

Online Book Services

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ABSTRACT

We have recognized the rapid growth of online service which is showed to be one of the most successful types of business these days. One clear evidence we can see is to think about how much time the online service saves a customer. To tackle just a small corner of this type of business, we decided to work on the project of which we will build an online book services with a goal to experiment how to handle different types of request from clients and issue an appropriate response to each request. To be more specific, the purpose of this project is to utilize the core concept of service-oriented web applications that we learned from lectures. In addition, thinking of an online book service gives us a chance to carefully explore the architecture of the whole application from user interface to web structure as well as database and dive into the design effort of creating a platform-independent and maintainable system. Our system will act as a online bookstore which allows users to login, buy and sell books on the server. All requests from user will be checked for validation and executed on the server side accordingly.

1. INTRODUCTION

One of the reasons for choosing this project is to understand how to implement good communication between server and its clients. Clients of the system can send and request various types of services such as search for books, buy books, and edit personal information. However, it would be difficult to have just one server running alone to accept and handle all the requests from clients. Therefore, having two or more servers is a better approach of sharing the work load and thus makes the system more scalable and responsive. Our online book service really shows us what it takes to build such a system. For example, a user might need to

update his/her account information. In order to do that, an instance of server should be present to take care of the request properly. By that, it means the server will first need to validate inputs from user then connects to the database to update new inputs after everything has been corrected. After that, the server will finally make an acknowledge and return result back to the user.

With the helps of well-known technology, we studied and created an online service using web and database tools such as J2EE and Oracle9i. Having said that, we used Servlets, JSP, EJB, JDBC, Oracle, Xdoclet, and JBoss-Tomcat integrated. As for the model-view-control design pattern, Servlets will take care of the control of the application. JSP will handle the view (presentations of business logic). JDBC is used to connect to the Oracle database. EJB offers distributed client connectivity to invoke a remote method call from the server-side component. Xdoclet will help to generate xml files such as deployment descriptor, enterprise archive file. Finally, JBoss and Tomcat containers are needed to deploy and run the application.

2. SOLUTION

2.1. Design

2.1.1. Client

First, a client must have an account on the server. Then, the client can use his/her username and password to log in. New users are required to sign up for an account. In order to sign up, a client must provide necessary information such as first name, last name, address, username, password, and credit card information.

Once a user logs in, there will be several options that he can choose. For example, the

client can list his books to sell which requires ISBN, price and amount of items to be entered. Or, he can search for books to buy and update his shopping cart. As for book searching, the book services will provide four options that users can pick to make their searches easier. For instance, if the user knows title of the book, he can choose an option to search by title. On the other hand, if user knows book's ISBN, he can find the books by using ISBNs [see figure 1]. Users can also edit his personal information including changing address, credit card, and password. In addition, the server will need to validate the correctness of users' inputs before updating them into the database. [see figure 2].

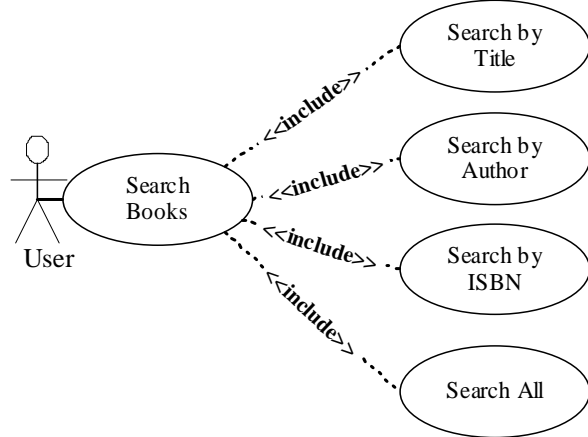


Figure 1: Search book use case

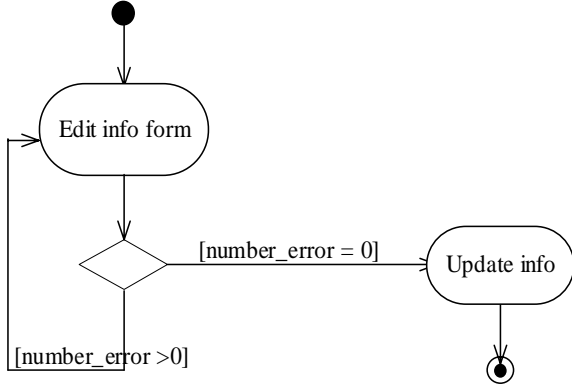


Figure 2: Edit information activity diagram

2.2.1 Server

There will be several servers to handle requests from clients. First, one server needs to verify users' authentication. Another server will process book queries from database and return results back to the clients. On top of that, one server needs to verify and update clients' information.

More over, a server has to give each client a session when he/she logs in so that the server can update his/her information correctly until logout is required from user. This session context is very important to all servers and client because with this session, servers can talk to each other and send information back and forth. Hence, session will be treated as a token to be passed around among the servers. Also, the server needs to actually generate an appropriate, understandable and friendly error if a client makes any mistake. This is a crucial part since this step will show how the server and clients communicate with each other. Thus, for error handling, there will be clear and specific errors so that users will know what they have to fix. For instance, a server will throw invalid username/password exception if user logs in unsuccessfully, etc...

Last but not least, all servers are able to connect to database through an object call **DBHandler** [see figure 3]. This object will instantiate database connection, load driver manager, receive query string from server, implement queries by executing statements, then returns result back to the servers and close the connection.

The design of database will be described in detail as follow. First, there will be a table to store books information. This table basically contains all the necessary information about books such as title, author, ISBN, price and amount in stock. Since we cannot use ISBN as a primary key, the primary key for this table is an automatic generated sequenced number. Another important table is a *customer* table. *Customer* table will store all personal information of user with username as a primary key. Both *book* and *customer* tables will be link with each other through a *shopping cart* table. The shopping cart table has 2 prominent fields: username and book id. The username in *shopping cart* table is a foreign key that references to username in *customer* table. And book id references to primary key in *book* table. In addition, both username and book id in *shopping cart* table will treated as a primary key. Along with three tables

just mentioned, there is also an *order* table which keeps track of all the purchases of every single user.

To demonstrate one use case of the online book service application, figure 5 below shows the sequence diagram which describes the series of steps of book searching action that is requested by the client. First step, the client attempts to log in the server. Then, the web server will forward client’s authentication to the DBHandler object, this object will then make a connection to the database. Result from database will be sent back to the web server. If the client has valid account, the web server will redirect the response to the manage page and send the view back to the client. Whereas, the web server will indicated login failure and route the response to the login page so client can correct his inputs.

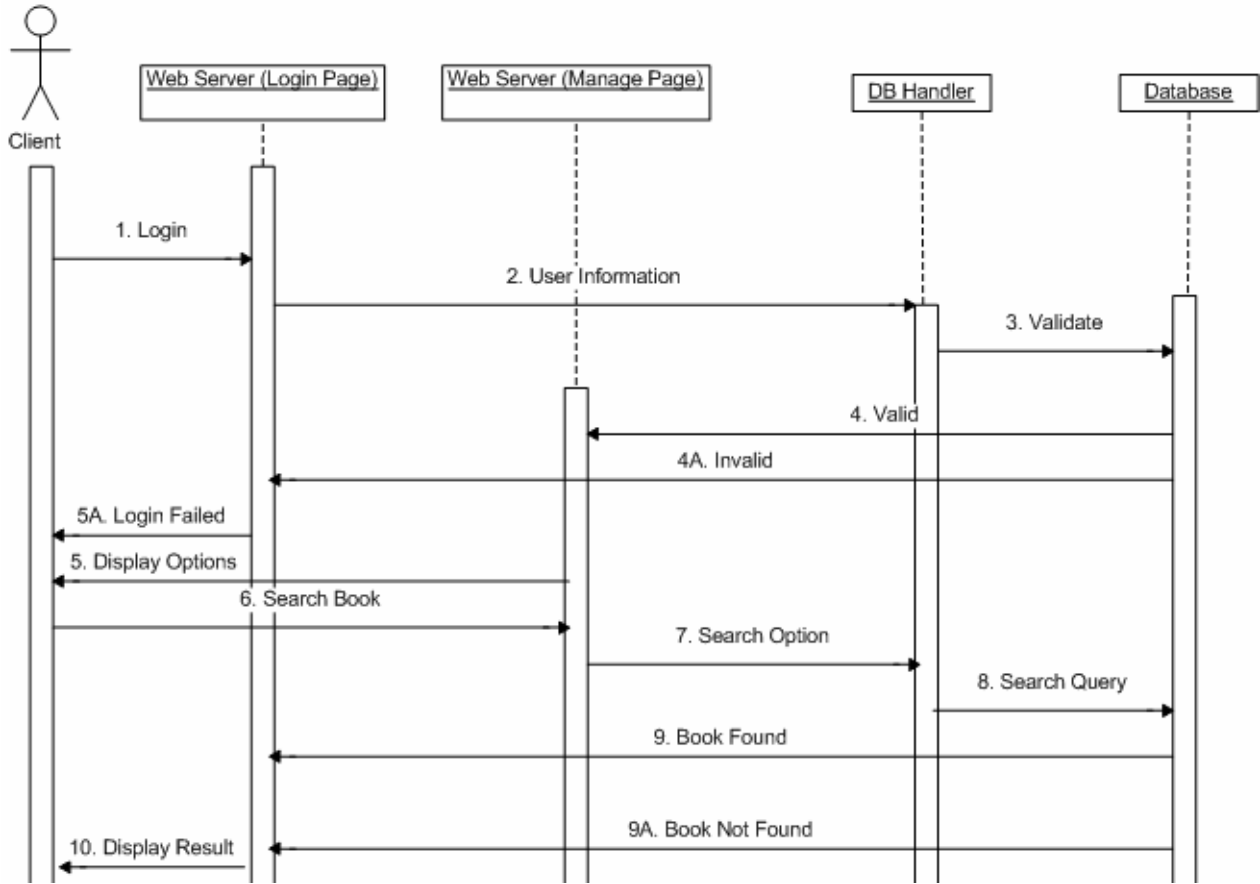


Figure 5: Sequence diagram of book searching action

2.2 Technical Architecture

The technical architecture will be focusing on the J2EE design and implementations as well as the configurations. In the nutshell, there will be four major components that we need to take into account and explore the importance of each of those components. They are client, presentation logic, business logic, and back end system. All technical problems will be briefly stated in this section and more solution along with analysis will be covered in the next section.

2.2.1 Front end GUI

In technical approach, client of the system will mainly use web browser to access and request services from the server. First, we have a web page called login page to handle login authentication. Having said that, it means inputs from clients will be passed to the web server using HTTP request/response. The second web page which is also very important is the manage page. From the manage page, the client can almost perform any activity with the server and database. The connection between login page and manage page is made if and only if information entered by user is correct and validated from the database. One more thing needs to state at this point is that not only the web server will redirect information from login page to manage page, but there is also a session context will be instantiated. This session will be alive during application life time and will be deleted right after logout logic had been executed.

2.2.2 Presentation logic

As for the presentation logic, it would be a web server which includes JSP container and Servlet container. Although we have both JSP and Servlet in this context, however, each of them will implement different types of logic. As mentioned in the introduction section, Servlet will be used to handle the control of the process. All the Servlets will receive requests from clients

and according to the nature of the request, Servlets container will dispatch request to appropriate action in server. After that, server will invoke the DB Handler using JDBC to communicate with the database. The result will be forwarded from the database, to the server and back to the Servlets.

In addition, Servlets might direct a current request to a JSP so that JSP can obtain the same requests and generate static/dynamic HTML view and send it back to the same client. The reason behind this idea is to let loose the constraint between technical programming and design layout. Beside, it's easier to create a view in JSP than in Servlets. Last but not least, the design will be much better off if we have Servlets and JSP work together to decouple the *logic* and the *presentation* in the scope of one request.

2.2.3 Business Logic

All the business methods should lie on the EJB container and will be remotely invoke from Servlets or JSP. In this project, we have implemented one remote method in EJB that requires a request to get the object reference from JNDI through RMI calls. The remote method is a login method which serves a purpose of validating username and password from client. This method will use JDBC to talk with the database, the same way Servlets do. The reason for having EJB is because this container will help to make the system more scalable in terms of distributed services since EJB is a server component and resides on sever side that waits to be invoked. Nonetheless, the draw back of EJB is that we need to make RMI calls and sometimes these calls will be slower than local calls. Another problem with EJB is dirty reading which allows multiple request access to a same instance of data record on the database and might cause inconsistency.

2.2.4 Back End System

The last component from this technical point of view is the storage. We chose Oracle 9i

as our database simply because it is available to us. This back end system needs to be updated very often and all the data tables need to be normalized for both consistency and independency reasons. As we discussed on the design phase, we only have four basic tables [book, customer, shopping cart, order] that represent the relational database. Nonetheless, there will be a table to store states in US and countries in the world. These two tables will give big hand to the application when it comes to the time on which users need to edit their information.

The only problem with this database component that we have encountered is to configure how the web application server like Tomcat and JBoss can connect to Oracle9i through some database listener. Again, JDBC offers great help for this configuration since we did not have make connection and load driver manager by ourselves. All we had to do is modify the server.xml files and copy the database zip file from Oracle to both Tomcat and JBoss servers. Figure 6 below is the overall technical architecture and design of our online book service application.

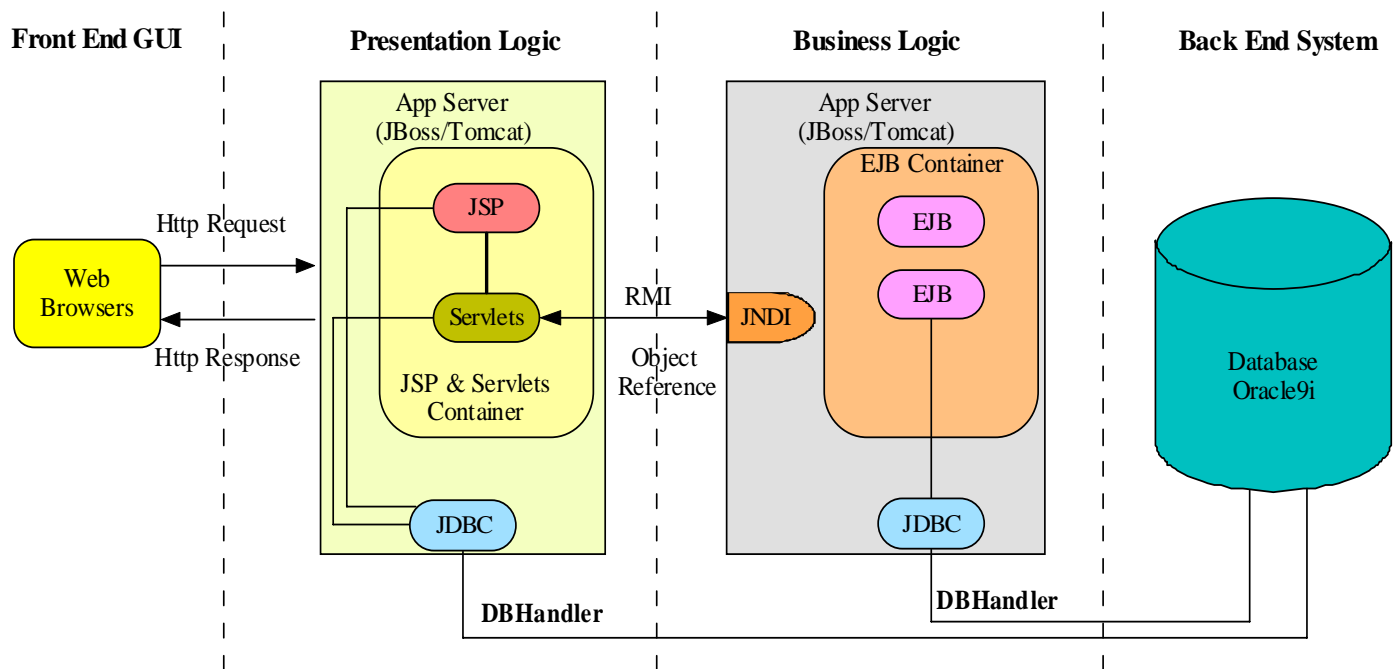


Figure 6: Online Book Service Technical Architecture

4. Related projects:

4.1 Online computer services:

This project was brought into the picture as a time we were brainstorming about our hands-on project. The basic concept behind this project is to implement a system that allows users to buy and sell their computer parts online. We can think of this system as a trading market online which focusing on computer accessories. The main difference between this project and the online book services project is the types of item

in the two systems. In online book services, the only item is book, even though we have different types of books such as hard-cover, paperback or category like novel, fiction, textbooks. However, if we think at high level of abstract, book is the easier kind of item to deal than computer parts. For instance, computer part could be from hardware to software, and each part will have wide area of subtypes and so forth. Therefore, for simplicity purpose and also for convenience reason, we implemented book services instead because after all, we will learn a same amount of design and system architecture in general.

4.2 Online address books:

This project is the easiest comparing to the online book services and online computer services. The online address books implements address book business logic. The system lets people to enter addresses of their friends in the system, checks for errors and saves the addresses in the database. Later on, user can use the system to search for his/her friends' information or update and edit information if necessary. From the bird's-eye view, this is an interesting project; however, we decided not to go along with this project because the project will not give us a bigger room to play around if we want to expand the scope of business logic in the future.

5. Summary:

We believe the online book services turned out to be a good application design exercise. It reflects the usefulness of multi-tiered architecture that we implemented in this project using J2EE. As far as the project concerns, it not only showed us a big picture on distributed service-oriented performance but also led us to a vision of great design effort. Overall, we felt that having a term project was a good idea to explore and learn concepts that are related to distribute computing systems. It allowed us the opportunity to get more familiar with the prevalent and well-known technologies such as EJB, Servlets, JSPs, and application servers. The most important part of the project in general is how to combine all these tools in order to produce the final deliverable product. There were a lot of problems and issues came along a way while we were working on the project. Just to name a few, we had difficulty to let JBoss talk to Oracle through JDBC thin driver, how to let Tomcat, JBoss and Oracle run on different port numbers. Finally, having Xdoclet to generate

deployment descriptor, web archive file, java archive file and enterprise archive file is a tricky part since there was so many files that we needed to configure properly. Nonetheless, we have succeeded in doing so and were able to make our project work as planned.

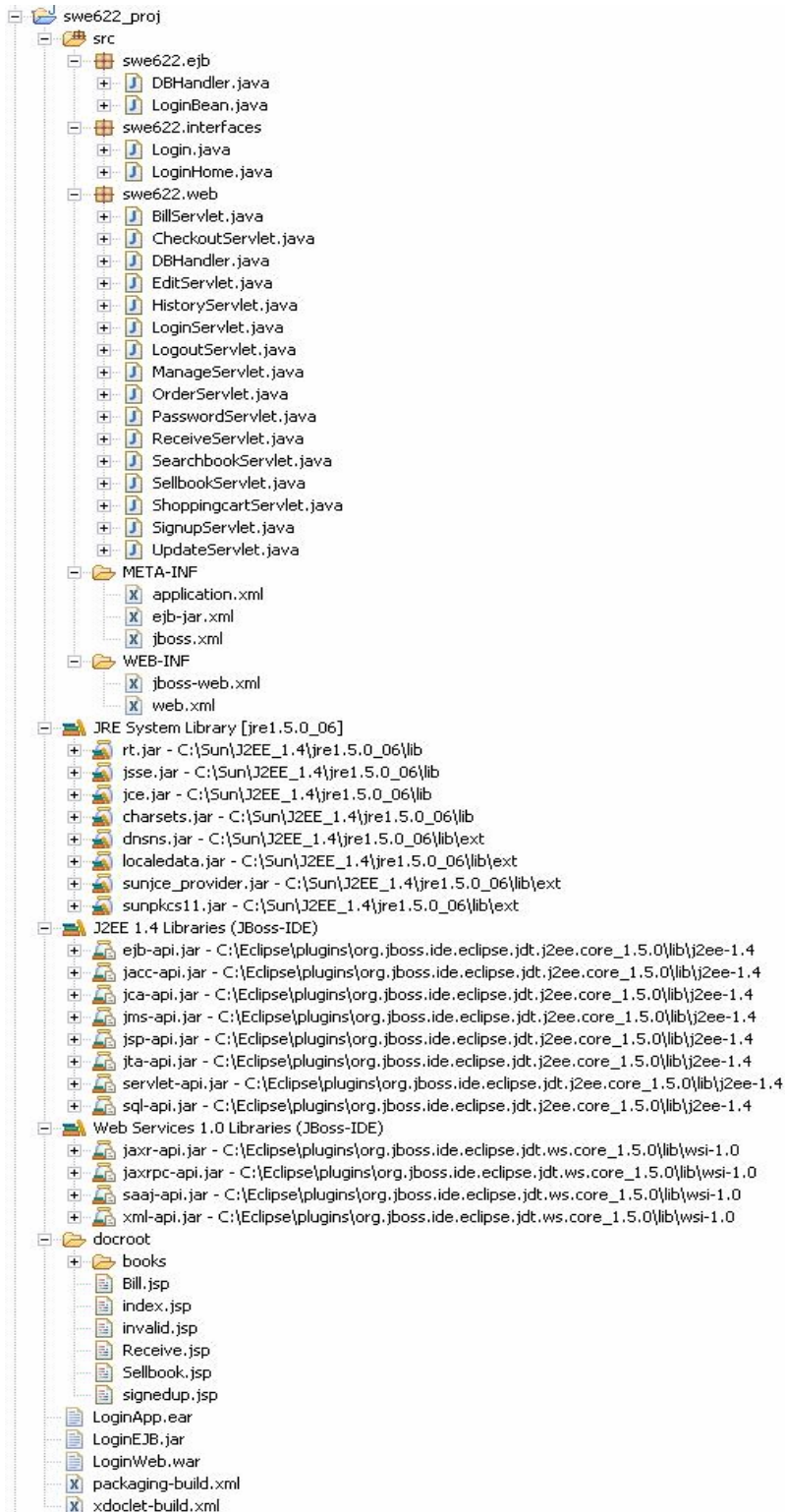
For future plan, we learned and realized that online book is very helpful. We are thinking about developing a book services to help student in George Mason buy and sell their books to each other. It is totally possible since we already have a framework and business logic. Think about all the flies that we have all over the walls Mason's buildings, those flies sometimes will not very practical since they will be removed after each week, people do not like to repost it, other people do not want to write down contact information and last but not least, people do not like to search for the book that they need on the walls on which the flies are overlapped each other. Therefore, having a system that student can search for book and buy in a convenient way; it would contribute the more efficient service of school in the attempt to serve its students better.

6. References:

- [1]. M.L. Liu, *Distributed Computing: Principle and Applications*, Pearson/Addison Wesley, Boston, 2004
- [2]. David Braun. "Unified Model Language (UML) Tutorial", http://atlas.kennesaw.edu/~dbraun/csis4650/A&D/UML_tutorial/index.htm, Apr 20th 2006
- [3]. "Author Guidelines for 8.5 x 11-inch Proceedings Manuscripts", <ftp://pubftp.computer.org/Press/Outgoing/proceedings/8.5x11%20-%20Formatting%20files/instruct.dot>, Apr 20th 2006

SOURCE CODES

The source code of this project is mainly developed in J2EE environment. Most of them are pure java files, HTML and XML codes. To make it more understandable, we have broken down the structure of the applications and walk through the design. The tree structure graph below will capture the ultimate content of the system.



EJB Files

The first sub folder called *swe622.ejb*. This folder contains important files which are DBHandler.java and LoginBean.java files. The DBHandler.java will use JDBC to connect the EJB to Oracle Database. The LoginBean.java is a bean files that invoke the remote method on the server by using Home and Remote Beans.

DBHandler.java

```
package swe622.ejb;

import java.sql.*;

public class DBHandler{

    private String url;
    private String userID;
    private String password;
    private Connection conn;
    private String driver = "oracle.jdbc.driver.OracleDriver";
    private Statement stmt;
    private ResultSet rs;
    public DBHandler()
    {
        try{
            driver = "oracle.jdbc.driver.OracleDriver";
            Class.forName(driver);
            url = "jdbc:oracle:thin:@supngo:1521:test";
            userID = "system";
            password = "thanhcong";
            conn = DriverManager.getConnection(url , userID, password);
            stmt = conn.createStatement();
        }
        catch (ClassNotFoundException e){
            System.out.println ("Could not load the driver");
            e.printStackTrace ();
        }
        catch (Exception e){
            System.out.println ("Exception in Connecting to the db");
            e.printStackTrace ();
        }
    }

    public ResultSet get_query(String query){
        rs = null;
        try {
            rs = stmt.executeQuery(query);
        }
        catch (SQLException e){
            System.out.println ("Exception in Connecting to the db");
            e.printStackTrace ();
        }
        return rs;
    }

    public void insert(String query){
        int rs = 0;
```

```

        try {
            rs = stmt.executeUpdate(query);
            System.out.println("number of records updated: " + rs);
            conn.commit();
        }
        catch (SQLException e){
            System.out.println ("Exception in inserting to the db");
            e.printStackTrace ();
        }
    }

    public void DB_close(){
        try {
            rs.close();
            stmt.close();
            conn.close();
        }
        catch (SQLException e){
            System.out.println ("Exception in closing the db");
            e.printStackTrace ();
        }
    }
}

```

LoginBean.javja

```

package swe622.ejb;

import java.rmi.RemoteException;
import java.sql.ResultSet;
import java.sql.SQLException;

import javax.ejb.EJBException;
import javax.ejb.SessionBean;
import javax.ejb.SessionContext;

import javax.ejb.CreateException;

/**
 * @ejb.bean name="Login"
 *           display-name="Name for Login"
 *           description="Description for Login"
 *           jndi-name="ejb/Login"
 *           type="Stateless"
 *           view-type="remote"
 */
public class LoginBean implements SessionBean {

    private static final long serialVersionUID = 1L;

    public LoginBean() {
        super();
    }

    public void setSessionContext(SessionContext ctx)
        throws EJBException, RemoteException {}
}

```

```

public void ejbRemove() throws EJBException, RemoteException {}

public void ejbActivate() throws EJBException, RemoteException {}

public void ejbPassivate() throws EJBException, RemoteException {}
/**
 * Default create method
 *
 * @throws CreateException
 * @ejb.create-method
 */
public void ejbCreate() throws CreateException {
}
/**
 * Business method
 * @ejb.interface-method view-type = "remote"
 */
public String checking(String user, String passwd) {
    DBHandler S1 = new DBHandler();
    String result = "";
    try {
        ResultSet rs1 = S1.get_query("select username, PASSWORD, fname,
lname from customer where username = '" + user + "' and PASSWORD ='" + passwd +"'");
        if (rs1.next()){
            result = rs1.getString("fname") + " " +
rs1.getString("lname");
        }
    } //end try
    catch (SQLException e){
        System.out.println ("Exception in connecting to the db");
        //e.printStackTrace ();
    }
    finally{
        try{
            S1.DB_close();
        }catch(Exception e2){}
    }
    return result;
}
}

```

The second sub folder is *swe622.interfaces*. This folder contains the EJB home and remote. These two java files helps the client talk to the server through RMI using JNDI.

Login.java

```

package swe622.interfaces;

/**
 * Remote interface for Login.
 */
public interface Login extends javax.ejb.EJBObject
{
    /**
     * Business method
     */
    public java.lang.String checking( java.lang.String user,java.lang.String passwd )
}

```

```
throws java.rmi.RemoteException;
}
```

LoginHome.java

```
package swe622.interfaces;

/**
 * Home interface for Login.
 */
public interface LoginHome extends javax.ejb.EJBHome
{
    public static final String COMP_NAME="java:comp/env/ejb/Login";
    public static final String JNDI_NAME="ejb/Login";

    public swe622.interfaces.Login create()
    throws javax.ejb.CreateException, java.rmi.RemoteException;
}
```

Servlet Files

The next sub folder is swe622.web. This folder contains all the Servlet files that take care of the control of the application. Some of Servlet files will make a call to EJB, some of them will forward to JSP files and some of them will redirect back to itself with different requests and responses.

CheckoutServlet.java

```
package swe622.web;

import javax.servlet.http.HttpServlet;

import java.io.IOException;
import java.io.PrintWriter;
import java.math.BigDecimal;
import java.sql.ResultSet;
//import java.sql.SQLException;
import java.util.Vector;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 * Servlet Class
 *
 * @web.servlet          name="Checkout"
 *                      display-name="Name for Checkout"
 *                      description="Description for Checkout"
 * @web.servlet-mapping url-pattern="/Checkout"
 * @web.servlet-init-param name="A parameter"
 *                          value="A value"
 */
public class CheckoutServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;
```

```

public CheckoutServlet() {
    super();
}

@SuppressWarnings("unchecked")
protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    doPost(request, response);
}

@SuppressWarnings("unchecked")
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    response.setContentType("text/html");
    PrintWriter out= response.getWriter();
    boolean non_session = false;
    String update=null;
    String id = null;
    String name = null;
    Vector tit = new Vector();
    Vector aut = new Vector();
    Vector pri = new Vector();
    Vector amt = new Vector();
    Vector itm = new Vector();
    Vector isbn = new Vector();
    Vector book_id = new Vector();
    try{
        HttpSession session = request.getSession(false);
        id = (String) session.getAttribute("accountid");
        name = (String)session.getAttribute("accountname");
    }catch(NullPointerException e){
        non_session = true;
    }
    try{
        HttpSession session = request.getSession(false);
        update = (String)session.getAttribute("update");
        session.removeAttribute("update");
    }catch(NullPointerException e2){}
    if(!non_session && name!=null){
        out.println("<!DOCTYPE HTML PUBLIC \"/>
Transitional//EN"/>
        out.println("<http://www.w3.org/TR/html4/loose.dtd"/>
        out.println("<html><head><title>Shopping Cart</title></head>");
        out.println("<body bgcolor=\"/>
        out.println("<center><table><tr>");
        out.println("<td align=center width=150><a href=\"/>
color=blue><b>Home Page</b></font></a></td>");
        out.println("<td align=center width=150><a"/>
href=\"/>
        out.println("<td align=center width=150><a href=\"/>
color=blue><b>Sell Books</b></font></a></td>");
        out.println("<td align=center width=150><font"/>
color=blue><b>Shopping Cart</b></font></td>");
    }
}

```

```

        out.println("<td align=center width=150><a href=\"History\"><font
color=blue><b>Order History</b></font></a></td>");
        out.println("<td align=center width=150><a href=\"Edit\"><font
color=blue><b>Edit Information</b></font></a></td>");
        out.println("<td align=center width=150><a href=\"Password\"><font
color=blue><b>Change Password</b></font></a></td>");
        out.println("<td align=center width=150><a href=\"Logout\"><font
color=blue><b>Logout</b></font></a></td>");
        out.println("</tr></table>");
        out.println("<hr width=100%><br />");
        DBHelper cart = new DBHelper();
        double total = 0.00;
        String query = null;
        int num_book = 0;
        try {
            query = "SELECT * FROM book, shoppingcart WHERE
shoppingcart.id=book.id" +
                    " AND shoppingcart.username='"+id+"'";
            ResultSet rs1 = cart.get_query(query);
            while (rs1.next()) {
                book_id.add(new Integer(rs1.getInt(1)));
                tit.add(rs1.getString(2));
                aut.add(rs1.getString(3));
                isbn.add(rs1.getString(4));
                Double price = new Double(rs1.getDouble(5));
                Integer item = new Integer(rs1.getInt(9));
                double amount = price.doubleValue()*item.intValue();
                BigDecimal bd = new BigDecimal(amount);
                bd = bd.setScale(2,BigDecimal.ROUND_HALF_UP);
                amount = bd.doubleValue();
                pri.add(new Double(rs1.getDouble(5)));
                itm.add(item);
                amt.add(new Double(amount));
                num_book+= item.intValue();
            }
        }//end try
        catch (Exception e){
            System.out.println ("Exception in connecting to shoppincart
DB");

            e.printStackTrace ();
        }
        finally{
            try{
                cart.DB_close();
            }catch(Exception e2){}
        }
        if(tit.size()==0){
            if (update!=null){
                out.println("<br/><b><i>"+update+"</i></b><br/>");
                update = null;
            }
            out.println("<b><i>Your shopping cart is empty !!!</i></b>");
        }
        else{
            if (update!=null){
                out.println("<br/><b><i>"+update+"</i></b><br/>");
                update = null;
            }
        }
    }
}

```

```

    }
    out.println("<b><i>You have "+num_book+" book(s) in your
shopping cart</i></b><br />");
    out.println("<br /><form METHOD=\"GET\" ACTION=\"Update\">");
    out.println("<Table border = 1>");
    out.println("<TR bgcolor=\"#FFD700\">");
    out.println("<TD width=\"300\"> <center> <b> Title </b>
</center> </TD>");
    out.println("<TD width=\"200\"> <center> <b> Author </b>
</center> </TD>");
    out.println("<TD width=\"100\"> <center> <b> ISBN </b>
</center> </TD>");
    out.println("<TD width=\"70\"> <center> <b> Price </b>
</center> </TD>");
    out.println("<TD width=\"100\"> <center> <b> Items </b>
</center> </TD>");
    out.println("<TD width=\"70\"> <center> <b> Amounts </b>
</center> </TD>");
    out.println("</TR>");
    for (int i = 0; i < tit.size(); i++) {
        out.println("<TR>");
        out.println("<TD width=\"300\" align=left>"+
tit.elementAt(i) + "</TD>");
        out.println("<TD width=\"200\" align=left>" +
aut.elementAt(i)+ "</TD>");
        out.println("<TD width=\"100\"> <center>" +
isbn.elementAt(i)
+ "</center> </TD>");
        out.println("<TD width=\"70\"><center><font
color=red><b><i>$ " +
pri.elementAt(i)+"</i></b></font></center></TD>");
        out.println("<TD width=\"100\"> <center><select
name=\""+book_id.elementAt(i)+"\">");
        out.println("<option value=\"0\" />");
        for (int
j=1;j<=((Integer)itm.elementAt(i)).intValue();j++){
            if(j<10){
                if(j==((Integer)itm.elementAt(i)).intValue())
                    out.println("<option value=\""+j+\" \"
selected>"+0+j+\"</option>");
                else
                    out.println("<option value=\""+j+\" \"
>"+0+j+\"</option>");
            }
            else{
                if(j==((Integer)itm.elementAt(i)).intValue())
                    out.println("<option value=\""+j+\" \"
selected>"+j+\"</option>");
                else
                    out.println("<option value=\""+j+\" \"
>"+j+\"</option>");
            }
        }
        out.println("</select></center> </TD>");
    }

```

```

        out.println("<TD width=\"70\" align=right><center><font
color=red><b>$ " +
                                amt.elementAt(i)+"</b></font></center>
</TD>");
        total += ((Double)amt.elementAt(i)).doubleValue();
        out.println("</TR>");
    }
    HttpSession session = request.getSession(true);
    session.setAttribute("book_id",book_id);
    session.setAttribute("item",itm);
    BigDecimal bd = new BigDecimal(total);
    bd = bd.setScale(2,BigDecimal.ROUND_HALF_UP);
    total = bd.doubleValue();
    out.println("</Table>");
    out.println("<table><tr><td width=\"740\"></td>");
    out.println("<td width=\"100\"><center>");
    out.println("<b> Total: $
<u>"+total+"</u></b></center></td></tr>");
    out.println("<tr><td width=\"740\"></td>");
    out.println("<td width=\"100\"><br /> " +
        "<center><input type=\"submit\" value=\" Update
\">");
    out.println("</center></td></tr>");
    out.println("</table></form><br />");
    out.println("</center>");
    out.println("<center><form METHOD=\"\"
ACTION=\"Bill.jsp\">");
    out.println("<input type=\"submit\" value=\"Check Out\">");
    out.println("</form></center>");
    }
    out.println("</BODY>");
    out.println("</HTML>");
}else{response.sendRedirect("index.jsp");}
}
}

```

EditServlet.java

```

package swe622.web;

import javax.servlet.http.HttpServlet;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Vector;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
/**
 * Servlet Class
 *
 * @web.servlet          name="Edit"
 *                      display-name="Name for Edit"
 *                      description="Description for Edit"

```

```

* @web.servlet-mapping      url-pattern="/Edit"
* @web.servlet-init-param   name="A parameter"
*                             value="A value"
*/
public class EditServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

    public EditServlet() {
        super();
    }

    @SuppressWarnings("unchecked")
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out= response.getWriter();
        String id = null;
        String name = null;
        boolean non_session = false;
        try{
            HttpSession session = request.getSession(false);
            id = (String) session.getAttribute("accountid");
            name = (String)session.getAttribute("accountname");
        }catch(NullPointerException e){
            non_session = true;
        }
        if(!non_session && name!=null){
            Vector param = new Vector();
            DBHandler account = new DBHandler();
            try {
                ResultSet rs = account.get_query("select * from customer
where username = '"+id+"'");
                while (rs.next()){
                    param.add(rs.getString("FNAME"));
                    param.add(rs.getString("LNAME"));
                    param.add(rs.getString("ADDRESS"));
                    param.add(rs.getString("CITY"));
                    param.add(rs.getString("STATE"));
                    param.add(rs.getString("ZIP"));
                    param.add(rs.getString("COUNTRY"));
                    param.add(rs.getString("EMAIL"));
                    param.add(rs.getString("CREDITCARD"));
                    param.add(rs.getString("EXPMN"));
                    param.add(rs.getString("EXPYR"));
                }
            }
            //end try
            catch (SQLException e){
                e.printStackTrace ();
            }
            finally{
                try{
                    account.DB_close();
                }catch(Exception e2){}
            }
            out.println("<!DOCTYPE HTML PUBLIC \"/>

```

```

        out.println("<a href='\"http://www.w3.org/TR/html4/loose.dtd'>");
        out.println("<html><head><title>Edit Information</title></head>");
        out.println("<body bgcolor='\"#CCCCFF'\" vlink='\"#000ff0'>");
        out.println(" welcome, <b>"+name+"</b><br /><br />");
        out.println("<center><table><tr>");
        out.println("<td align=center width=150><a href='\"Manage'><font
color=blue><b>Home Page</b></font></a></td>");
        out.println("<td align=center width=150><a
href='\"Searchbook'><font color=blue><b>Search Books</b></font></a></td>");
        out.println("<td align=center width=150><a href='\"Sellbook'><font
color=blue><b>Sell Books</b></font></a></td>");
        out.println("<td align=center width=150><a href='\"Checkout'><font
color=blue><b>Shopping Cart</b></font></a></td>");
        out.println("<td align=center width=150><a href='\"History'><font
color=blue><b>Order History</b></font></a></td>");
        out.println("<td align=center width=150><font color=blue><b>Edit
Information</b></font></td>");
        out.println("<td align=center width=150><a href='\"Password'><font
color=blue><b>Change Password</b></font></a></td>");
        out.println("<td align=center width=150><a href='\"Logout'><font
color=blue><b>Logout</b></font></a></td>");
        out.println("</tr></table></center>");
        out.println("<hr width=100%>");
        out.println("<form action='\"\"\" name='\"Edit'\" method='\"post'>");

        out.println("<br />");
        out.println("<center><font color='\"#00008B'><b>Edit Personal
Information</b>");
        out.println("</font></center>");
        out.println("<br /><br />");
        out.println("<center><table>");
        out.println("<tr>");
        out.println("<td width='\"200'><b>First Name:</b></td>");
        out.println("<td width='\"600'><input type='\"text\"
name='\"FirstNameField'\" +
                \"value='\""+param.elementAt(0)+"\" size='\"20'>");
        out.println("</td></tr><tr>");
        out.println("<td width='\"200'><b>Last Name: </b></td>");
        out.println("<td width='\"600'><input type='\"text\"
name='\"LastNameField'\" +
                \"value='\""+param.elementAt(1)+"\" size='\"20' >");
        out.println("</td></tr><tr>");
        out.println("<td width='\"200'><b>Resident Address: </b></td>");
        out.println("<td width='\"600'><input type='\"text\"
name='\"AddressField'\" \" +
                \"value='\""+param.elementAt(2)+"\" size='\"30' >");
        out.println("</td></tr><tr>");
        out.println("<td width='\"200'><b>City: </b></td>");
        out.println("<td width='\"600'><input type='\"text\"
name='\"CityField'\" \" +
                \"value='\""+param.elementAt(3)+"\" size='\"15' >");
        out.println("</td></tr><tr>");
        out.println("<td width='\"200'><b>State: </b></td>");
        out.println("<td width='\"600'>");
        out.println("<select name='\"StateField'>");
        DBHandler state_country = new DBHandler();
        String sta=null;

```

```

try {
    ResultSet rs = state_country.get_query("select * from
state");
    while (rs.next()){
        sta = (rs.getString("state"));
        if(param.elementAt(4).equals(sta))
            out.println("<option Value=\""+sta+"\" selected>"
+sta+"</option>");
        else
            out.println("<option Value=\""+sta+"\">"
+sta+"</option>");
    }
} //end try
catch (SQLException e){
    e.printStackTrace ();
}
out.println("</select>");
out.println("</td></tr>");
out.println("<tr><td width=\"200\"><b>Zip Code: </b></td>");
out.println("<td width=\"600\"><input type=\"text\"
name=\"ZipCodeField\" " +
            "value=\""+param.elementAt(5)+"\"size=\"10\" >");
out.println("</td></tr><tr>");
out.println("<td width=\"200\"><b>Country: </b></td>");
out.println("<td width=\"600\">");
out.println("<select name=\"CountryField\">");
try {
    ResultSet rs = state_country.get_query("select * from
country");
    while (rs.next()){
        sta = (rs.getString("cnt"));
        if(param.elementAt(6).equals(sta))
            out.println("<option Value=\""+sta+"\" selected>"
+sta+"</option>");
        else
            out.println("<option Value=\""+sta+"\">"
+sta+"</option>");
    }
} //end try
catch (SQLException e){
    e.printStackTrace ();
}
finally{
    try{
        state_country.DB_close();
    }catch(Exception e2){}
}
out.println("</select>");
out.println("</td></tr>");
out.println("<tr><td width=\"200\"><b>Email Address:</b></td>");
out.println("<td width=\"600\"><input type=\"text\"
name=\"EmailField\" " +
            "value=\""+param.elementAt(7)+"\"size=\"20\" ></td>");
out.println("</tr><tr>");
out.println("<td width=\"200\"><b>Credit Card Number: </b></td>");
out.println("<td width=\"600\"><input type=\"text\"
name=\"CreditField\" " +

```

```

        "value=\""+param.elementAt(8)+"\"size=\"20\" ></td>");
out.println("</tr><tr>");
out.println("<td width=\"200\"><b>Expiration Date: </b></td>");
out.println("<td width=\"\600\">");
out.println("<select name=\"ExpireM\">");
Vector month = new Vector();
month.add("01");
month.add("02");
month.add("03");
month.add("04");
month.add("05");
month.add("06");
month.add("07");
month.add("08");
month.add("09");
month.add("10");
month.add("11");
month.add("12");
for (int i=0;i<month.size();i++){
    if(param.elementAt(9).equals(month.elementAt(i)))
        out.println("<option Value=\""+month.elementAt(i)+"\"
selected>"
                    +month.elementAt(i)+"</option>");
    else
        out.println("<option Value=\""+month.elementAt(i)+"\">"
                    +month.elementAt(i)+"</option>");
}
out.println("</select>&nbsp;&nbsp;&nbsp;");
out.println("<select name=\"ExpireY\">");
Vector year = new Vector();
year.add("2006");
year.add("2007");
year.add("2008");
year.add("2009");
year.add("2010");
year.add("2011");
year.add("2012");
for (int i=0;i<year.size();i++){
    if(param.elementAt(10).equals(year.elementAt(i)))
        out.println("<option Value=\""+year.elementAt(i)+"\"
selected>"
                    +year.elementAt(i)+"</option>");
    else
        out.println("<option Value=\""+year.elementAt(i)+"\">"
                    +year.elementAt(i)+"</option>");
}
out.println("</select>");
out.println("</td>");
out.println("</tr>");
out.println("</table></center><br />");
out.println("<hr width=100%>");
out.println("<br />");
out.println("<center><input value=\"Submit\" type=\"submit\">");
out.println("</center>");
out.println("</form></body></html>");
}else{response.sendRedirect("index.jsp");}
}

```

```

@SuppressWarnings("unchecked")
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    Vector msg = new Vector();
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    boolean non_session = false;
    String id = null;
    String name = null;
    try{
        HttpSession session = request.getSession(false);
        id = (String) session.getAttribute("accountid");
        name = (String)session.getAttribute("accountname");
    }catch(NullPointerException e){
        non_session = true;
    }
    if(!non_session && name!=null){
        if(!check_fname(request.getParameter("FirstNameField"))){
            msg.add(" First name must be 2 to 15 letters\n");
        }
        if(!check_lname(request.getParameter("LastNameField"))){
            msg.add(" Last name must be 2 to 15 letters\n");
        }
        if(!check_address(request.getParameter("AddressField"))){
            msg.add(" Address must be 5 to 40 characters\n");
        }
        if(!check_city(request.getParameter("CityField"))){
            msg.add(" City must be 2 to 15 characters\n");
        }
        if(!check_zip(request.getParameter("ZipCodeField"))){
            msg.add(" Zipcode must be either 5 or 9 digits\n");
        }
        if(!check_email(request.getParameter("EmailField"))){
            msg.add(" Email must be 5 to 40 characters. Eg.
yourname@server.com\n");
        }
        if(!check_credit(request.getParameter("CreditField"))){
            msg.add(" Credit card number must be 16 digits\n");
        }
        if (msg.size()==0){
            DBHandler Signup = new DBHandler();
            try {
                String update = "update customer set FNAME = "+
                ""+request.getParameter("FirstNameField")+"' , LNAME =
"+
                ""+request.getParameter("LastNameField")+"' , ADDRESS =
"+
                ""+request.getParameter("AddressField")+"' , CITY = "+
                ""+request.getParameter("CityField")+"' , STATE = "+
                ""+request.getParameter("StateField")+"' , ZIP = "+
                ""+request.getParameter("ZipCodeField")+"' , COUNTRY =
"+
                ""+request.getParameter("CountryField")+"' , EMAIL = "+
                ""+request.getParameter("EmailField")+"' , CREDITCARD =
"+
                ""+request.getParameter("CreditField")+"' , EXPMN = "+

```

```

        ""+request.getParameter("ExpireM")+""', EXPYR = ""
        ""+request.getParameter("ExpireY")+"" where username =
' " +
                id+""";
        Signup.insert(update);
        HttpSession session = request.getSession(true);

        session.setAttribute("accountname",request.getParameter("FirstNameField")+"" +
                request.getParameter("LastNameField"));
        name = (String) session.getAttribute("accountname");
        out.println("<!DOCTYPE HTML PUBLIC \"-//W3C//DTD HTML
4.01 Transitional//EN\"");

        out.println("<http://www.w3.org/TR/html4/loose.dtd\">");
        out.println("<html><head><title>Edit
Information</title></head>");
        out.println("<body bgcolor=\"#CCCCFF\"
vlink=\"#000ff0\">");
        out.println(" welcome, <b>"+name+"</b><br />");
        /*out.println("<center><table><tr>");
        out.println("<td align=center width=170><a
href=\"/swe622/manage\"><font color=blue><b>Home Page</b></font></a></td>");
        out.println("<td align=center width=170><a
href=\"/swe622/SearchbookServlet\"><font color=blue><b>Search
Books</b></font></a></td>");
        out.println("<td align=center width=170><a
href=\"/swe622/SellbookServlet\"><font color=blue><b>Sell
Books</b></font></a></td>");
        out.println("<td align=center width=170><a
href=\"/swe622/CheckoutServlet\"><font color=blue><b>Shopping
Cart</b></font></a></td>");
        out.println("<td align=center width=170><a
href=\"/swe622/EditServlet\"><font color=blue><b>Edit
Information</b></font></a></td>");
        out.println("<td align=center width=170><a
href=\"/swe622/PasswordServlet\"><font color=blue><b>Change
Password</b></font></a></td>");
        out.println("<td align=center width=170><a
href=\"/swe622/LogoutServlet\"><font color=blue><b>Logout</b></font></a></td>");
        out.println("</tr></table>");*/
        out.println("<center><h2> ONLINE BOOKS </h2> ");
        out.println("<hr width=100%><br />");
        out.println("<b><i>Your Personal Informtion has been
edited sucessfully!!!</i></b>");
        out.println("<br /><form action=\"Manage\"");
        out.println("<br /><input type=\"submit\" value=\"Home
Page\" />");

        out.println("</form>");
        out.println("</center</body></html>");
    }//end try
    catch (Exception e){
        System.out.println ("Exception in Editing DB");
        e.printStackTrace ();
    }
    finally{
        try{
            Signup.DB_close();

```



```

                                "size=\"20\" style=\"background-color:yellow;
color:maroon;\">");
                                else
                                out.println("<td width=\"600\"><input type=\"text\"
name=\"FirstNameField\""+
                                "value=\""+request.getParameter("FirstNameField")+\"size=\"20\">");
                                out.println("</td></tr><tr>");
                                out.println("<td width=\"200\"><b>Last Name: </b></td>");
                                if(!check_lname(request.getParameter("LastNameField")))
                                out.println("<td width=\"600\"><input type=\"text\"
name=\"LastNameField\" " +
                                "size=\"20\" style=\"background-color:yellow;
color:maroon;\">");
                                else
                                out.println("<td width=\"600\"><input type=\"text\"
name=\"LastNameField\""+
                                "value=\""+request.getParameter("LastNameField")+\"size=\"20\">");
                                out.println("</td></tr><tr>");
                                out.println("<td width=\"200\"><b>Resident Address:
</b></td>");
                                if(!check_address(request.getParameter("AddressField")))
                                out.println("<td width=\"600\"><input type=\"text\"
name=\"AddressField\" " " +
                                "size=\"30\" style=\"background-color:yellow;
color:maroon;\">");
                                else
                                out.println("<td width=\"600\"><input type=\"text\"
name=\"AddressField\" " " +
                                "value=\""+request.getParameter("AddressField")+\"size=\"30\" >");
                                out.println("</td></tr><tr>");
                                out.println("<td width=\"200\"><b>City: </b></td>");
                                if(!check_city(request.getParameter("CityField")))
                                out.println("<td width=\"600\"><input type=\"text\"
name=\"CityField\" " " +
                                "size=\"15\" style=\"background-color:yellow;
color:maroon;\">");
                                else
                                out.println("<td width=\"600\"><input type=\"text\"
name=\"CityField\" " " +
                                "value=\""+request.getParameter("CityField")+\"size=\"15\" >");
                                out.println("</td></tr><tr>");
                                out.println("<td width=\"200\"><b>State: </b></td>");
                                out.println("<td width=\"600\">");
                                out.println("<select name=\"StateField\">");
                                DBHandler state_country = new DBHandler();
                                String sta=null;
                                try {
                                ResultSet rs = state_country.get_query("select * from
state");
                                while (rs.next()){
                                sta = (rs.getString("state"));

```

```

        if(request.getParameter("StateField").equals(sta))
            out.println("<option Value=\""+sta+"\" "
selected>" +sta+"</option>");
        else
            out.println("<option Value=\""+sta+"\">"
+sta+"</option>");
    }
} //end try
catch (SQLException e){
    e.printStackTrace ();
}
out.println("</select>");
out.println("</td></tr>");
out.println("<tr><td width=\"200\"><b>Zip Code: </b></td>");
if(!check_zip(request.getParameter("ZipCodeField")))
    out.println("<td width=\"600\"><input type=\"text\"
name=\"ZipCodeField\" " +
        "size=\"10\" style=\"background-color:yellow;
color:maroon;\">");
    else
        out.println("<td width=\"600\"><input type=\"text\"
name=\"ZipCodeField\" " +
            "value=\""+request.getParameter("ZipCodeField")+\"size=\"10\" >");
    out.println("</td></tr><tr>");
    out.println("<td width=\"200\"><b>Country: </b></td>");
    out.println("<td width=\"600\">");
    out.println("<select name=\"CountryField\">");
    try {
        ResultSet rs = state_country.get_query("select * from
country");
        while (rs.next()){
            sta = (rs.getString("cnt"));

            if(request.getParameter("CountryField").equals(sta))
                out.println("<option Value=\""+sta+"\" "
selected>" +sta+"</option>");
            else
                out.println("<option Value=\""+sta+"\">"
+sta+"</option>");
        }
    } //end try
    catch (SQLException e){
        e.printStackTrace ();
    }
    finally{
        try{
            state_country.DB_close();
        }catch(Exception e2){}
    }
    out.println("</select>");
    out.println("</td></tr>");
    out.println("<tr><td width=\"200\"><b>Email
Address:</b></td>");
    if(!check_email(request.getParameter("EmailField")))

```

```

        out.println("<td width=\"600\"><input type=\"text\"
name=\"EmailField\" " +
        "size=\"20\" style=\"background-color:yellow;
color:maroon;\"></td>");
    else
        out.println("<td width=\"600\"><input type=\"text\"
name=\"EmailField\" " +
        "value=\""+request.getParameter("EmailField")+\"size=\"20\" ></td>");
    out.println("</tr><tr>");
    out.println("<td width=\"200\"><b>Credit Card Number:
</b></td>");
    if(!check_credit(request.getParameter("CreditField")))
        out.println("<td width=\"600\"><input type=\"text\"
name=\"CreditField\" " +
        "size=\"20\" style=\"background-color:yellow;
color:maroon;\"></td>");
    else
        out.println("<td width=\"600\"><input type=\"text\"
name=\"CreditField\" " +
        "value=\""+request.getParameter("CreditField")+\"size=\"20\" ></td>");
    out.println("</tr><tr>");
    out.println("<td width=\"200\"><b>Expiration Date:
</b></td>");
    out.println("<td width=\"600\">");
    out.println("<select name=\"ExpireM\">");
    Vector month = new Vector();
    month.add("01");
    month.add("02");
    month.add("03");
    month.add("04");
    month.add("05");
    month.add("06");
    month.add("07");
    month.add("08");
    month.add("09");
    month.add("10");
    month.add("11");
    month.add("12");
    for (int i=0;i<month.size();i++){
        if(request.getParameter("ExpireM").equals(month.elementAt(i)))
            out.println("<option
Value=\""+month.elementAt(i)+\" selected>"
                +month.elementAt(i)+"</option>");
        else
            out.println("<option
Value=\""+month.elementAt(i)+\">"
                +month.elementAt(i)+"</option>");
    }
    out.println("</select>&nbsp;&nbsp;&nbsp;");
    out.println("<select name=\"ExpireY\">");
    Vector year = new Vector();
    year.add("2006");
    year.add("2007");
    year.add("2008");

```

```

        year.add("2009");
        year.add("2010");
        year.add("2011");
        year.add("2012");
        for (int i=0;i<year.size();i++){

            if(request.getParameter("ExpireY").equals(year.elementAt(i)))
                out.println("<option
Value=\""+year.elementAt(i)+"\" selected>"
                    +year.elementAt(i)+"</option>");
            else
                out.println("<option
Value=\""+year.elementAt(i)+"\">"
                    +year.elementAt(i)+"</option>");
        }
        out.println("</select>");
        out.println("</td>");
        out.println("</tr>");
        out.println("</table></center><br />");
        out.println("<hr width=100%>");
        out.println("<br />");
        out.println("<center><input value=\"Submit\"
type=\"submit\">");
        out.println("</center>");
        out.println("</form></body></html>");
    }
}
else{response.sendRedirect("index.jsp");}
}

public boolean check_fname(String fname){
    int i=0;
    for (i=0;i<fname.length();i++){
        if(Character.isLetter(fname.charAt(i)))
            continue;
        else
            break;
    }
    if (i!=fname.length() || i<2 || i>15){
        return false;
    }
    return true;
}

public boolean check_lname(String lname){
    int i=0;
    for (i=0;i<lname.length();i++){
        if(Character.isLetter(lname.charAt(i)))
            continue;
        else
            break;
    }
    if (i!=lname.length() || i<2 || i>15){
        return false;
    }
    return true;
}
}

```

```

public boolean check_address(String address){
    if (address.length()==0 || address.length(>40){
        return false;
    }
    return true;
}

public boolean check_city(String city){
    if (city.length()==0 || city.length(>20){
        return false;
    }
    return true;
}

public boolean check_zip(String zip){
    int i=0;
    for (i=0;i<zip.length();i++){
        if(Character.isDigit(zip.charAt(i)))
            continue;
        else
            break;
    }
    if(i!=zip.length() || (i!=5 && i!=9)){
        return false;
    }
    return true;
}

public boolean check_email(String email){
    int pos_at = -1;
    int pos_dot = -1;
    if (email == null || email.length(>40)
        return false;
    for (int i=0;i<email.length();i++){
        if (email.charAt(i)=='@'){
            if (pos_at == -1)
                pos_at = i;
            else
                return false;
        }
        if (email.charAt(i)=='.'){
            if (pos_dot == -1 && i > pos_at && pos_at != -1)
                pos_dot = i;
            else
                return false;
        }
    }
    return (pos_at != -1 && pos_dot != -1);
}

public boolean check_credit(String credit){
    int i=0;
    for (i=0;i<credit.length();i++){
        if(Character.isDigit(credit.charAt(i)))
            continue;
        else

```

```

                break;
            }
            if(i!=credit.length() || i!=16){
                return false;
            }
            return true;
        }
    }
}

```

History.java

```

package swe622.web;

import javax.servlet.http.HttpServlet;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.ResultSet;
import java.util.Vector;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 * Servlet Class
 *
 * @web.servlet          name="History"
 *                      display-name="Name for History"
 *                      description="Description for History"
 * @web.servlet-mapping url-pattern="/History"
 * @web.servlet-init-param name="A parameter"
 *                          value="A value"
 */
public class HistoryServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;
    public HistoryServlet() {
        super();
    }

    @SuppressWarnings("unchecked")
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        PrintWriter out= response.getWriter();
        response.setContentType("text/html");
        String name = null;
        String id = null;
        boolean non_session = false;
        try{
            HttpSession session = request.getSession(false);
            name = (String)session.getAttribute("accountname");
            id = (String)session.getAttribute("accountid");
        }catch(NullPointerException e){
            non_session = true;
        }
        if(!non_session && name!=null){

```

```

out.println("<!DOCTYPE HTML PUBLIC \"-//W3C//DTD HTML 4.01//EN\"");
out.println(" \"http://www.w3.org/TR/html4/strict.dtd\"");
out.println("<HTML>");
out.println("<head>");
out.println("<title>Personal Account</title>");
out.println("</head>");
out.println("<BODY bgcolor=#CCCCFF\"");
out.println(" welcome, <b>"+name+"</b><br /><br />");
out.println("<center>");
out.println("<table><tr>");
out.println("<td align=center width=150><a href=\"Manage\"><font
color=blue><b>Home Page</b></font></a></td>");
out.println("<td align=center width=150><a
href=\"Searchbook\"><font color=blue><b>Search Books</b></font></a></td>");
out.println("<td align=center width=150><a href=\"Sellbook\"><font
color=blue><b>Sell Books</b></font></a></td>");
out.println("<td align=center width=150><a href=\"Checkout\"><font
color=blue><b>Shopping Cart</b></font></a></td>");
out.println("<td align=center width=150><font color=blue><b>Order
History</b></font></td>");
out.println("<td align=center width=150><a href=\"Edit\"><font
color=blue><b>Edit Information</b></font></a></td>");
out.println("<td align=center width=150><a href=\"Password\"><font
color=blue><b>Change Password</b></font></a></td>");
out.println("<td align=center width=150><a href=\"Logout\"><font
color=blue><b>Logout</b></font></a></td>");
out.println("</tr></table>");
out.println("<hr width=\"100%\"");
DBHandler history = new DBHandler();
Vector amount = new Vector();
Vector order_id = new Vector();
Vector dt = new Vector();

try {
String query = "SELECT * FROM order_num WHERE username
='"+id+
        " ' order by dt";
ResultSet rs1 = history.get_query(query);
while (rs1.next()) {
//System.out.println("loop");
amount.add(new Double(rs1.getDouble(2)));
order_id.add(new Integer(rs1.getInt(3)));
dt.add(rs1.getDate(4));
//System.out.println(dt.elementAt(dt.size()-1));
}
rs1.close();
} //end try
catch (Exception e){
System.out.println ("Exception in connecting to shoppincart
DB");
e.printStackTrace ();
}
finally{
try{
history.DB_close();
} catch(Exception e2){}
}

```

```

        out.println("<br /><form METHOD=get ACTION=\"Manage\">");
        out.println("<Table border = 1>");
        out.println("<TR bgcolor = \"#FFC1C1\">");
        out.println("<TD width=\"150\" > <center> <b> Order Number </b>
</center> </TD>");
        out.println("<TD width=\"100\"> <center> <b> Amount </b> </center>
</TD>");
        out.println("<TD width=\"150\"> <center> <b> Date </b> </center>
</TD>");
        out.println("</TR>");
        for (int i=0; i<amount.size();i++){
            out.println("<TR>");
            out.println("<TD width=\"150\"><center>"+
order_id.elementAt(i) + "</center></TD>");
            out.println("<TD width=\"100\"><center><b> $" +
amount.elementAt(i)+ "</b></center></TD>");
            out.println("<TD width=\"150\"> <center>" + dt.elementAt(i)
+ "</center> </TD>");
            out.println("</TR>");
        }
        out.println("</Table><br />");
        out.println("<br /><input type=\"submit\" value=\"Back To Home
Page\">");
        out.println("</form>");
        out.println("</center>");
        out.println("</BODY>");
        out.println("</HTML>");
    }
    else{response.sendRedirect("index.jsp");}
}

protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
}
}

```

LoginServlet.java

```

package swe622.web;

import javax.servlet.http.HttpServlet;
import javax.servlet.ServletException;
import javax.servlet.ServletConfig;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
import javax.naming.Context;
import javax.naming.InitialContext;
import javax.rmi.PortableRemoteObject;
import java.util.Properties;
import java.io.*;

import swe622.interfaces.Login;
import swe622.interfaces.LoginHome;
/**
 * Servlet Class

```

```

*
* @web.servlet          name="Login"
*                      display-name="Login Page"
*                      description="This page is a login page"
* @web.servlet-mapping url-pattern="/Login"
* @web.servlet-init-param name="A parameter"
*                        value="A value"
* @web.ejb-ref
*   name="ejb/Login"
*   type="Session"
*   home="swe622.interfaces.LoginHome"
*   remote="swe622.interfaces.Login"
*   discription="Reference to the Login EJB"
*
* @jboss.ejb-ref-jndi
*   ref-name="ejb/Login"
*   jndi-name="ejb/Login"
*/
public class LoginServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

    private LoginHome lgin;
    private Login lg;

    public LoginServlet() {
        super();
        // TODO Auto-generated constructor stub
    }

    public void init(ServletConfig config) throws ServletException {
        try {
            Properties props = System.getProperties();
            Context context = new InitialContext(props);
            Object ref = context.lookup("java:/comp/env/ejb/Login");
            lgin = (LoginHome) PortableRemoteObject.narrow(ref,
LoginHome.class);
        } catch (Exception e) {
            throw new ServletException("Lookup of java:/comp/env/ failed");
        }
    }

    protected void doPost(HttpServletRequest req, HttpServletResponse resp)
        throws ServletException, IOException {
        PrintWriter out = resp.getWriter();
        try{
            lg = lgin.create();
        }catch (Exception e) {
            System.out.println(e.getMessage());
            e.printStackTrace(out);
        }
        String name =
lg.checking(req.getParameter("name"),req.getParameter("passwd"));
        if(name.length()!=0){
            HttpSession session = req.getSession(true);
            session.setAttribute("accountid", req.getParameter("name"));
            session.setAttribute("accountname",name );

```

```

        resp.sendRedirect("Manage");
    }
    else{
        resp.sendRedirect("invalid.jsp");
    }
}
}

```

LogoutServlet.java

```

package swe622.web;

import javax.servlet.http.HttpServlet;

import java.io.IOException;
import java.io.PrintWriter;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 * Servlet Class
 *
 * @web.servlet          name="Logout"
 *                      display-name="Name for Logout"
 *                      description="Description for Logout"
 * @web.servlet-mapping url-pattern="/Logout"
 * @web.servlet-init-param name="A parameter"
 *                          value="A value"
 */
public class LogoutServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

    public LogoutServlet() {
        super();
    }

    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out= response.getWriter();
        HttpSession session = request.getSession(false);
        session.removeAttribute("accountid");
        session.removeAttribute("accountname");
        session.invalidate();
        //session = null;
        out.println("<!DOCTYPE HTML PUBLIC \\"-//W3C//DTD HTML 4.01
Transitional//EN\");");
        out.println("\\"http://www.w3.org/TR/html4/loose.dtd\");");
        out.println("<html><head><title>Change Password</title></head>");
        out.println("<body bgcolor=\\"#CCCCFF\\" vlink=\\"#00ff0\");");
        out.println("<center> <h2> ONLINE BOOKS </h2> </center>");
        out.println("<hr width=100%>");
    }
}

```

```

        out.println("<center><b><i>You have successfully logged out
!!!</i></b></center><br>");
        out.println("<FORM METHOD=GET ACTION=\\\"index.jsp\\\">");
        out.println("<center><button TYPE=\\\"SUBMIT\\\">Back To
Login</button></center>");
        out.println("</form>");
        out.println("</body>");
        out.println("</html>");
    }

    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out= response.getWriter();
        HttpSession session = request.getSession(false);
        session.removeAttribute("accountid");
        session.removeAttribute("accountname");
        session.invalidate();
        //session = null;
        out.println("<!DOCTYPE HTML PUBLIC \\\"-//W3C//DTD HTML 4.01
Transitional//EN\\\"");
        out.println("\\\"http://www.w3.org/TR/html4/loose.dtd\\\"");
        out.println("<html><head><title>Change Password</title></head>");
        out.println("<body bgcolor=\\\"#CCCCFF\\\" vlink=\\\"#000ff0\\\"");
        out.println("<center> <h2> ONLINE BOOKS </h2> </center>");
        out.println("<hr width=100%>");
        out.println("<center><b><i>You have successfully logged out
!!!</i></b></center><br>");
        out.println("<FORM METHOD=GET ACTION=\\\"index.jsp\\\"");
        out.println("<center><button TYPE=\\\"SUBMIT\\\">Back To
Login</button></center>");
        out.println("</form>");
        out.println("</body>");
        out.println("</html>");
    }
}
}

```

ManageServlet.java

```

package swe622.web;

import javax.servlet.http.HttpServlet;

import java.io.IOException;
import java.io.PrintWriter;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 * Servlet Class
 *
 * @web.servlet          name="Manage"
 *                      display-name="Name for Manage"
 *                      description="Description for Manage"
 */

```

```

* @web.servlet-mapping      url-pattern="/Manage"
* @web.servlet-init-param  name="A parameter"
*                           value="A value"
*/
public class ManageServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

    public ManageServlet() {
        super();
        // TODO Auto-generated constructor stub
    }

    protected void doGet(HttpServletRequest req, HttpServletResponse resp)
        throws ServletException, IOException {

        PrintWriter out= resp.getWriter();
        resp.setContentType("text/html");
        String name = null;
        boolean non_session = false;
        try{
            HttpSession session = req.getSession(false);
            name = (String)session.getAttribute("accountname");
        }catch(NullPointerException e){
            non_session = true;
        }
        if(!non_session && name!=null){
            out.println("<!DOCTYPE HTML PUBLIC \"-//W3C//DTD HTML 4.01//EN\"");
            out.println("  \"http://www.w3.org/TR/html4/strict.dtd\"");
            out.println("<HTML>");
            out.println("<head>");
            out.println("<title>Personal Account</title>");
            out.println("</head>");
            out.println("<BODY bgcolor=#CCCCFF\"");
            out.println(" welcome, <b>"+name+"</b><br /><br />");
            out.println("<center>");
            out.println("<table><tr>");
            out.println("<td align=center width=150><font color=blue><b>Home
Page</b></font></td>");
            out.println("<td align=center width=150><a
href=\"Searchbook\"><font color=blue><b>Search Books</b></font></a></td>");
            out.println("<td align=center width=150><a href=\"Sellbook\"><font
color=blue><b>Sell Books</b></font></a></td>");
            out.println("<td align=center width=150><a href=\"Checkout\"><font
color=blue><b>Shopping Cart</b></font></a></td>");
            out.println("<td align=center width=150><a href=\"History\"><font
color=blue><b>Order History</b></font></a></td>");
            out.println("<td align=center width=150><a href=\"Edit\"><font
color=blue><b>Edit Information</b></font></a></td>");
            out.println("<td align=center width=150><a href=\"Password\"><font
color=blue><b>Change Password</b></font></a></td>");
            out.println("<td align=center width=150><a href=\"Logout\"><font
color=blue><b>Logout</b></font></a></td>");
            out.println("</tr></table>");
            out.println("<hr width=\"100%\"><br />");
            out.println("<table cellpadding=6 cellspacing=10><tr>");
            out.println("<td align=center width=250>");

```

```

        out.println("<img alt=\"logo1\" src=\"books\\1.JPG\"></img><br
/>");
        out.println("<b>DA VINCI CODE</b><br><b><i>Dan Brown</i></b></td>");

        out.println("<td align=center width=250>");
        out.println("<img alt=\"logo2\" src=\"books\\2.JPG\"></img><br
/>");
        out.println("<b>THE KITE RUNNER</b><br><b><i>Khaled
Hosseini</i></b></td>");

        out.println("<td align=center width=250>");
        out.println("<img alt=\"logo3\" src=\"books\\3.JPG\"></img><br
/>");
        out.println("<b>5th HORSEMAN</b><br><b><i>James
Patterson</i></b></td>");
        out.println("</tr>");

        out.println("<td align=center width=250>");
        out.println("<img alt=\"logo4\" src=\"books\\4.JPG\"></img><br
/>");
        out.println("<b>THE TENTH CIRCLE</b><br><b><i>Jodi
Picoult</i></b></td>");

        out.println("<td align=center width=250>");
        out.println("<img alt=\"logo2\" src=\"books\\5.JPG\"></img><br
/>");
        out.println("<b>ANGELS & DEMONS</b><br><b><i>Dan Brown</i></b></td>");

        out.println("<td align=center width=250>");
        out.println("<img alt=\"logo3\" src=\"books\\6.JPG\"></img><br
/>");
        out.println("<b>INTERVIEW WITH VAMPIRE</b><br><b><i>Anne
Rice</i></b></td>");
        out.println("</tr></table>");

        out.println("</center>");
        out.println("</BODY>");
        out.println("</HTML>");
    }
    else{resp.sendRedirect("index.jsp");}
}

protected void doPost(HttpServletRequest req, HttpServletResponse resp)
    throws ServletException, IOException {
    doGet(req,resp);
}
}

```

OrderServlet.java

```

package swe622.web;

import javax.servlet.http.HttpServlet;

import java.io.IOException;
import java.io.PrintWriter;
import java.math.BigDecimal;

```

```

import java.util.Calendar;
import java.util.Vector;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 * Servlet Class
 *
 * @web.servlet          name="Order"
 *                      display-name="Name for Order"
 *                      description="Description for Order"
 * @web.servlet-mapping url-pattern="/Order"
 * @web.servlet-init-param name="A parameter"
 *                          value="A value"
 */
public class OrderServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;
    String id = null;
    String name = null;
    Calendar dt = Calendar.getInstance();
    public OrderServlet() {
        super();
    }

    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out= response.getWriter();
        boolean non_session = false;
        try{
            HttpSession session = request.getSession(false);
            id = (String) session.getAttribute("accountid");
            name = (String)session.getAttribute("accountname");
        }catch(NullPointerException e){
            non_session = true;
        }
        if(!non_session && name!=null){
            HttpSession session = request.getSession(false);
            Vector tit = new Vector();
            Vector aut = new Vector();
            Vector pri = new Vector();
            Vector amt = new Vector();
            Vector itm = new Vector();
            Vector isbn = new Vector();
            Vector info = new Vector();
            tit = (Vector)session.getAttribute("tit");
            aut = (Vector)session.getAttribute("aut");
            pri = (Vector)session.getAttribute("pri");
            amt = (Vector)session.getAttribute("amt");
            itm = (Vector)session.getAttribute("itm");
            isbn = (Vector)session.getAttribute("isbn");
            info = (Vector)session.getAttribute("info");

```

```

        int order_num =
((Integer)session.getAttribute("order_num")).intValue();
        session.removeAttribute("tit");
        session.removeAttribute("aut");
        session.removeAttribute("pri");
        session.removeAttribute("amt");
        session.removeAttribute("itm");
        session.removeAttribute("isbn");
        session.removeAttribute("info");
        session.removeAttribute("order_num");

        out.println("<!DOCTYPE HTML PUBLIC \\"-//W3C//DTD HTML 4.01
Transitional//EN\");
        out.println("\\"http://www.w3.org/TR/html4/loose.dtd\");
        out.println("<html><head><title>Order</title></head>");
        out.println("<center><h2> Order Information </h2></center>");
        out.println("<hr width=\\"100%\");
        out.println("<h3> Order No: "+order_num+"</h3>");
        out.println("<b> Date: "+(dt.get(Calendar.MONTH)+1)+"-"+
            dt.get(Calendar.DAY_OF_MONTH)+"-
"+dt.get(Calendar.YEAR)+
            "</b><br /><br />");
        double total = 0.00;
        out.println("<Table border = 1>");
        out.println("<TR bgcolor=\\"#FFD700\");
        out.println("<TD width=\\"300\"); <center> <b> Title </b> </center>
</TD>");
        out.println("<TD width=\\"200\"); <center> <b> Author </b> </center>
</TD>");
        out.println("<TD width=\\"100\"); <center> <b> ISBN </b> </center>
</TD>");
        out.println("<TD width=\\"70\"); <center> <b> Price </b> </center>
</TD>");
        out.println("<TD width=\\"100\"); <center> <b> Items </b> </center>
</TD>");
        out.println("<TD width=\\"70\"); <center> <b> Amounts </b> </center>
</TD>");
        out.println("</TR>");
        for (int i = 0; i < tit.size(); i++) {
            out.println("<TR>");
            out.println("<TD width=\\"300\"); align=left>"+ tit.elementAt(i)
+ "</TD>");
            out.println("<TD width=\\"200\"); align=left>"+
aut.elementAt(i) + "</TD>");
            out.println("<TD width=\\"100\"); <center>"+ isbn.elementAt(i)
+
            "</center> </TD>");
            out.println("<TD width=\\"70\");<center><font color=red><b><i>$
" +
            pri.elementAt(i)+"</i></b></font></center></TD>");
            out.println("<TD width=\\"100\"); <center>"+ itm.elementAt(i)
+
            "</center> </TD>");
            out.println("<TD width=\\"70\"); align=right><font
color=red><b>$ " +
            amt.elementAt(i)+"</b></font></TD>");

```

```

        total += ((Double)amt.elementAt(i)).doubleValue();
        out.println("</TR>");
    }
    out.println("</Table>");

    BigDecimal bd = new BigDecimal(total);
    bd = bd.setScale(2,BigDecimal.ROUND_HALF_UP);
    total = bd.doubleValue();
    double tax = (total*5)/100;
    bd = new BigDecimal(tax);
    bd = bd.setScale(2,BigDecimal.ROUND_HALF_UP);
    tax = bd.doubleValue();
    double Total = total + tax;
    bd = new BigDecimal(total);
    bd = bd.setScale(2,BigDecimal.ROUND_HALF_UP);
    Total = bd.doubleValue();

    out.println("<table><tr><td width=\"685\"></td>");
    out.println("<td width=\"100\" align=right>");
    out.println("<b>Sub total:</b></td>");
    out.println("<td width=\"70\"
align=right><b>$<u>" +total+"</u></b></td></tr>");

    out.println("<tr><td width=\"685\"></td>");
    out.println("<td width=\"100\" align=right>");
    out.println("<b>Tax:</b></td>");
    out.println("<td width=\"70\"
align=right><b>$<u>" +tax+"</u></b></td></tr>");

    out.println("<tr><td width=\"685\"></td>");
    out.println("<td width=\"100\" align=right>");
    out.println("</td>");
    out.println("<td width=\"70\"
align=right><b><i>_____</i></b></td></tr>");

    out.println("<tr><td width=\"685\"></td>");
    out.println("<td width=\"100\" align=right>");
    out.println("<b>Total:</b></td>");
    out.println("<td width=\"70\"
align=right><b>$<u>" +Total+"</u></b></td></tr>");
    out.println("</table><br />");

    out.println("<hr width=\"100%\">");
    out.println("<b><u> Credit card information: </u></b><br>");
    out.println("<b> &nbsp;   Name: </b>" +name+"<br>");
    out.println("<b> &nbsp;   Credit card #:
</b>*****"+info.elementAt(6)+"<br>");
    out.println("<b> &nbsp;   Expire:
</b>" +info.elementAt(7)+"/"+info.elementAt(8)+"<br /><br />");

    out.println("<hr width=\"100%\">");
    out.println("<b><u> Shipping Address: </u></b><br>");
    out.println("<b> &nbsp;   Name: </b>" +name+"<br>");
    out.println("<b> &nbsp;   Street: </b>" +info.elementAt(0)+"<br>");
    out.println("<b> &nbsp;   City: </b>" +info.elementAt(1)+"<br>");
    out.println("<b> &nbsp;   State: </b>" +info.elementAt(2)+"<br>");
    out.println("<b> &nbsp;   Zip: </b>" +info.elementAt(3)+"<br>");

```

```

        out.println("<b> &nbsp;&nbsp;&nbsp;Country: </b>"+info.elementAt(4)+"<br>");
        out.println("<b> &nbsp;&nbsp;&nbsp;Email: </b>"+info.elementAt(5)+"<br /><br
/>");

        out.println("<center><h4> Thank you for your order
!!!</h4></center><br />");
        out.println("<hr width=\"100%\">");
        out.println("<center><form method=post action=\"Manage\">");
        out.println("<input type=\"submit\" name=\"Sub\" value=\"Back to
Home Page\">");
        out.println("</form></center>");
        out.println("</body></html>");
    }else{response.sendRedirect("index.jsp");}
}

protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    response.setContentType("text/html");
    PrintWriter out= response.getWriter();
    boolean non_session = false;
    try{
        HttpSession session = request.getSession(false);
        id = (String) session.getAttribute("accountid");
        name = (String)session.getAttribute("accountname");
    }catch(NullPointerException e){
        non_session = true;
    }
    if(!non_session && name!=null){
        HttpSession session = request.getSession(false);
        Vector tit = new Vector();
        Vector aut = new Vector();
        Vector pri = new Vector();
        Vector amt = new Vector();
        Vector itm = new Vector();
        Vector isbn = new Vector();
        Vector info = new Vector();
        tit = (Vector)session.getAttribute("tit");
        aut = (Vector)session.getAttribute("aut");
        pri = (Vector)session.getAttribute("pri");
        amt = (Vector)session.getAttribute("amt");
        itm = (Vector)session.getAttribute("itm");
        isbn = (Vector)session.getAttribute("isbn");
        info = (Vector)session.getAttribute("info");
        int order_num =
((Integer)session.getAttribute("order_num")).intValue();
        session.removeAttribute("tit");
        session.removeAttribute("aut");
        session.removeAttribute("pri");
        session.removeAttribute("amt");
        session.removeAttribute("itm");
        session.removeAttribute("isbn");
        session.removeAttribute("info");
        session.removeAttribute("order_num");

        out.println("<!DOCTYPE HTML PUBLIC \"-//W3C//DTD HTML 4.01
Transitional//EN\"");
        out.println("\<a href='http://www.w3.org/TR/html4/loose.dtd'>");

```

```

out.println("<html><head><title>Order</title></head>");
out.println("<center><h2> Order Information </h2></center>");
out.println("<hr width=\"100%\">");
out.println("<h3> Order No: "+order_num+"</h3>");
out.println("<b> Date: "+(dt.get(Calendar.MONTH)+1)+"-"+
dt.get(Calendar.DAY_OF_MONTH)+"-
"+dt.get(Calendar.YEAR)+
"</b><br /><br />");
double total = 0.00;
out.println("<Table border = 1>");
out.println("<TR bgcolor=\"#FFD700\">");
out.println("<TD width=\"300\"> <center> <b> Title </b> </center>
</TD>");
out.println("<TD width=\"200\"> <center> <b> Author </b> </center>
</TD>");
out.println("<TD width=\"100\"> <center> <b> ISBN </b> </center>
</TD>");
out.println("<TD width=\"70\"> <center> <b> Price </b> </center>
</TD>");
out.println("<TD width=\"100\"> <center> <b> Items </b> </center>
</TD>");
out.println("<TD width=\"70\"> <center> <b> Amounts </b> </center>
</TD>");
out.println("</TR>");
for (int i = 0; i < tit.size(); i++) {
    out.println("<TR>");
    out.println("<TD width=\"300\" align=left>"+ tit.elementAt(i)
+ "</TD>");
    out.println("<TD width=\"200\" align=left>" +
aut.elementAt(i) + "</TD>");
    out.println("<TD width=\"100\"> <center>" + isbn.elementAt(i)
+
"</center> </TD>");
    out.println("<TD width=\"70\"><center><font color=red><b><i>$
" +
pri.elementAt(i)+"</i></b></font></center></TD>");
    out.println("<TD width=\"100\"> <center>" + itm.elementAt(i)
+
"</center> </TD>");
    out.println("<TD width=\"70\" align=right><font
color=red><b>$ " +
amt.elementAt(i)+"</b></font></TD>");
    total += ((Double)amt.elementAt(i)).doubleValue();
    out.println("</TR>");
}
out.println("</Table>");

BigDecimal bd = new BigDecimal(total);
bd = bd.setScale(2, BigDecimal.ROUND_HALF_UP);
total = bd.doubleValue();
double tax = (total*5)/100;
bd = new BigDecimal(tax);
bd = bd.setScale(2, BigDecimal.ROUND_HALF_UP);
tax = bd.doubleValue();
double Total = total + tax;
bd = new BigDecimal(total);

```

```

        bd = bd.setScale(2, BigDecimal.ROUND_HALF_UP);
        Total = bd.doubleValue();

        out.println("<table><tr><td width=\"685\"></td>");
        out.println("<td width=\"100\" align=right>");
        out.println("<b>Sub total:</b></td>");
        out.println("<td width=\"70\"
align=right><b>$<u>"+total+"</u></b></td></tr>");

        out.println("<tr><td width=\"685\"></td>");
        out.println("<td width=\"100\" align=right>");
        out.println("<b>Tax:</b></td>");
        out.println("<td width=\"70\"
align=right><b>$<u>"+tax+"</u></b></td></tr>");

        out.println("<tr><td width=\"685\"></td>");
        out.println("<td width=\"100\" align=right>");
        out.println("</td>");
        out.println("<td width=\"70\"
align=right><b><i>_____</i></b></td></tr>");

        out.println("<tr><td width=\"685\"></td>");
        out.println("<td width=\"100\" align=right>");
        out.println("<b>Total:</b></td>");
        out.println("<td width=\"70\"
align=right><b>$<u>"+Total+"</u></b></td></tr>");
        out.println("</table><br />");

        out.println("<hr width=\"100%\">");
        out.println("<b><u> Credit card information: </u></b><br>");
        out.println("<b> &nbsp;   Name: </b>"+name+"<br>");
        out.println("<b> &nbsp;   Credit card #:
</b>*****"+info.elementAt(6)+"<br>");
        out.println("<b> &nbsp;   Expire:
</b>"+info.elementAt(7)+"/"+info.elementAt(8)+"<br /><br />");

        out.println("<hr width=\"100%\">");
        out.println("<b><u> Shipping Address: </u></b><br>");
        out.println("<b> &nbsp;   Name: </b>"+name+"<br>");
        out.println("<b> &nbsp;   Street: </b>"+info.elementAt(0)+"<br>");
        out.println("<b> &nbsp;   City: </b>"+info.elementAt(1)+"<br>");
        out.println("<b> &nbsp;   State: </b>"+info.elementAt(2)+"<br>");
        out.println("<b> &nbsp;   Zip: </b>"+info.elementAt(3)+"<br>");
        out.println("<b> &nbsp;   Country: </b>"+info.elementAt(4)+"<br>");
        out.println("<b> &nbsp;   Email: </b>"+info.elementAt(5)+"<br /><br
/>");

        out.println("<center><h4> Thank you for your order
!!!</h4></center><br />");
        out.println("<hr width=\"100%\">");
        out.println("<center><form method=post action=\"Manage\">");
        out.println("<input type=\"submit\" name=\"Sub\" value=\"Back to
Home Page\">");
        out.println("</form></center>");
        out.println("</body></html>");
    }else{response.sendRedirect("index.jsp");}
}

```

```
}
```

PasswordServlet.java

```
package swe622.web;

import javax.servlet.http.HttpServlet;
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
/**
 * Servlet Class
 *
 * @web.servlet          name="Password"
 *                      display-name="Name for Password"
 *                      description="Description for Password"
 * @web.servlet-mapping url-pattern="/Password"
 * @web.servlet-init-param name="A parameter"
 *                          value="A value"
 */
public class PasswordServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

    public PasswordServlet() {
        super();
    }

    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out= response.getWriter();
        String name = null;
        boolean non_session = false;
        try{
            HttpSession session = request.getSession(false);
            name = (String)session.getAttribute("accountname");
        }catch(NullPointerException e){
            non_session = true;
        }
        if(!non_session && name!=null){
            out.println("<!DOCTYPE HTML PUBLIC \"/>");
            out.println("<http://www.w3.org/TR/html4/loose.dtd>");
            out.println("<html><head><title>Change Password</title></head>");
            out.println("<body bgcolor=\"#CCCCFF\" vlink=\"#000ff0\">");
            out.println(" welcome, <b>"+name+"</b><br /><br />");
            out.println("<center><table><tr>");
            out.println("<td align=center width=150><a href=\"Manage\"><font color=blue><b>Home Page</b></font></a></td>");
            out.println("<td align=center width=150><a href=\"Searchbook\"><font color=blue><b>Search Books</b></font></a></td>");
            out.println("<td align=center width=150><a href=\"Sellbook\"><font color=blue><b>Sell Books</b></font></a></td>");
        }
    }
}
```

```

        out.println("<td align=center width=150><a href=\"Checkout\"><font
color=blue><b>Shopping Cart</b></font></a></td>");
        out.println("<td align=center width=150><a href=\"History\"><font
color=blue><b>Order History</b></font></a></td>");
        out.println("<td align=center width=150><a href=\"Edit\"><font
color=blue><b>Edit Information</b></font></a></td>");
        out.println("<td align=center width=150><font color=blue><b>Change
Password</b></font></td>");
        out.println("<td align=center width=150><a href=\"Logout\"><font
color=blue><b>Logout</b></font></a></td>");
        out.println("</tr></table></center>");
        out.println("<hr width=100%>");
        out.println("<form action=\"\" name=\"Password\"
method=\"post\">");
        out.println("<br />");
        out.println("<center><font color=\"#00008B\"><b>Change
Password</b>");
        out.println("</font></center>");
        out.println("<br /><br />");
        out.println("<center><table>");
        out.println("<tr>");
        out.println("<td width=\"200\"><b>New password:</b></td>");
        out.println("<td width=\"600\"><input type=\"password\"
name=\"Pw1\" size=\"20\">");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>Retype new password: </b></td>");
        out.println("<td width=\"600\"><input type=\"password\"
name=\"Pw2\" size=\"20\" >");
        out.println("</td></tr>");
        out.println("</table></center><br />");
        out.println("<hr width=100%>");
        out.println("<br />");
        out.println("<center><input value=\"Submit\"
type=\"submit\"></center>");
        out.println("</form></body></html>");
    }
    else{response.sendRedirect("index.jsp");}
}

protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    response.setContentType("text/html");
    PrintWriter out= response.getWriter();
    String name = null;
    String id = null;
    boolean non_session = false;
    try{
        HttpSession session = request.getSession(false);
        name = (String)session.getAttribute("accountname");
        id = (String)session.getAttribute("accountid");
    }catch(NullPointerException e){
        non_session = true;
    }
    if(!non_session && name != null){
        String password1 = request.getParameter("Pw1");
        String password2 = request.getParameter("Pw2");
        String error = "";

```

```

        if(same_password(password1, password2)){
            if(!correct_password(password1))
                error = " Password must be 5 to 15 characters\n";
        }
        else
            error = " 2 passwords must be the same\n";
        if(error.length()!=0){
            out.println("<!DOCTYPE HTML PUBLIC \"/>");
            out.println("<html><head><title>Change
            Password</title></head>");
            out.println("<body bgcolor=\"#CCCCFF\" vlink=\"#000ff0\">");
            out.println(" welcome, <b>"+name+"</b><br /><br />");
            out.println("<center><table><tr>");
            out.println("<td align=center width=150><a
            href=\"Manage\"><font color=blue><b>Home Page</b></font></a></td>");
            out.println("<td align=center width=150><a
            href=\"Searchbook\"><font color=blue><b>Search Books</b></font></a></td>");
            out.println("<td align=center width=150><a
            href=\"Sellbook\"><font color=blue><b>Sell Books</b></font></a></td>");
            out.println("<td align=center width=150><a
            href=\"Checkout\"><font color=blue><b>Shopping Cart</b></font></a></td>");
            out.println("<td align=center width=150><a
            href=\"History\"><font color=blue><b>Order History</b></font></a></td>");
            out.println("<td align=center width=150><a
            href=\"Edit\"><font color=blue><b>Edit Information</b></font></a></td>");
            out.println("<td align=center width=150><font
            color=blue><b>Change Password</b></font></td>");
            out.println("<td align=center width=150><a
            href=\"Logout\"><font color=blue><b>Logout</b></font></a></td>");
            out.println("</tr></table></center>");
            out.println("<hr width=100%>");
            out.println("<form action=\"\" name=\"Password\"
            method=\"post\">");
            out.println("<br />");
            out.println("<center><font color=\"#00008B\"><b>Change
            Password</b>");
            out.println("</font></center>");
            out.println("<br /><br />");
            out.println("&nbsp;<font color=red><b>"+error+"</b></font><br
            /><br />");
            out.println("<table>");
            out.println("<tr>");
            out.println("<td width=\"200\"><b>New password:</b></td>");
            out.println("<td width=\"600\"><input type=\"password\"
            name=\"Pw1\" size=\"20\">");
            out.println("</td></tr><tr>");
            out.println("<td width=\"200\"><b>Retype new password:
            </b></td>");
            out.println("<td width=\"600\"><input type=\"password\"
            name=\"Pw2\" size=\"20\" >");
            out.println("</td></tr>");
            out.println("</table><br />");
            out.println("<hr width=100%>");
            out.println("<br />");

```

```

        out.println("<center><input value=\"Submit\"
type=\"submit\"></center>");
        out.println("</form></body></html>");
    }
    else{
        DBHandler passw = new DBHandler();
        String passwd = request.getParameter("Pw1");
        try {
            String update="update customer set
password='"+passwd+"'where username='"+id+"'";
            passw.insert(update);
        }//end try
        catch (Exception e){
            System.out.println ("Exception in Password DB");
            e.printStackTrace ();
        }
        finally{
            try{
                passw.DB_close();
            }catch(Exception e2){}
        }
        out.println("<!DOCTYPE HTML PUBLIC \"-//W3C//DTD HTML 4.01
Transitional//EN\"");
        out.println("\"http://www.w3.org/TR/html4/loose.dtd\">");
        out.println("<html><head><title>Change
Password</title></head>");
        out.println("<body bgcolor=\"#CCCCFF\" vlink=\"#000ff0\">");
        out.println(" welcome, <b>"+name+"</b><br />");
        out.println("<center><h2> ONLINE BOOKS </h2> ");
        out.println("<hr width=100%><br />");
        out.println("<b><i>Your password has been updated
sucessfully!!!</i></b>");
        out.println("<br /><form action=\"Manage\"");
        out.println("<br /><input type=\"submit\" value=\"Home
Page\" />");
        out.println("</form>");
        out.println("</center</body></html>");
    }
    }else{response.sendRedirect("index.jsp");}
}
public boolean same_password(String password1, String password2){
    if(!password1.equals(password2))
        return false;
    return true;
}

public boolean correct_password(String password){
    if (password.length()>15 || password.length()<5)
        return false;
    return true;
}
}

```

ReceiveServlet.java

```

package swe622.web;

import javax.servlet.http.HttpServlet;

```

```

import java.io.IOException;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Calendar;
import java.util.Vector;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 * Servlet Class
 *
 * @web.servlet          name="Receive"
 *                      display-name="Name for Receive"
 *                      description="Description for Receive"
 * @web.servlet-mapping url-pattern="/Receive"
 * @web.servlet-init-param name="A parameter"
 *                          value="A value"
 */
public class ReceiveServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

    public ReceiveServlet() {
        super();
    }

    @SuppressWarnings("unchecked")
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        boolean non_session = false;
        String back = null;
        String id=null;
        String name = null;
        try{
            HttpSession session = request.getSession(false);
            id = (String) session.getAttribute("accountid");
            name = (String)session.getAttribute("accountname");
            back = (String)session.getAttribute("back");
        }catch(NullPointerException e){
            non_session = true;
        }
        if(!non_session && name!=null && back!=null){
            if(request.getParameter("Can")!=null)
                response.sendRedirect("Checkout");
            else if(request.getParameter("Sub")!=null){
                DBHandler bill = new DBHandler();
                Vector book_id = new Vector();
                ResultSet rs;
                try{
                    rs = bill.get_query("select id from shoppingcart where
username='"+id+"'");
                    while(rs.next())

```

```

        book_id.add(new Integer(rs.getInt(1)));
rs.close();
bill.insert("Delete shoppingcart where
username='"+id+"'");
        for(int i=0;i<book_id.size();i++){
            rs = bill.get_query("select amount from book
where id="+
                                book_id.elementAt(i)+"");
            if(rs.next()){
                int amount = rs.getInt(1);
                if(amount!=0){
                    book_id.removeElementAt(i);
                    i--;
                }
            }
            rs.close();
        }
    }catch(SQLException e){}
    if(book_id.size(>0){
        for(int i=0;i<book_id.size();i++){
            bill.insert("Delete book where
id="+book_id.elementAt(i));
        }
    }
    //DBHandler cart = new DBHandler();
    int order_num = 0;
    try{
        ResultSet seq = bill.get_query("SELECT order_id.NEXTVAL
FROM DUAL");
        if(seq.next())
            order_num = seq.getInt(1);
        seq.close();
    }catch(SQLException e){}
    HttpSession session = request.getSession(false);
    session.setAttribute("order_num",new Integer(order_num));
    double total =
((Double)session.getAttribute("total")).doubleValue();
    Calendar dt = Calendar.getInstance();
    String d = (dt.get(Calendar.MONTH)+1)+"-"+
                dt.get(Calendar.DAY_OF_MONTH)+"-
"+dt.get(Calendar.YEAR);
    String ord = ("insert into order_num
values('"+id+"',"+total+", "+order_num
                +",to_date('"+d+"', 'MM-DD-YY'))");
    bill.insert(ord);
    bill.DB_close();
    //System.out.println("d: "+ord);
    session.removeAttribute("back");
    session.removeAttribute("total");
    response.sendRedirect("Order");
    }
    }else{response.sendRedirect("index.jsp");}
}

protected void handle(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
}

```

```
}
```

SearchbookServlet.java

```
package swe622.web;

import javax.servlet.http.HttpServlet;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Vector;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
/**
 * Servlet Class
 *
 * @web.servlet          name="Searchbook"
 *                      display-name="Name for Searchbook"
 *                      description="Description for Searchbook"
 * @web.servlet-mapping url-pattern="/Searchbook"
 * @web.servlet-init-param name="A parameter"
 *                          value="A value"
 */
public class SearchbookServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

    public SearchbookServlet() {
        super();
    }

    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out= response.getWriter();
        String name = null;
        boolean non_session = false;
        try{
            HttpSession session = request.getSession(false);
            name = (String)session.getAttribute("accountname");
        }catch(NullPointerException e){
            non_session = true;
        }
        if(!non_session && name!=null){
            out.println("<!DOCTYPE HTML PUBLIC \\"-//W3C//DTD HTML 4.01//EN\\"");
            out.println(" \\"http://www.w3.org/TR/html4/strict.dtd\\"");
            out.println("<HTML>");
            out.println("<head>");
            out.println("<title>Search Books</title>");
            out.println("</head>");
            out.println("<BODY bgcolor=\\"#CCCCFF\\"");
            out.println(" welcome, <b>"+name+"</b><br /><br />");
        }
    }
}
```

```

        out.println("<center>");
        out.println("<table><tr>");
        out.println("<td align=center width=150><a href=\"Manage\"><font
color=blue><b>Home Page</b></font></a></td>");
        out.println("<td align=center width=150><font color=blue><b>Search
Books</b></font></td>");
        out.println("<td align=center width=150><a href=\"Sellbook\"><font
color=blue><b>Sell Books</b></font></a></td>");
        out.println("<td align=center width=150><a href=\"Checkout\"><font
color=blue><b>Shopping Cart</b></font></a></td>");
        out.println("<td align=center width=150><a href=\"History\"><font
color=blue><b>Order History</b></font></a></td>");
        out.println("<td align=center width=150><a href=\"Edit\"><font
color=blue><b>Edit Information</b></font></a></td>");
        out.println("<td align=center width=150><a href=\"Password\"><font
color=blue><b>Change Password</b></font></a></td>");
        out.println("<td align=center width=150><a href=\"Logout\"><font
color=blue><b>Logout</b></font></a></td>");
        out.println("</tr></table>");
        out.println("<hr width=\"100%\"><br />");
        out.println("<form action=\"\" method=\"Post\">");
        out.println("<table><tr><td>");
        out.println("Search:</td>");
        out.println("<td><input type=\"text\" name=\"searching\"></td>");
        out.println("<td><input type=\"submit\" Value=\"Submit\"></td>");
        out.println("</tr></table><table><tr>");
        out.println("<td><input type=\"radio\" name=\"book\" "
value=\"Author\">Author</td>");
        out.println("<td><input type=\"radio\" name=\"book\" "
value=\"Title\">Title</td>");
        out.println("<td><input type=\"radio\" name=\"book\" "
value=\"ISBN\">ISBN</td>");
        out.println("<td><input type=\"radio\" name=\"book\" "
value=\"All\">All</td>");
        out.println("</tr></table></form>");
        out.println("</center>");
        out.println("</BODY>");
        out.println("</HTML>");
    }
    else{response.sendRedirect("index.jsp");}
}

```

```

@SuppressWarnings("unchecked")
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    response.setContentType("text/html");
    PrintWriter out= response.getWriter();
    String name = null;
    boolean non_session = false;
    try{
        HttpSession session = request.getSession(false);
        name = (String)session.getAttribute("accountname");
    }catch(NullPointerException e){
        non_session = true;
    }
    if(!non_session && name!=null){
        out.println("<!DOCTYPE HTML PUBLIC \"-//W3C//DTD HTML 4.01//EN\"");
    }
}

```

```

out.println(" \ "http://www.w3.org/TR/html4/strict.dtd\ ">");
out.println("<HTML>");
out.println("<head>");
out.println("<title>Search Books</title>");
out.println("</head>");
out.println("<BODY bgcolor=\ "#CCCCFF\ ">");
out.println(" welcome, <b>"+name+"</b><br /><br />");
out.println("<center>");
out.println("<table><tr>");
out.println("<td align=center width=150><a href=\ "Manage\ "><font
color=blue><b>Home Page</b></font></a></td>");
out.println("<td align=center width=150><font color=blue><b>Search
Books</b></font></td>");
out.println("<td align=center width=150><a href=\ "Sellbook\ "><font
color=blue><b>Sell Books</b></font></a></td>");
out.println("<td align=center width=150><a href=\ "Checkout\ "><font
color=blue><b>Shopping Cart</b></font></a></td>");
out.println("<td align=center width=150><a href=\ "History\ "><font
color=blue><b>Order History</b></font></a></td>");
out.println("<td align=center width=150><a href=\ "Edit\ "><font
color=blue><b>Edit Information</b></font></a></td>");
out.println("<td align=center width=150><a href=\ "Password\ "><font
color=blue><b>Change Password</b></font></a></td>");
out.println("<td align=center width=150><a href=\ "Logout\ "><font
color=blue><b>Logout</b></font></a></td>");
out.println("</tr></table><br />");
out.println("<hr width=\ "100%\ ">");
out.println("<form action=\ "\ " method=\ "Post\ ">");
out.println("<table><tr><td>");
out.println("Search:</td>");
out.println("<td><input type=\ "text\ " name=\ "searching\ "></td>");
out.println("<td><input type=\ "submit\ " Value=\ "Submit\ "></td>");
out.println("</tr></table><table><tr>");
out.println("<td><input type=\ "radio\ " name=\ "book\ "
value=\ "Author\ ">Author</td>");
out.println("<td><input type=\ "radio\ " name=\ "book\ "
value=\ "Title\ ">Title</td>");
out.println("<td><input type=\ "radio\ " name=\ "book\ "
value=\ "ISBN\ ">ISBN</td>");
out.println("<td><input type=\ "radio\ " name=\ "book\ "
value=\ "All\ ">All</td>");
out.println("</tr></table></form>");
out.println("<hr width=\ "100%\ ">");
if(request.getParameter("book")!=null){
    if(request.getParameter("book").equals("Author")){
        DBHandler book = new DBHandler();
        Vector tit = new Vector();
        Vector aut = new Vector();
        Vector isbn = new Vector();
        Vector pri = new Vector();
        Vector amount = new Vector();
        Vector id = new Vector();
        try {
            ResultSet rs1 = book.get_query("select * from
book where author LIKE '%" +
request.getParameter("searching")+%"'
order by author");

```

```

while (rs1.next()) {
    id.add(new Integer(rs1.getInt(1)));
    tit.add(rs1.getString(2));
    aut.add(rs1.getString(3));
    isbn.add(rs1.getString(4));
    pri.add(new Double(rs1.getDouble(5)));
    amount.add(new Integer(rs1.getInt(6)));
}
if(tit.size()==0)
    out.println("<b><i>No Authors match
\""+request.getParameter("searching")+
    "\"" in the system !!!</i></b>");
} //end try
catch (SQLException e){
    //System.out.println ("Exception in connecting to
book db");
    //e.printStackTrace ();
}
finally{
    try{
        book.DB_close();
    }catch(Exception e2){}
}
if(tit.size()!=0){
    HttpSession session = request.getSession(true);
    session.setAttribute("id",id);
    out.println("<form METHOD=GET

ACTION=\"Shoppingcart\">");

    out.println("<Table border = 1>");
    out.println("<TR bgcolor=\"#FFD700\">");
    out.println("<TD width=\"300\"> <center> <b>
Title </b> </center> </TD>");
    out.println("<TD width=\"200\"> <center> <b>
Author </b> </center> </TD>");
    out.println("<TD width=\"100\"> <center> <b> ISBN
</b> </center> </TD>");
    out.println("<TD width=\"70\"> <center> <b> Price
</b> </center> </TD>");
    out.println("<TD width=\"50\"> <center> <b> Items
</b> </center> </TD>");
    out.println("<TD width=\"100\"> <center> <b> Add
to cart </b> </center> </TD>");

    out.println("</TR>");
    for (int i = 0; i < tit.size(); i++) {

        if(((Integer)amount.elementAt(i)).intValue(>0){
            out.println("<TR>");
            out.println("<TD width=\"300\"
align=left>"+ tit.elementAt(i) + "</TD>");
            out.println("<TD width=\"200\"
align=left>"+ aut.elementAt(i)+ "</TD>");
            out.println("<TD width=\"100\">
<center>"+ isbn.elementAt(i)
+ "</center> </TD>");
            out.println("<TD
width=\"70\"><center><font color=red><b><i>$ " +

```

```

        pri.elementAt(i)+"</i></b></font></center></TD>");
        out.println("<TD
width=\"50\"><center>" + amount.elementAt(i)
        + "</center></TD>");
        out.println("<TD width=\"100\">
        id.elementAt(i)+\">");
        out.println("<option value=\"0\"
/>");
        for (int
j=1;j<=((Integer)amount.elementAt(i)).intValue();j++){
            if(j<10)
                out.println("<option
value=\""+j+"\" >"+0+j+"</option>");
            else out.println("<option
value=\""+j+"\" >"+j+"</option>");
        }
        out.println("</select></center>
</TD>");
        out.println("</TR>");
    }
}
out.println("</Table> <br />");
out.println("<input type=\"submit\" value=\" Add
\">");
        out.println("</form>");
    }
}
else if(request.getParameter("book").equals("Title")){
    DBHandler book = new DBHandler();
    Vector tit = new Vector();
    Vector aut = new Vector();
    Vector isbn = new Vector();
    Vector pri = new Vector();
    Vector amount = new Vector();
    Vector id = new Vector();
    try {
        ResultSet rs1 = book.get_query("select * from
book where title LIKE '%" +
        request.getParameter("searching")+%"'
order by title");
        while (rs1.next()) {
            id.add(new Integer(rs1.getInt(1)));
            tit.add(rs1.getString(2));
            aut.add(rs1.getString(3));
            isbn.add(rs1.getString(4));
            pri.add(new Double(rs1.getString(5)));
            amount.add(new Integer(rs1.getInt(6)));
        }
        if(tit.size()==0)
            out.println("<b><i>No Title match
\""+request.getParameter("searching")+
            "\" in the system !!!</i></b>");
    }//end try
    catch (SQLException e){

```

```

book db");
//System.out.println ("Exception in connecting to
//e.printStackTrace ();
}
finally{
try{
book.DB_close();
}catch(Exception e2){}
}
if(tit.size()!=0){
HttpSession session = request.getSession(true);
session.setAttribute("id",id);
out.println("<form METHOD=GET
ACTION=\"Shoppingcart\">");
out.println("<Table border = 1>");
out.println("<TR bgcolor=\"#FFD700\">");
out.println("<TD width=\"300\"> <center> <b>
Title </b> </center> </TD>");
out.println("<TD width=\"200\"> <center> <b>
Author </b> </center> </TD>");
out.println("<TD width=\"100\"> <center> <b> ISBN
</b> </center> </TD>");
out.println("<TD width=\"70\"> <center> <b> Price
</b> </center> </TD>");
out.println("<TD width=\"50\"> <center> <b> Items
</b> </center> </TD>");
out.println("<TD width=\"100\"> <center> <b> Add
to cart </b> </center> </TD>");
out.println("</TR>");
for (int i = 0; i < tit.size(); i++) {
if(((Integer)amount.elementAt(i)).intValue()>0){
out.println("<TR>");
out.println("<TD width=\"300\"
align=left>"+ tit.elementAt(i) +
out.println("<TD width=\"200\"
align=left>"+ aut.elementAt(i)
out.println("<TD width=\"100\">
+ "</center> </TD>");
out.println("<TD width=\"100\">
+ "</center> </TD>");
out.println("<TD
width=\"70\"><center><font color=red><b><i>$ " +
pri.elementAt(i)+"</i></b></font></center></TD>");
out.println("<TD
width=\"50\"><center>"+ amount.elementAt(i)
+ "</center></TD>");
out.println("<TD width=\"100\">
<center><select name=\""+
id.elementAt(i)+"\">");
out.println("<option value=\"0\"
/>");
for (int
j=1;j<=((Integer)amount.elementAt(i)).intValue();j++){
if(j<10)

```

```

value="\ "+j+"\ " >"+0+j+"</option>");
value="\ "+j+"\ " >"+j+"</option>");
</TD>");
out.println("<option
else out.println("<option
}
out.println("</select></center>
out.println("</TR>");
}
}
out.println("</Table> <br />");
out.println("<input type=\"submit\" value=\" Add
\">");
out.println("</form>");
}
}
else if(request.getParameter("book").equals("ISBN")){
DBHandler book = new DBHandler();
Vector tit = new Vector();
Vector aut = new Vector();
Vector isbn = new Vector();
Vector pri = new Vector();
Vector amount = new Vector();
Vector id = new Vector();
try {
ResultSet rs1 = book.get_query("select * from
book where ISBN = ' " +
request.getParameter("searching")+ "'
order by ISBN");
while (rs1.next()) {
id.add(new Integer(rs1.getInt(1)));
tit.add(rs1.getString(2));
aut.add(rs1.getString(3));
isbn.add(rs1.getString(4));
pri.add(new Double(rs1.getString(5)));
amount.add(new Integer(rs1.getInt(6)));
}
if(tit.size()==0)
out.println("<b><i>No ISBN match
\""+request.getParameter("searching")+
\" \" in the system !!!</i></b>");
} //end try
catch (SQLException e){
//System.out.println ("Exception in connecting to
book db");
//e.printStackTrace ();
}
finally{
try{
book.DB_close();
} catch(Exception e2){}
}
if(tit.size()!=0){
HttpSession session = request.getSession(true);
session.setAttribute("id",id);
out.println("<form METHOD=GET
ACTION=\"Shoppingcart\">");

```

```

        out.println("<Table border = 1>");
        out.println("<TR bgcolor=\\"#FFD700\\">");
        out.println("<TD width=\\"300\\"> <center> <b>
Title </b> </center> </TD>");
        out.println("<TD width=\\"200\\"> <center> <b>
Author </b> </center> </TD>");
        out.println("<TD width=\\"100\\"> <center> <b> ISBN
</b> </center> </TD>");
        out.println("<TD width=\\"70\\"> <center> <b> Price
</b> </center> </TD>");
        out.println("<TD width=\\"50\\"> <center> <b> Items
</b> </center> </TD>");
        out.println("<TD width=\\"100\\"> <center> <b> Add
to cart </b> </center> </TD>");
        out.println("</TR>");
        for (int i = 0; i < tit.size(); i++) {
            if(((Integer)amount.elementAt(i)).intValue()>0){
                out.println("<TR>");
                out.println("<TD width=\\"300\\"
align=left>"+ tit.elementAt(i) + "</TD>");
                out.println("<TD width=\\"200\\"
align=left>"+ aut.elementAt(i)+ "</TD>");
                out.println("<TD width=\\"100\\">
                <center>" + isbn.elementAt(i)
                + "</center> </TD>");
                out.println("<TD
width=\\"70\\"><center><font color=red><b><i>$ " +
                pri.elementAt(i)+"</i></b></font></center></TD>");
                out.println("<TD width=\\"50\\">
                <center>" + amount.elementAt(i)
                + "</center> </TD>");
                out.println("<TD width=\\"100\\">
                <center><select name=\\""+
                id.elementAt(i)+"\\">");
                out.println("<option value=\\"0\\"
/>");
                for (int
                j=1;j<=((Integer)amount.elementAt(i)).intValue();j++){
                    if(j<10)
                        out.println("<option
value=\\""+j+"\\" >"+0+j+"</option>");
                    else out.println("<option
value=\\""+j+"\\" >"+j+"</option>");
                }
                out.println("</select></center>
                </TD>");
                out.println("</TR>");
            }
        }
        out.println("</Table> <br />");
        out.println("<input type=\\"submit\\" value=\\" Add
\\>");
        out.println("</form>");
    }
}

```

```

else if(request.getParameter("book").equals("All")){
    DBHandler book = new DBHandler();
    Vector tit = new Vector();
    Vector aut = new Vector();
    Vector isbn = new Vector();
    Vector pri = new Vector();
    Vector amount = new Vector();
    Vector id = new Vector();
    try {
        ResultSet rs1 = book.get_query("select * from
book order by title");

        while (rs1.next()) {
            id.add(new Integer(rs1.getInt(1)));
            tit.add(rs1.getString(2));
            aut.add(rs1.getString(3));
            isbn.add(rs1.getString(4));
            pri.add(new Double(rs1.getString(5)));
            amount.add(new Integer(rs1.getInt(6)));
        }
        if(tit.size()==0)
            out.println("<b><i>No Keywords match
\""+request.getParameter("searching")+
            \"\" in the system !!!</i></b>");
    }//end try
    catch (SQLException e){
        //System.out.println ("Exception in connecting to
book db");

        //e.printStackTrace ();
    }
    finally{
        try{
            book.DB_close();
        }catch(Exception e2){}
    }
    if(tit.size()!=0){
        HttpSession session = request.getSession(true);
        session.setAttribute("id",id);
        out.println("<form method=\"GET\"

ACTION=\"Shoppingcart\">");

        out.println("<Table border = 1>");
        out.println("<TR bgcolor=\"#FFD700\">");
        out.println("<TD width=\"300\"> <center> <b>
Title </b> </center> </TD>");
        out.println("<TD width=\"200\"> <center> <b>
Author </b> </center> </TD>");
        out.println("<TD width=\"100\"> <center> <b> ISBN
</b> </center> </TD>");
        out.println("<TD width=\"70\"> <center> <b> Price
</b> </center> </TD>");
        out.println("<TD width=\"50\"> <center> <b> Items
</b> </center> </TD>");
        out.println("<TD width=\"100\"> <center> <b> Add
to cart </b> </center> </TD>");

        out.println("</TR>");
        for (int i = 0; i < tit.size(); i++) {

            if(((Integer)amount.elementAt(i)).intValue()>0){

```



```

import java.io.PrintWriter;
import java.math.BigDecimal;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Vector;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
/**
 * Servlet Class
 *
 * @web.servlet          name="Sellbook"
 *                      display-name="Name for Sellbook"
 *                      description="Description for Sellbook"
 * @web.servlet-mapping url-pattern="/Sellbook"
 * @web.servlet-init-param name="A parameter"
 *                          value="A value"
 */
public class SellbookServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;
    String tit = null;
    String aut = null;

    public SellbookServlet() {
        super();
    }

    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out= response.getWriter();
        //String id = null;
        String name = null;
        boolean non_session = false;
        try{
            HttpSession session = request.getSession(false);
            //id = (String) session.getAttribute("accountid");
            name = (String)session.getAttribute("accountname");
        }catch(NullPointerException e){
            non_session = true;
        }
        if(!non_session && name!=null){
            out.println("<!DOCTYPE HTML PUBLIC \\"-//W3C//DTD HTML 4.01
Transitional//EN\");
            out.println("\\"http://www.w3.org/TR/html4/loose.dtd\");
            out.println("<html><head><title>Edit Information</title></head>");
            out.println("<body bgcolor=\\"#CCCCFF\\" vlink=\\"#000ff0\");
            out.println(" welcome, <b>"+name+"</b><br /><br />");
            out.println("<center><table><tr>");
            out.println("<td align=center width=150><a href=\\"Manage\");
color=blue><b>Home Page</b></font></a></td>");
            out.println("<td align=center width=150><a
href=\\"Searchbook\");
href=\\"Searchbook\");
color=blue><b>Search Books</b></font></a></td>");

```



```

        out.println("<td width=\"600\"><input type=\"text\" name=\"Item\"
maxlength=\"2\" size=\"2\">");
        out.println("</td>");
        out.println("</tr>");

        out.println("</table></center><br />");
        out.println("<hr width=100%>");
        out.println("<br />");
        out.println("<center><input value=\"Submit\" type=\"submit\">");
        out.println("<input value=\"Reset\" type=\"reset\">");
        out.println("</center>");
        out.println("</form></body></html>");
        HttpSession session = request.getSession(true);
        session.setAttribute("back", "yes");
    }else{response.sendRedirect("index.jsp");}
}

@SuppressWarnings("unchecked")
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    Vector msg = new Vector();
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    boolean non_session = false;
    String back = null;
    String name = null;
    try{
        HttpSession session = request.getSession(false);
        back = (String) session.getAttribute("back");
        name = (String)session.getAttribute("accountname");
    }catch(NullPointerException e){
        non_session = true;
    }
    if(!non_session && name!=null && back!=null){
        tit = request.getParameter("Title");
        aut = request.getParameter("Author");
        if(!check_title(request.getParameter("Title")))
            msg.add(" Title cannot be empty and 30 characters max\n");
        if(!check_author(request.getParameter("Author")))
            msg.add(" Author cannot be empty and 20 characters max\n");
        if(check_isbn(request.getParameter("ISBN"))){
            String s = dup_isbn(request.getParameter("ISBN"));
            if (s.length()>1){
                msg.add(" ISBN found in database but either title or
author doesn't match\n");
                msg.add(" The title should be:
"+s.substring(0,s.indexOf("^"))+"\n");
                msg.add(" The author should be:
"+s.substring(s.indexOf("^")+1,s.length())+"\n");
            }
        }
        if(!check_isbn(request.getParameter("ISBN")))
            msg.add(" ISBN must be exact 10 digits or letters \n");

        if(!check_price(request.getParameter("Price1"),request.getParameter("Price2")))
            msg.add(" Price cannot be empty or negative\n");
        if(!check_amount(request.getParameter("Item")))

```

```

        msg.add(" Item cannot be empty or negative\n");
    if (msg.size()==0){
        DBHelper Sellbook = new DBHelper();
        String newbook = null;
        int amount = Integer.parseInt(request.getParameter("Item"));
        try {
            int p1 =
Integer.parseInt(request.getParameter("Price1"));
            int p2 =
Integer.parseInt(request.getParameter("Price2"));
            double price = p1+((double)p2/100);
            BigDecimal bd = new BigDecimal(price);
            bd = bd.setScale(2,BigDecimal.ROUND_HALF_UP);
            price = bd.doubleValue();
            String duplicate = "select amount, price from book
where isbn='"+
                request.getParameter("ISBN")+"'";
            ResultSet rs = Sellbook.get_query(duplicate);
            //System.out.println("price: "+price);
            if(rs.next()){
                int more = rs.getInt(1);
                double pri = rs.getDouble(2);
                if(pri==price){
                    amount =
(Integer.parseInt(request.getParameter("Item"))+more;
                    newbook="update book set amount="+amount+
" where
isbn='"+request.getParameter("ISBN")+"' and price="
+pri;
                }
                else{
                    DBHelper cart = new DBHelper();
                    int book_seq = 0;
                    try{
                        ResultSet seq =
cart.get_query("SELECT book_id.NEXTVAL FROM DUAL");
                        if(seq.next())
                            book_seq = seq.getInt(1);
                        seq.close();
                    }catch(SQLException e){}
                    cart.DB_close();
                    newbook="insert into book
values('"+book_seq+"',"+
                        "'"+request.getParameter("Title")+"',"+
                        "'"+request.getParameter("Author")+"',"+
                        "'"+request.getParameter("ISBN")+"',"+
                        "'"+price+", "+amount+"");
                }
            }
        }
        else {
            DBHelper cart = new DBHelper();
            int book_seq = 0;
            try{
                ResultSet seq = cart.get_query("SELECT
book_id.NEXTVAL FROM DUAL");
                if(seq.next())
                    book_seq = seq.getInt(1);
            }
        }
    }
}

```



```

        out.println("<br />");
        out.println("<center><input value=\"Submit\"
type=\"submit\">");
        out.println("<input value=\"Reset\" type=\"reset\">");
        out.println("</center>");
        out.println("</form></body></html>");
    }
    }else{response.sendRedirect("index.jsp");}
}
public boolean check_title(String title){
    if (title.length()==0 || title.length()>30 || title == null)
        return false;
    return true;
}

public boolean check_author(String author){
    if (author.length()==0 || author.length()>20 ||author == null)
        return false;
    return true;
}

public boolean check_isbn(String isbn){

    if (isbn.length()!=10 || isbn == null)
        return false;
    for(int i=0;i<isbn.length();i++)
        if(!Character.isLetterOrDigit(isbn.charAt(i)))
            return false;
    return true;
}

public String dup_isbn(String isbn){
    DBHandler check_isbn = new DBHandler();
    String result = "";
    try{
        ResultSet rs = check_isbn.get_query("select Title, Author from book
where "+
        "ISBN='"+isbn+"'");
        if(rs.next()){
            String t = rs.getString(1);
            String a = rs.getString(2);
            if(!tit.equalsIgnoreCase(t) || !aut.equalsIgnoreCase(a)){
                result=t+"^"+a;
            }
        }
        rs.close();
    }catch(SQLException e){}
    finally{
        check_isbn.DB_close();
    }
    return result;
}

public boolean check_price(String price1, String price2){
    int pri1=0, pri2=0;
    if(price1.length()==0 || price2.length()==0 ||
    price1==null || price2==null)

```

```

        return false;
    }
    try{
        pri1 = Integer.parseInt(pricel);
        pri2 = Integer.parseInt(price2);
    }catch(NumberFormatException e){
        return false;
    }
    if (pri1<0 || pri2<0)
        return false;
    return true;
}

public boolean check_amount(String amount){
    int item=0;
    try{
        item = Integer.parseInt(amount);
    }catch(NumberFormatException e){
        return false;
    }
    if (item<0)
        return false;
    return true;
}
}

```

ShoppingcartServlet.java

```

package swe622.web;

import javax.servlet.http.HttpServlet;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Vector;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
/**
 * Servlet Class
 *
 * @web.servlet          name="Shoppingcart"
 *                      display-name="Name for Shoppingcart"
 *                      description="Description for Shoppingcart"
 * @web.servlet-mapping url-pattern="/Shoppingcart"
 * @web.servlet-init-param name="A parameter"
 *                          value="A value"
 */
public class ShoppingcartServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

    public ShoppingcartServlet() {
        super();
    }
}

```

```

@SuppressWarnings("unchecked")
protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    response.setContentType("text/html");
    PrintWriter out= response.getWriter();
    Vector added = new Vector();
    Vector num_book = new Vector();
    String name=null;
    String id=null;
    boolean non_session = false;
    try{
        HttpSession session = request.getSession(false);
        name = (String)session.getAttribute("accountname");
        id = (String) session.getAttribute("accountid");
    }catch(NullPointerException e){
        non_session = true;
    }
    //System.out.println("121");
    if(!non_session && name!=null){
        //System.out.println("1");
        int total_books = 0;
        HttpSession session = request.getSession(false);
        added = (Vector) session.getAttribute("id");
        session.removeAttribute("id");
        //System.out.println("11");
        for (int i=0;i<added.size();i++){
            //System.out.println("2");
            String pass =
request.getParameter(added.elementAt(i).toString());
            int item = Integer.parseInt(pass);
            if(item > 0){
                total_books += item;
                Integer in = new Integer(item);
                num_book.add(in);
            }
            else {
                added.removeElementAt(i);
                i--;
            }
        }
        if(num_book.size()>0){
            DBHandler book_update = new DBHandler();
            ResultSet rs1;
            ResultSet rs2;
            for(int i=0;i<num_book.size();i++){
                try {
                    String query1 = "Select * from shoppingcart where
username = '"+
                                id+ "' and id="+added.elementAt(i)+"";
                    rs1 = book_update.get_query(query1);
                    if (rs1.next()){
                        int prev_amount = rs1.getInt(3);
                        int amount
=((Integer)num_book.elementAt(i)).intValue();
                        String update_cart = "update shoppingcart
set amount="+

```

```

                                (prev_amount+amount)+" where username
= '"+
                                id+ "' and id =
"+added.elementAt(i)+"";
                                book_update.insert(update_cart);
                                String query2 = "select amount from book
where id="+
                                added.elementAt(i)+"";
                                rs2 = book_update.get_query(query2);
                                if(rs2.next()){
                                    String update_book=null;
                                    int stock = rs2.getInt(1);
                                    update_book = "update book set
amount="+
                                    (stock-amount)+" where
id="+added.elementAt(i)+"";
                                    book_update.insert(update_book);
                                }
                                rs2.close();
                                System.out.println("3");
                                num_book.removeElementAt(i);
                                added.removeElementAt(i);
                                i--;
                            }
                            rs1.close();
                        }catch (SQLException e){
                            System.out.println ("Exception in adding book
db");
                            e.printStackTrace ();
                        }
                    }
                }//for
                book_update.DB_close();
            }//
            if(num_book.size(>0){
                String update = null;
                DBHandler book_update = new DBHandler();
                ResultSet rs1;
                for (int i = 0; i < added.size(); i++){
                    update = "insert into shoppingcart values ('"+id+"',
"+added.elementAt(i) + ", "
                    +num_book.elementAt(i)+"");
                    book_update.insert(update);
                    update = null;
                    try{
                        String query = "select amount from book where
id="+
                        added.elementAt(i)+"";
                        rs1 = book_update.get_query(query);
                        if(rs1.next()){
                            int stock = rs1.getInt(1);
                            int sold =
((Integer)num_book.elementAt(i)).intValue();
                            String update_book=null;
                            update_book = "update book set
amount="+
                            (stock-sold)+" where
id="+added.elementAt(i)+"";

```

```

        book_update.insert(update_book);
    }
    rs1.close();
} catch (SQLException e){
    System.out.println ("Exception in updating book
db");
    e.printStackTrace ();
}
} //for
book_update.DB_close();
}
out.println("<!DOCTYPE HTML PUBLIC \\"-//W3C//DTD HTML 4.01
Transitional//EN\");
out.println("\\"http://www.w3.org/TR/html4/loose.dtd\");
out.println("<html><head><title>Change Password</title></head>");
out.println("<body bgcolor=\\"#CCCCFF\\" vlink=\\"#000ff0\");
out.println(" welcome, <b>"+name+"</b><br /><br />");
out.println("<center><table><tr>");
out.println("<td align=center width=150><a href=\\"Manage\");
color=blue><b>Home Page</b></font></a></td>");
out.println("<td align=center width=150><a
href=\\"Searchbook\");
color=blue><b>Search Books</b></font></a></td>");
out.println("<td align=center width=150><a href=\\"Sellbook\");
color=blue><b>Sell Books</b></font></a></td>");
out.println("<td align=center width=150><a
href=\\"Shoppingcart\");
color=blue><b>Shopping Cart</b></font></a></td>");
out.println("<td align=center width=150><a href=\\"History\");
color=blue><b>Order History</b></font></a></td>");
out.println("<td align=center width=150><a href=\\"Edit\");
color=blue><b>Edit Information</b></font></a></td>");
out.println("<td align=center width=150><a href=\\"Password\");
color=blue><b>Change Password</b></font></a></td>");
out.println("<td align=center width=150><a href=\\"Logout\");
color=blue><b>Logout</b></font></a></td>");
out.println("</tr></table></center>");
out.println("<hr width=100%><br />");
out.println("<center>");
out.println("<b><i>You have added "+total_books+" book(s) in your
shopping cart</i></b>");
out.println("<br /><br /><form action=\\"Manage\");
out.println("<center><input value=\\"Back To Home Page\");
type=\\"submit\");
out.println("</form></center></body></html>");
}
else{response.sendRedirect("index.jsp");}
//handle(request,response);
}

@SuppressWarnings("unchecked")
protected void handle(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
}
}
}

```

SignupServlet.java

```
package swe622.web;
```

```

import javax.servlet.http.HttpServlet;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Vector;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
/**
 * Servlet Class
 *
 * @web.servlet          name="Signup"
 *                      display-name="Name for Signup"
 *                      description="Description for Signup"
 * @web.servlet-mapping url-pattern="/Signup"
 * @web.servlet-init-param name="A parameter"
 *                          value="A value"
 */
public class SignupServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

    public SignupServlet() {
        super();
    }

    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out= response.getWriter();
        out.println("<!DOCTYPE HTML PUBLIC \"-//W3C//DTD HTML 4.01
Transitional//EN\"");
        out.println("<\"http://www.w3.org/TR/html4/loose.dtd\">");
        out.println("<html><head><title>Signup</title></head>");
        out.println("<body bgcolor=\"#CCCCFF\" vlink=\"#000ff0\">");
        out.println("<center><h1 align=\"center\">Online Registration
</h1></center>");
        out.println("<hr width=100%>");
        out.println("<center><font color=\"#00008B\"><b>Please choose username
and password.</b></font></center>");
        out.println("<form action=\"Signup\" name=\"RegisterForm\"
method=\"post\">");
        out.println("<br/>");
        out.println("<table>");
        out.println("<tr>");
        out.println("<td width=\"200\"><b>Username:</b></td><td width=\"600\">");
        out.println("<INPUT TYPE = \"text\" NAME = \"UserNameField\"
size=\"15\">");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>Password:</b></td><td width=\"600\">");
        out.println("<INPUT TYPE = \"password\" NAME = \"PasswordField\"
size=\"15\">");
        out.println("</td></tr>");

```

```

        out.println("</table>");
        out.println("<hr width=100%></hr>");
        out.println("<center><font color=\"#00008B\"><b>Please fill out the
following information.</b>");
        out.println("</font></center>");
        out.println("<br/></br>");
        out.println("<table>");
        out.println("<tr>");
        out.println("<td width=\"200\"><b>First Name:</b></td>");
        out.println("<td width=\"600\"><input type=\"text\"
name=\"FirstNameField\" size=\"20\">");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>Last Name: </b></td>");
        out.println("<td width=\"600\"><input type=\"text\"
name=\"LastNameField\" size=\"20\" >");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>Resident Address: </b></td>");
        out.println("<td width=\"600\"><input type=\"text\" name=\"AddressField\"
size=\"30\" >");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>City: </b></td>");
        out.println("<td width=\"600\"><input type=\"text\" name=\"CityField\"
size=\"15\" >");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>State: </b></td>");
        out.println("<td width=\"600\">");
        out.println("<select name=\"StateField\">");
        DBHelper state_country = new DBHelper();
        String sta=null;
        try {
            ResultSet rs = state_country.get_query("select * from state");
            while (rs.next()){
                sta = (rs.getString("state"));
                out.println("<option Value=\""+sta+"\"> "+sta+"</option>");
            }
        }//end try
        catch (SQLException e){
            e.printStackTrace ();
        }
        out.println("</select>");
        out.println("</td></tr>");
        out.println("<tr><td width=\"200\"><b>Zip Code: </b></td>");
        out.println("<td width=\"600\"><input type=\"text\" name=\"ZipCodeField\"
size=\"10\" >");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>Country: </b></td>");
        out.println("<td width=\"600\">");
        out.println("<select name=\"CountryField\">");
        try {
            ResultSet rs = state_country.get_query("select * from country");
            while (rs.next()){
                sta = (rs.getString("cnt"));
                if(sta.equals("USA"))
                    out.println("<option Value=\""+sta+"\" selected>"+
sta+"</option>");
                else out.println("<option Value=\""+sta+"\">"+
sta+"</option>");
            }
        }

```

```

    }
} //end try
catch (SQLException e){
    e.printStackTrace ();
}
finally{
    try{
        state_country.DB_close();
    }catch(Exception e2){}
}
out.println("</select>");
out.println("</td></tr>");
out.println("<tr><td width=\"200\"><b>Email Address:</b></td>");
out.println("<td width=\"600\"><input type=\"text\" name=\"EmailField\"
size=\"20\"
></td>");
out.println("</tr><tr>");
out.println("<td width=\"200\"><b>Credit Card Number: </b></td>");
out.println("<td width=\"600\"><input type=\"text\" name=\"CreditField\"
size=\"20\"
></td>");
out.println("</tr><tr>");
out.println("<td width=\"200\"><b>Expiration Date: </b></td>");
out.println("<td width=\"600\">");
out.println("<select name=\"ExpireM\">");
out.println("<option value=\"01\">01</option>");
out.println("<option value=\"02\">02</option>");
out.println("<option value=\"03\">03</option>");
out.println("<option value=\"04\">04</option>");
out.println("<option value=\"05\">05</option>");
out.println("<option value=\"06\">06</option>");
out.println("<option value=\"07\">07</option>");
out.println("<option value=\"08\">08</option>");
out.println("<option value=\"09\">09</option>");
out.println("<option value=\"10\">10</option>");
out.println("<option value=\"11\">11</option>");
out.println("<option value=\"12\">12</option>");
out.println("</select>&nbsp;&nbsp;&nbsp;");
out.println("<select name=\"ExpireY\">");
out.println("<option value=\"2006\">2006</option>");
out.println("<option value=\"2007\">2007</option>");
out.println("<option value=\"2008\">2008</option>");
out.println("<option value=\"2009\">2009</option>");
out.println("<option value=\"2010\">2010</option>");
out.println("<option value=\"2011\">2011</option>");
out.println("<option value=\"2012\">2012</option>");
out.println("</select>");
out.println("</td>");
out.println("</tr>");
out.println("</table>");
out.println("<hr width=100%>");
out.println("<br/>");
out.println("<center><input value=\"Submit\" type=\"submit\">");
out.println("<input value=\"Reset\" type=\"reset\">");
out.println("</center>");
out.println("</form>");
out.println("<form action=\"index.jsp\">");
out.println("<center><input value=\"Back to Login\" type=\"submit\">");
out.println("</center>");

```

```

        out.println("</form>");
        out.println("</body></html>");
    }

    @SuppressWarnings("unchecked")
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        Vector msg = new Vector();
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        if(!check_username(request.getParameter("UserNameField"))){
            msg.add(" Username must be 5 to 15 characters\n");
        }
        if(check_username(request.getParameter("UserNameField"))
            if(!available_username(request.getParameter("UserNameField"))){
                msg.add(" <b>"+request.getParameter("UserNameField")+"</b>"
+" has already been registered\n");
            }
        }
        if(!check_password(request.getParameter("PasswordField"))){
            msg.add(" Password must be 5 to 15 characters\n");
        }
        if(!check_fname(request.getParameter("FirstNameField"))){
            msg.add(" First name must be 2 to 15 letters\n");
        }
        if(!check_lname(request.getParameter("LastNameField"))){
            msg.add(" Last name must be 2 to 15 letters\n");
        }
        if(!check_address(request.getParameter("AddressField"))){
            msg.add(" Address must be 5 to 40 characters\n");
        }
        if(!check_city(request.getParameter("CityField"))){
            msg.add(" City must be 2 to 15 characters\n");
        }
        if(!check_zip(request.getParameter("ZipCodeField"))){
            msg.add(" Zipcode must be either 5 or 9 digits\n");
        }
        if(!check_email(request.getParameter("EmailField"))){
            msg.add(" Email must be 5 to 40 characters. Eg.
yourname@server.com\n");
        }
        if(!check_credit(request.getParameter("CreditField"))){
            msg.add(" Credit card number must be 16 digits\n");
        }
        if (msg.size()==0){
            DBHandler Signup = new DBHandler();
            try {
                String update = "insert into customer values ("+
                    ""+request.getParameter("UserNameField")+","
                    ""+request.getParameter("PasswordField")+","
                    ""+request.getParameter("FirstNameField")+","
                    ""+request.getParameter("LastNameField")+","
                    ""+request.getParameter("AddressField")+","
                    ""+request.getParameter("CityField")+","
                    ""+request.getParameter("StateField")+","
                    ""+request.getParameter("ZipCodeField")+","
                    ""+request.getParameter("CountryField")+","
                    ""+request.getParameter("EmailField")+","

```



```

        out.println("<center><font color=\"#00008B\"><b>Please fill out the
following information.</b>");
        out.println("</font></center>");
        out.println("<br/></br>");
        out.println("<table>");
        out.println("<tr>");
        out.println("<td width=\"200\"><b>First Name:</b></td>");
        out.println("<td width=\"600\"><input type=\"text\"
name=\"FirstNameField\" size=\"20\">");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>Last Name: </b></td>");
        out.println("<td width=\"600\"><input type=\"text\"
name=\"LastNameField\" size=\"20\" >");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>Resident Address: </b></td>");
        out.println("<td width=\"600\"><input type=\"text\"
name=\"AddressField\" size=\"30\" >");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>City: </b></td>");
        out.println("<td width=\"600\"><input type=\"text\"
name=\"CityField\" size=\"15\" >");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>State: </b></td>");
        out.println("<td width=\"600\">");
        out.println("<select name=\"StateField\">");
        DBHandler state_country = new DBHandler();
        String sta=null;
        try {
            ResultSet rs = state_country.get_query("select * from
state");
            while (rs.next()){
                sta = (rs.getString("state"));
                out.println("<option Value=\"" +sta+"\">"
+sta+"</option>");
            }
        }//end try
        catch (SQLException e){
            e.printStackTrace ();
        }
        out.println("</select>");
        out.println("</td></tr>");
        out.println("<tr><td width=\"200\"><b>Zip Code: </b></td>");
        out.println("<td width=\"600\"><input type=\"text\"
name=\"ZipCodeField\" size=\"10\" >");
        out.println("</td></tr><tr>");
        out.println("<td width=\"200\"><b>Country: </b></td>");
        out.println("<td width=\"600\">");
        out.println("<select name=\"CountryField\">");
        try {
            ResultSet rs = state_country.get_query("select * from
country");
            while (rs.next()){
                sta = (rs.getString("cnt"));
                if(sta.equals("USA"))
                    out.println("<option Value=\"" +sta+"\" selected>"
+sta+"</option>");
            }
        }

```

```

else out.println("<option Value=\"" +sta+"\">"
+sta+"</option>");
    }
} //end try
catch (SQLException e){
    e.printStackTrace ();
}
finally{
    try{
        state_country.DB_close();
    }catch(Exception e2){}
}
out.println("</select>");
out.println("</td></tr>");
out.println("<tr><td width=\"200\"><b>Email Address:</b></td>");
out.println("<td width=\"600\"><input type=\"text\"
name=\"EmailField\" size=\"20\" ></td>");
out.println("</tr><tr>");
out.println("<td width=\"200\"><b>Credit Card Number: </b></td>");
out.println("<td width=\"600\"><input type=\"text\"
name=\"CreditField\" size=\"20\" ></td>");
out.println("</tr><tr>");
out.println("<td width=\"200\"><b>Expiration Date: </b></td>");
out.println("<td width=\"600\">");
out.println("<select name=\"ExpireM\">");
out.println("<option value=\"01\">01</option>");
out.println("<option value=\"02\">02</option>");
out.println("<option value=\"03\">03</option>");
out.println("<option value=\"04\">04</option>");
out.println("<option value=\"05\">05</option>");
out.println("<option value=\"06\">06</option>");
out.println("<option value=\"07\">07</option>");
out.println("<option value=\"08\">08</option>");
out.println("<option value=\"09\">09</option>");
out.println("<option value=\"10\">10</option>");
out.println("<option value=\"11\">11</option>");
out.println("<option value=\"12\">12</option>");
out.println("</select>&nbsp;&nbsp;&nbsp;");
out.println("<select name=\"ExpireY\">");
out.println("<option value=\"2006\">2006</option>");
out.println("<option value=\"2007\">2007</option>");
out.println("<option value=\"2008\">2008</option>");
out.println("<option value=\"2009\">2009</option>");
out.println("<option value=\"2010\">2010</option>");
out.println("<option value=\"2011\">2011</option>");
out.println("<option value=\"2012\">2012</option>");
out.println("</select>");
out.println("</td>");
out.println("</tr>");
out.println("</table>");
out.println("<hr width=100%>");
out.println("<br />");
out.println("<center><input value=\"Submit\" type=\"submit\">");
out.println("<input value=\"Reset\" type=\"reset\">");
out.println("</center>");
out.println("</form>");
out.println("<form action=\"index.jsp\">");

```

```

        out.println("<center><input value=\"Back to Login\"
type=\"submit\">");
        out.println("</center>");
        out.println("</form>");
        out.println("</body></html>");
    }
}
public boolean check_username(String username){
    if (username == null || username.length()>15 || username.length()< 5)
        return false;
    return true;
}

public boolean available_username(String username){
    DBHandler S1 = new DBHandler();
    boolean non_error = true;
    try {
        ResultSet rs = S1.get_query("select username from customer where
username = '" + username + "'");
        if(rs.next())
            non_error = false;
    }
    catch (SQLException e){}
    finally{
        try{
            S1.DB_close();
        }catch(Exception e2){}
    }
    return non_error;
}

public boolean check_password(String password){
    if (password.length()>15 || password.length()<5){
        return false;
    }
    return true;
}

public boolean check_fname(String fname){
    int i=0;
    for (i=0;i<fname.length();i++){
        if(Character.isLetter(fname.charAt(i)))
            continue;
        else
            break;
    }
    if (i!=fname.length() || i<2 || i>15){
        return false;
    }
    return true;
}

public boolean check_lname(String lname){
    int i=0;
    for (i=0;i<lname.length();i++){
        if(Character.isLetter(lname.charAt(i)))
            continue;

```

```

        else
            break;
    }
    if (i!=lname.length() || i<2 || i>15){
        return false;
    }
    return true;
}

public boolean check_address(String address){
    if (address.length()==0 || address.length(>40){
        return false;
    }
    return true;
}

public boolean check_city(String city){
    if (city.length()==0 || city.length(>20){
        return false;
    }
    return true;
}

public boolean check_zip(String zip){
    int i=0;
    for (i=0;i<zip.length();i++){
        if(Character.isDigit(zip.charAt(i)))
            continue;
        else
            break;
    }
    if(i!=zip.length() || (i!=5 && i!=9)){
        return false;
    }
    return true;
}

public boolean check_email(String email){
    int pos_at = -1;
    int pos_dot = -1;
    if (email == null || email.length(>40)
        return false;
    for (int i=0;i<email.length();i++){
        if (email.charAt(i)=='@'){
            if (pos_at == -1)
                pos_at = i;
            else
                return false;
        }
        if (email.charAt(i)=='.'){
            if (pos_dot == -1 && i > pos_at && pos_at != -1)
                pos_dot = i;
            else
                return false;
        }
    }
    return (pos_at != -1 && pos_dot != -1);
}

```

```

    }

    public boolean check_credit(String credit){
        int i=0;
        for (i=0;i<credit.length();i++){
            if(Character.isDigit(credit.charAt(i)))
                continue;
            else
                break;
        }
        if(i!=credit.length() || i!=16){
            return false;
        }
        return true;
    }
}

```

UpdateServlet.java

```

package swe622.web;

import javax.servlet.http.HttpServlet;

import java.io.IOException;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Vector;

import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 * Servlet Class
 *
 * @web.servlet          name="Update"
 *                      display-name="Name for Update"
 *                      description="Description for Update"
 * @web.servlet-mapping url-pattern="/Update"
 * @web.servlet-init-param name="A parameter"
 *                          value="A value"
 */
public class UpdateServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

    public UpdateServlet() {
        super();
    }

    @SuppressWarnings("unchecked")
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        boolean non_session = false;
        String name=null;
        String id=null;
        String update=null;

```

```

Vector book_id = new Vector();
Vector itm = new Vector();
try{
    HttpSession session = request.getSession(false);
    name = (String)session.getAttribute("accountname");
    id = (String) session.getAttribute("accountid");
    book_id = (Vector)session.getAttribute("book_id");
    session.removeAttribute("book_id");
    itm = (Vector)session.getAttribute("item");
    session.removeAttribute("item");
}catch(NullPointerException e){
    non_session = true;
}
if(!non_session && name!=null){
    Vector off_set = new Vector();
    for(int i=0;i<book_id.size();i++){
        if
(Integer.parseInt(request.getParameter(book_id.elementAt(i).toString()))==((Integer)itm.elementAt(i)).intValue()){
            itm.removeElementAt(i);
            book_id.removeElementAt(i);
            i--;
        }
        else{
            String pass=
request.getParameter(book_id.elementAt(i).toString());
            int new_amt = Integer.parseInt(pass);
            off_set.add(new
Integer(((Integer)itm.elementAt(i)).intValue()-new_amt));
            itm.setElementAt(new Integer(new_amt),i);
        }
    }
    if(book_id.size()==0){
        update = "Nothing has been updated in your shopping cart";
        HttpSession session = request.getSession(true);
        session.setAttribute("update",update);
        response.sendRedirect("Checkout");
    }
    else{
        DBHandler cart_update = new DBHandler();
        ResultSet rs;
        String update_cart=null;
        for(int i=0;i<book_id.size();i++){
            try{
                if(((Integer)itm.elementAt(i)).intValue()!=0)
                    update_cart = "update shoppingcart set
amount="+
                    (itm.elementAt(i))+ " where username = '"+
                    id+ "' and id = "+book_id.elementAt(i)+"";
                else
                    update_cart = "delete shoppingcart where
id="+
                    book_id.elementAt(i)+" AND username =
'"+id+ "'";
                cart_update.insert(update_cart);
                String query = "select amount from book where
id="+

```


<%

```
String id = null;
String name = null;
boolean non_session = false;
try{
    session = request.getSession(false);
    id = (String) session.getAttribute("accountid");
    name = (String)session.getAttribute("accountname");
}catch(NullPointerException e){
    non_session = true;
}
if(!non_session && name!=null){
    DBHandler cart = new DBHandler();
    out.println("<!DOCTYPE HTML PUBLIC \\"-//W3C//DTD HTML 4.01
Transitional//EN\");
    out.println("\\"http://www.w3.org/TR/html4/loose.dtd\");
    out.println("<html><head><title>Check Out</title></head>");
    out.println("<center><h2> Order Information </h2></center>");
    out.println("<hr width=\\"100%\");

    Vector tit = new Vector();
    Vector aut = new Vector();
    Vector pri = new Vector();
    Vector amt = new Vector();
    Vector itm = new Vector();
    Vector isbn = new Vector();

    double total = 0.00;
    String query = null;
    int num_book = 0;
    try {
        query = "SELECT * FROM book, shoppingcart
                WHERE shoppingcart.id=book.id" +
                "AND shoppingcart.username='"+id+"'
                order by book.title";
        ResultSet rs1 = cart.get_query(query);
        while (rs1.next()) {
            tit.add(rs1.getString(2));
            aut.add(rs1.getString(3));
            isbn.add(rs1.getString(4));
            Double price = new Double(rs1.getDouble(5));
            Integer item = new Integer(rs1.getInt(9));
            double amount = price.doubleValue()*item.intValue();
            BigDecimal bd = new BigDecimal(amount);
            bd = bd.setScale(2,BigDecimal.ROUND_HALF_UP);
            amount = bd.doubleValue();
            pri.add(new Double(rs1.getDouble(5)));
            itm.add(item);
            amt.add(new Double(amount));
            num_book+= item.intValue();
        }
    }//end try
    catch (Exception e){
        System.out.println ("Exception in connecting to shoppincart
DB");
        e.printStackTrace ();
    }
}
```

```

finally{
    try{
        cart.DB_close();
    }catch(Exception e2){}
}
out.println("<Table border = 1>");
out.println("<TR bgcolor=\\"#FFD700\\">");
out.println("<TD width=\\"300\\"> <center> <b> Title </b> </center>
</TD>");
out.println("<TD width=\\"200\\"> <center> <b> Author </b> </center>
</TD>");
out.println("<TD width=\\"100\\"> <center> <b> ISBN </b> </center> </TD>");
out.println("<TD width=\\"70\\"> <center> <b> Price </b> </center> </TD>");
out.println("<TD width=\\"100\\"> <center> <b> Items </b> </center>
</TD>");
out.println("<TD width=\\"70\\"> <center> <b> Amounts </b> </center>
</TD>");
out.println("</TR>");
for (int i = 0; i < tit.size(); i++) {
    out.println("<TR>");
    out.println("<TD width=\\"300\\" align=left>" + tit.elementAt(i) +
"</TD>");
    out.println("<TD width=\\"200\\" align=left>" + aut.elementAt(i)
+ "</TD>");
    out.println("<TD width=\\"100\\"> <center>" + isbn.elementAt(i) +
"</center> </TD>");
    out.println("<TD width=\\"70\\"><center><font color=red><b><i>$ " +
pri.elementAt(i)+</i></b></font></center> </TD>");
    out.println("<TD width=\\"100\\"> <center>" + itm.elementAt(i) +
"</center> </TD>");
    out.println("<TD width=\\"70\\" align=right><font color=red><b>$ " +
amt.elementAt(i)+</b></font></TD>");
    total += ((Double)amt.elementAt(i)).doubleValue();
    out.println("</TR>");
}
out.println("</Table>");

BigDecimal bd = new BigDecimal(total);
bd = bd.setScale(2, BigDecimal.ROUND_HALF_UP);
total = bd.doubleValue();
double tax = (total*5)/100;
bd = new BigDecimal(tax);
bd = bd.setScale(2, BigDecimal.ROUND_HALF_UP);
tax = bd.doubleValue();
double Total = total + tax;
bd = new BigDecimal(total);
bd = bd.setScale(2, BigDecimal.ROUND_HALF_UP);
Total = bd.doubleValue();

out.println("<table><tr><td width=\\"685\\"></td>");
out.println("<td width=\\"100\\" align=right>");
out.println("<b>Sub total:</b></td>");
out.println("<td width=\\"70\\"
align=right><b>$<u>" + total + "</u></b></td></tr>");

out.println("<tr><td width=\\"685\\"></td>");
out.println("<td width=\\"100\\" align=right>");

```

```

        out.println("<b>Tax:</b></td>");
        out.println("<td width=\"70\"
align=right><b>$<u>"+tax+"</u></b></td></tr>");

        out.println("<tr><td width=\"685\"></td>");
        out.println("<td width=\"100\" align=right>");
        out.println("</td>");
        out.println("<td width=\"70\"
align=right><b><i>_____</i></b></td></tr>");

        out.println("<tr><td width=\"685\"></td>");
        out.println("<td width=\"100\" align=right>");
        out.println("<b>Total:</b></td>");
        out.println("<td width=\"70\"
align=right><b>$<u>"+Total+"</u></b></td></tr>");
        out.println("</table><br />");

        DBHandler order = new DBHandler();
        Vector info = new Vector();
        try{
            ResultSet rs = order.get_query("Select * from customer where
username='"+id+"'");
            if(rs.next()){
                info.add(rs.getString(5));
                info.add(rs.getString(6));
                info.add(rs.getString(7));
                info.add(rs.getString(8));
                info.add(rs.getString(9));
                info.add(rs.getString(10));
                info.add(rs.getString(11).substring(12,16));
                info.add(rs.getString(12));
                info.add(rs.getString(13));
            }
        }catch(SQLException e){}
        finally{
            try{
                order.DB_close();
            }catch(Exception e2){}
        }
        out.println("<hr width=\"100%\">");
        out.println("<b><u> Credit card information: </u></b><br>");
        out.println("<b> &nbsp;Name: </b>"+name+"<br>");
        out.println("<b> &nbsp;Credit card #:
</b>*****"+info.elementAt(6)+"<br>");
        out.println("<b> &nbsp;Expire:
</b>"+info.elementAt(7)+"/"+info.elementAt(8)+"<br /><br />");

        out.println("<hr width=\"100%\">");
        out.println("<b><u> Shipping Address: </u></b><br>");
        out.println("<b> &nbsp;Name: </b>"+name+"<br>");
        out.println("<b> &nbsp;Street: </b>"+info.elementAt(0)+"<br>");
        out.println("<b> &nbsp;City: </b>"+info.elementAt(1)+"<br>");
        out.println("<b> &nbsp;State: </b>"+info.elementAt(2)+"<br>");
        out.println("<b> &nbsp;Zip: </b>"+info.elementAt(3)+"<br>");
        out.println("<b> &nbsp;Country: </b>"+info.elementAt(4)+"<br>");
        out.println("<b> &nbsp;Email: </b>"+info.elementAt(5)+"<br /><br />");

```

```

out.println("<hr width=\"100%\">");
out.println("<center><form method=\"\" action=\"Receive.jsp\">");
out.println("<input type=\"submit\" name=\"Sub\" value=\"Submit\">");
out.println("<input type=\"submit\" name=\"Can\" value=\"Cancel\">");
out.println("</form></center>");
out.println("</body></html>");
session = request.getSession(false);
session.setAttribute("tit",tit);
session.setAttribute("aut",aut);
session.setAttribute("pri",pri);
session.setAttribute("amt",amt);
session.setAttribute("itm",itm);
session.setAttribute("isbn",isbn);
session.setAttribute("info",info);
session.setAttribute("back","yes");
session.setAttribute("total",new Double(Total));
}else{response.sendRedirect("index.jsp");}
%>
</body>
</html>

```

index.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"
%>

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>ONLINE BOOKS</title>
</head>
<body bgcolor="#CCCCCCFF">
<center> <h2> ONLINE BOOKS </h2> </center>
<hr width=100%>
<FORM METHOD=POST ACTION="Login">

<table>

<tr>
<td width="100"><b>Username:</b></td>
<td width="600"><INPUT TYPE="TEXT" NAME="name"></td>
</tr>

<tr>
<td width="100"><b>Password:</b></td>
<td width="600"><INPUT TYPE="password" NAME="passwd"></td>
</tr>

</table>
<br>
<button TYPE="SUBMIT">Log in</button>
</form>

```

```
<a href="Signup"><font color=blue><b>New User? Signup</b></font></a>
</body>
</html>
```

invalid.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body bgcolor="#CCCCFF">
<center> <h2> ONLINE BOOKS </h2> </center>
<FORM METHOD=POST ACTION="Login">
<hr width=100%>
<font color=red><b> Invalid username or password</b></font><br>

<table>

<tr>
<td width="100"><b>Username:</b></td>
<td width="600"><INPUT TYPE="TEXT" NAME="name"></td>
</tr>

<tr>
<td width="100"><b>Password:</b></td>
<td width="600"><INPUT TYPE="password" NAME="passwd"></td>
</tr>

</table>

<br />
<button TYPE="SUBMIT">Log in</button>
</form>
<a href="signup"><b>New User? Signup</b></a>
</body>
</html>
```

receive.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%@ page import="java.sql.*" %>
<%@ page import="java.util.*" %>
```

```

<%@ page import="java.math.*" %>
<%@ page import="swe622.web.*" %>
<%
    boolean non_session = false;
    String back = null;
    String id=null;
    String name = null;
    try{
        session = request.getSession(false);
        id = (String) session.getAttribute("accountid");
        name = (String)session.getAttribute("accountname");
        back = (String)session.getAttribute("back");
    }catch(NullPointerException e){
        non_session = true;
    }
    if(!non_session && name!=null && back!=null){
        if(request.getParameter("Can")!=null)
            response.sendRedirect("Checkout");
        else if(request.getParameter("Sub")!=null){
            DBHandler bill = new DBHandler();
            Vector book_id = new Vector();
            ResultSet rs;
            try{
                rs = bill.get_query("select id from shoppingcart where
username='"+id+"'");
                while(rs.next())
                    book_id.add(new Integer(rs.getInt(1)));
                rs.close();
                bill.insert("Delete shoppingcart where username='"+id+"'");
                for(int i=0;i<book_id.size();i++){
                    rs = bill.get_query("select amount from book where
id="+
                                book_id.elementAt(i)+"");
                    if(rs.next()){
                        int amount = rs.getInt(1);
                        if(amount!=0){
                            book_id.removeElementAt(i);
                            i--;
                        }
                    }
                }
                rs.close();
            }
            }catch(SQLException e){}
            if(book_id.size(>0){
                for(int i=0;i<book_id.size();i++){
                    bill.insert("Delete book where
id="+book_id.elementAt(i));
                }
            }
            //DBHandler cart = new DBHandler();
            int order_num = 0;
            try{
                ResultSet seq = bill.get_query("SELECT order_id.NEXTVAL FROM
DUAL");
                if(seq.next())
                    order_num = seq.getInt(1);
                seq.close();

```

```

        }catch(SQLException e){}
        session = request.getSession(false);
        session.setAttribute("order_num",new Integer(order_num));
        double total =
((Double)session.getAttribute("total")).doubleValue();
        Calendar dt = Calendar.getInstance();
        String d = (dt.get(Calendar.MONTH)+1)+"-"+
dt.get(Calendar.DAY_OF_MONTH)+"-
"+dt.get(Calendar.YEAR);
        String ord = ("insert into order_num
values('"+id+"',"+total+", "+order_num
        +",to_date('"+d+"', 'MM-DD-YY'))");
        bill.insert(ord);
        bill.DB_close();
        //System.out.println("d: "+ord);
        session.removeAttribute("back");
        session.removeAttribute("total");
        response.sendRedirect("Order");
    }
    }else{response.sendRedirect("index.jsp");}
%>
</body>
</html>

```

Sellbook.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Sell Books</title>
</head>
<body bgcolor="#CCCCFF" vlink="#000ff0">
<%
    String name = null;
    try{
        session = request.getSession(false);
        name = (String)session.getAttribute("accountname");
    }catch(NullPointerException e){}
    if(name!=null){
%>
        welcome, <b><%=name%></b><br /><br />
        <center>
        <table><tr>
        <td align=center width=150><a href="\Manage\"><font color=blue><b>Home
Page</b></font></a></td>
        <td align=center width=150><a href="\Searchbook\"><font color=blue><b>Search
Books</b></font></a></td>
        <td align=center width=150><a href="\Sellbook\"><font color=blue><b>Sell
Books</b></font></a></td>
        <td align=center width=150><a href="\Checkout\"><font color=blue><b>Shopping
Cart</b></font></a></td>
        <td align=center width=150><a href="\History\"><font color=blue><b>Order
History</b></font></a></td>

```

```

        <td align=center width=150><a href=\"Edit\"><font color=blue><b>Edit
Information</b></font></a></td>
        <td align=center width=150><a href=\"Password\"><font color=blue><b>Change
Password</b></font></a></td>
        <td align=center width=150><a href=\"Logout\"><font
color=blue><b>Logout</b></font></a></td>
    </tr>
</table>
<hr width=100%><br />
<b><i>Your book(s) have been stored in the database</i></b>
<form action="manage">
<br /><input type="submit" value="Back To Home Page"/>
</form>
</center>
<%
    }else{
        response.sendRedirect("index.jsp");
    }
%>
</body>
</html>

```

signedup.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body bgcolor="#CCCCCCFF">
<center> <h2> ONLINE BOOKS </h2> </center>
<hr width=100%>
<center><b><i>You have successfully registered !!!</i></b></center><br>
<FORM ACTION="index.jsp">
<center><button TYPE="SUBMIT">Back To Log In</button></center>
</form>
</body>
</html>

```

XML Files

Now the last type of files that we have for this project is xml files. Xml files is used to create deployment descriptor to describe the contents of packages, mapping actions with requests, configuration files to let the packages communicate to each other and finally xml files is used deploy the application.

META-INF Folder

application.xml

```
<?xml version="1.0" encoding="UTF-8"?>
```

```

<!DOCTYPE application PUBLIC
"-//Sun Microsystems, Inc.//DTD J2EE Application 1.3//EN"
"http://java.sun.com/dtd/application_1_3.dtd">

<application>
  <display-name>Login checking</display-name>
  <module>
    <ejb>LoginEJB.jar</ejb>
  </module>
  <module>
    <web>
      <web-uri>LoginWeb.war</web-uri>
      <context-root>/onlinebooks</context-root>
    </web>
  </module>
</application>

```

ejb-jar.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE ejb-jar PUBLIC "-//Sun Microsystems, Inc.//DTD Enterprise JavaBeans
2.0//EN" "http://java.sun.com/dtd/ejb-jar_2_0.dtd">

<ejb-jar >
  <description><![CDATA[No Description.]]></description>
  <display-name>Generated by XDoclet</display-name>
  <enterprise-beans>

    <!-- Session Beans -->
    <session >
      <description><![CDATA[Description for Login]]></description>
      <display-name>Name for Login</display-name>
      <ejb-name>Login</ejb-name>
      <home>swe622.interfaces.LoginHome</home>
      <remote>swe622.interfaces.Login</remote>
      <ejb-class>swe622.ejb.LoginBean</ejb-class>
      <session-type>Stateless</session-type>
      <transaction-type>Container</transaction-type>
    </session>

    <!--
      To add session beans that you have deployment descriptor info for,
      add a file to your XDoclet merge directory called session-beans.xml
      that contains the <session></session> markup for those beans.
    -->

    <!-- Entity Beans -->
    <!--
      To add entity beans that you have deployment descriptor info for, add
      a file to your XDoclet merge directory called entity-beans.xml that
      contains the <entity></entity> markup for those beans.
    -->

    <!-- Message Driven Beans -->
    <!--

```

To add message driven beans that you have deployment descriptor info for, add a file to your XDoclet merge directory called message-driven-beans.xml that contains the <message-driven></message-driven> markup for those beans.

```
-->
</enterprise-beans>

<!-- Relationships -->
<!-- Assembly Descriptor -->
<!--
    To specify your own assembly descriptor info here, add a file to your
    XDoclet merge directory called assembly-descriptor.xml that contains
    the <assembly-descriptor></assembly-descriptor> markup.
-->

<assembly-descriptor >
<!--
    To specify additional security-role elements, add a file in the merge
    directory called ejb-security-roles.xml that contains them.
-->

<!-- method permissions -->
<!--
    To specify additional method-permission elements, add a file in the
    merge directory called ejb-method-permissions.ent that contains them.
-->

<!-- transactions -->
<!--
    To specify additional container-transaction elements, add a file in
    the merge directory called ejb-container-transactions.ent that
    contains them.
-->

<!-- finder transactions -->
<!-- message destinations -->

<!--
    To specify additional message-destination elements, add a file in the
    Merge directory called ejb-message-destinations.ent that contains
    them.
-->

<!-- exclude list -->
<!--
    To specify an exclude-list element, add a file in the merge directory
    called ejb-exclude-list.xml that contains it.
-->
</assembly-descriptor>
</ejb-jar>
```

jboss.xml

```
<?xml version="1.0" encoding="UTF-8"?>
```

```

<!DOCTYPE jboss PUBLIC "-//JBoss//DTD JBOSS 3.0//EN"
"http://www.jboss.org/j2ee/dtd/jboss_3_0.dtd">

<jboss>
  <enterprise-beans>
    <!--
      To add beans that you have deployment descriptor info for, add
      a file to your XDoclet merge directory called jboss-beans.xml that
      contains the <session></session>, <entity></entity> and
      <message-driven></message-driven> markup for those beans.
    -->

    <session>
      <ejb-name>Login</ejb-name>
      <jndi-name>ejb/Login</jndi-name>
    </session>

    <!--
      write a merge file jboss-webservices.ent for webservice-description
    -->

  </enterprise-beans>
  <resource-managers>
</resource-managers>

  <!--
  | for container settings, you can merge in jboss-container.xml
  | this can contain <invoker-proxy-bindings/> and
  | <container-configurations/>
  -->
</jboss>

```

WEB-INF Folder

jboss-web.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE jboss-web PUBLIC "-//JBoss//DTD Web Application 2.3//EN"
"http://www.jboss.org/j2ee/dtd/jboss-web_3_0.dtd">

<jboss-web>
  <!-- Resource Environment References -->
  <!--
    For additional resource-env-ref tags add a merge file called jbossweb-
    resource-env-ref.xml
  -->

  <!-- Resource references -->

  <!--
    For additional resource-ref tags add a merge file called jbossweb-
    resource-ref.xml
  -->

```

```

-->

<!-- EJB References -->
<!--
  For additional ejb-ref tags add a merge file called
  jbossweb-ejb-ref.xml
-->

<ejb-ref>
  <ejb-ref-name>ejb/Login</ejb-ref-name>
  <jndi-name>ejb/Login</jndi-name>
</ejb-ref>

<!-- EJB Local References -->
</jboss-web>

```

web.xml

```

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE web-app PUBLIC "-//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"
"http://java.sun.com/dtd/web-app_2_3.dtd">

<web-app >
  <distributable/>
  <!--
    To use non XDoclet filters, create a filters.xml file that
    contains the additional filters (eg Sitemesh) and place it in your
    project's merge dir. Don't include filter-mappings in this file,
    include them in a file called filter-mappings.xml and put that in
    the same directory.
  -->

  <!--
    To use non XDoclet filter-mappings, create a filter-mappings.xml file
    that contains the additional filter-mappings and place it in your
    project's merge dir.
  -->

  <!--
    To use non XDoclet listeners, create a listeners.xml file that
    contains the additional listeners and place it in your
    project's merge dir.
  -->

  <servlet>
    <servlet-name>History</servlet-name>
    <display-name>Name for History</display-name>
    <description><![CDATA[Description for History]]></description>
    <servlet-class>swe622.web.HistoryServlet</servlet-class>

    <init-param>
      <param-name>A parameter</param-name>
      <param-value>A value</param-value>
    </init-param>

```

```

</servlet>
<servlet>
  <servlet-name>Sellbook</servlet-name>
  <display-name>Name for Sellbook</display-name>
  <description><![CDATA[Description for Sellbook]]></description>
  <servlet-class>swe622.web.SellbookServlet</servlet-class>

  <init-param>
    <param-name>A parameter</param-name>
    <param-value>A value</param-value>
  </init-param>
</servlet>
<servlet>
  <servlet-name>Order</servlet-name>
  <display-name>Name for Order</display-name>
  <description><![CDATA[Description for Order]]></description>
  <servlet-class>swe622.web.OrderServlet</servlet-class>

  <init-param>
    <param-name>A parameter</param-name>
    <param-value>A value</param-value>
  </init-param>
</servlet>
<servlet>
  <servlet-name>Login</servlet-name>
  <display-name>Login Page</display-name>
  <description><![CDATA[This page is a login page]]></description>
  <servlet-class>swe622.web.LoginServlet</servlet-class>

  <init-param>
    <param-name>A parameter</param-name>
    <param-value>A value</param-value>
  </init-param>
</servlet>
<servlet>
  <servlet-name>Searchbook</servlet-name>
  <display-name>Name for Searchbook</display-name>
  <description><![CDATA[Description for Searchbook]]></description>
  <servlet-class>swe622.web.SearchbookServlet</servlet-class>

  <init-param>
    <param-name>A parameter</param-name>
    <param-value>A value</param-value>
  </init-param>
</servlet>
<servlet>
  <servlet-name>Password</servlet-name>
  <display-name>Name for Password</display-name>
  <description><![CDATA[Description for Password]]></description>
  <servlet-class>swe622.web.PasswordServlet</servlet-class>

  <init-param>
    <param-name>A parameter</param-name>

```

```

        <param-value>A value</param-value>
    </init-param>

</servlet>
<servlet>
    <servlet-name>Shoppingcart</servlet-name>
    <display-name>Name for Shoppingcart</display-name>
    <description><![CDATA[Description for Shoppingcart]]></description>
    <servlet-class>swe622.web.ShoppingcartServlet</servlet-class>

    <init-param>
        <param-name>A parameter</param-name>
        <param-value>A value</param-value>
    </init-param>

</servlet>
<servlet>
    <servlet-name>Manage</servlet-name>
    <display-name>Name for Manage</display-name>
    <description><![CDATA[Description for Manage]]></description>
    <servlet-class>swe622.web.ManageServlet</servlet-class>

    <init-param>
        <param-name>A parameter</param-name>
        <param-value>A value</param-value>
    </init-param>

</servlet>
<servlet>
    <servlet-name>Update</servlet-name>
    <display-name>Name for Update</display-name>
    <description><![CDATA[Description for Update]]></description>
    <servlet-class>swe622.web.UpdateServlet</servlet-class>

    <init-param>
        <param-name>A parameter</param-name>
        <param-value>A value</param-value>
    </init-param>

</servlet>
<servlet>
    <servlet-name>Logout</servlet-name>
    <display-name>Name for Logout</display-name>
    <description><![CDATA[Description for Logout]]></description>
    <servlet-class>swe622.web.LogoutServlet</servlet-class>

    <init-param>
        <param-name>A parameter</param-name>
        <param-value>A value</param-value>
    </init-param>

</servlet>
<servlet>
    <servlet-name>Checkout</servlet-name>
    <display-name>Name for Checkout</display-name>
    <description><![CDATA[Description for Checkout]]></description>
    <servlet-class>swe622.web.CheckoutServlet</servlet-class>

```

```

    <init-param>
      <param-name>A parameter</param-name>
      <param-value>A value</param-value>
    </init-param>

  </servlet>
  <servlet>
    <servlet-name>Edit</servlet-name>
    <display-name>Name for Edit</display-name>
    <description><![CDATA[Description for Edit]]></description>
    <servlet-class>swe622.web.EditServlet</servlet-class>

    <init-param>
      <param-name>A parameter</param-name>
      <param-value>A value</param-value>
    </init-param>

  </servlet>
  <servlet>
    <servlet-name>Signup</servlet-name>
    <display-name>Name for Signup</display-name>
    <description><![CDATA[Description for Signup]]></description>
    <servlet-class>swe622.web.SignupServlet</servlet-class>

    <init-param>
      <param-name>A parameter</param-name>
      <param-value>A value</param-value>
    </init-param>

  </servlet>
  <servlet>
    <servlet-name>Bill</servlet-name>
    <display-name>Name for Bill</display-name>
    <description><![CDATA[Description for Bill]]></description>
    <servlet-class>swe622.web.BillServlet</servlet-class>

    <init-param>
      <param-name>A parameter</param-name>
      <param-value>A value</param-value>
    </init-param>

  </servlet>
  <servlet>
    <servlet-name>Receive</servlet-name>
    <display-name>Name for Receive</display-name>
    <description><![CDATA[Description for Receive]]></description>
    <servlet-class>swe622.web.ReceiveServlet</servlet-class>

    <init-param>
      <param-name>A parameter</param-name>
      <param-value>A value</param-value>
    </init-param>

  </servlet>

<!--

```

To use non XDoclet servlets, create a servlets.xml file that contains the additional servlets (eg Struts) and place it in your project's merge dir. Don't include servlet-mappings in this file, include them in a file called servlet-mappings.xml and put that in the same directory.

-->

```
<servlet-mapping>
  <servlet-name>History</servlet-name>
  <url-pattern>/History</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Sellbook</servlet-name>
  <url-pattern>/Sellbook</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Order</servlet-name>
  <url-pattern>/Order</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Login</servlet-name>
  <url-pattern>/Login</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Searchbook</servlet-name>
  <url-pattern>/Searchbook</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Password</servlet-name>
  <url-pattern>/Password</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Shoppingcart</servlet-name>
  <url-pattern>/Shoppingcart</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Manage</servlet-name>
  <url-pattern>/Manage</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Update</servlet-name>
  <url-pattern>/Update</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Logout</servlet-name>
  <url-pattern>/Logout</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Checkout</servlet-name>
  <url-pattern>/Checkout</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Edit</servlet-name>
  <url-pattern>/Edit</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Signup</servlet-name>
```

```

    <url-pattern>/Signup</url-pattern>
</servlet-mapping>
<servlet-mapping>
    <servlet-name>Bill</servlet-name>
    <url-pattern>/Bill</url-pattern>
</servlet-mapping>
<servlet-mapping>
    <servlet-name>Receive</servlet-name>
    <url-pattern>/Receive</url-pattern>
</servlet-mapping>

<!--
To specify mime mappings, create a file named mime-mappings.xml, put it in
your project's mergedir.  Organize mime-mappings.xml following this DTD
slice:  <!ELEMENT mime-mapping (extension, mime-type)>
-->

<!--
To specify error pages, create a file named error-pages.xml, put it in
your project's mergedir.  Organize error-pages.xml following this DTD
slice:  <!ELEMENT error-page ((error-code | exception-type), location)>
-->

<!--
To add taglibs by xml, create a file called taglibs.xml and place it
in your merge dir.
-->

<!--
To set up security settings for your web app, create a file named web-
security.xml, put it in your project's mergedir.  Organize web-
security.xml following this DTD slice:
<!ELEMENT security-constraint (display-name?, web-resource-collection+,
auth-constraint?, user-data-constraint?)>
<!ELEMENT web-resource-collection (web-resource-name, description?, url-
pattern*, http-method*)>
<!ELEMENT web-resource-name (#PCDATA)>
<!ELEMENT url-pattern (#PCDATA)>
<!ELEMENT http-method (#PCDATA)>
<!ELEMENT user-data-constraint (description?, transport-guarantee)>
<!ELEMENT transport-guarantee (#PCDATA)>

<!ELEMENT login-config (auth-method?, realm-name?, form-login-config?)>
<!ELEMENT auth-method (#PCDATA)>
<!ELEMENT realm-name (#PCDATA)>
<!ELEMENT form-login-config (form-login-page, form-error-page)>
<!ELEMENT form-login-page (#PCDATA)>
<!ELEMENT form-error-page (#PCDATA)>
-->

<ejb-ref >
    <ejb-ref-name>ejb/Login</ejb-ref-name>
    <ejb-ref-type>Session</ejb-ref-type>
    <home>swe622.interfaces.LoginHome</home>
    <remote>swe622.interfaces.Login</remote>
</ejb-ref>

```

</web-app>

swe622_proj Folder

packaging-build.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<project name="Packaging Generator" default="_packaging_generation_">
  <target name="_packaging_generation_" depends="N65540,N65573,N65616"/>
  <target name="N65540" description="LoginEJB.jar">
    <jar destfile="LoginEJB.jar">
      <zipfileset dir="src/META-INF" prefix="META-INF">
        <include name="ejb-jar.xml"/>
      </zipfileset>
      <zipfileset dir="src/META-INF" prefix="META-INF">
        <include name="jboss.xml"/>
      </zipfileset>
      <zipfileset dir="bin"
includes="swe622/ejb/*.class,swe622/interfaces/*.class"/>
    </jar>
  </target>

  <target name="N65573" description="LoginWeb.war">
    <jar destfile="LoginWeb.war">
      <zipfileset dir="src/WEB-INF" prefix="WEB-INF">
        <include name="web.xml"/>
      </zipfileset>
      <zipfileset dir="src/WEB-INF" prefix="WEB-INF">
        <include name="jboss-web.xml"/>
      </zipfileset>
      <zipfileset dir="bin" prefix="WEB-INF/classes"
includes="swe622/web/*.class"/>
    </jar>
  </target>

  <target name="N65616" description="LoginApp.ear">
    <jar destfile="LoginApp.ear">
      <zipfileset dir="src/META-INF" prefix="META-INF">
        <include name="application.xml"/>
      </zipfileset>
      <zipfileset dir=".">
        <include name="LoginEJB.jar"/>
      </zipfileset>
      <zipfileset dir=".">
        <include name="LoginWeb.war"/>
      </zipfileset>
    </jar>
  </target>
</project>
```

xdoclet-build.xml

```
<?xml version="1.0" encoding="UTF-8"?>
```

```

<project name="XDoclet Generator" default="_xdoclet_generation_">
<property file="xdoclet-build.properties"/>
<property name="eclipse.home" value="C:/Eclipse"/>
<property name="xdoclet.basedir"
value="\${eclipse.home}/plugins/org.jboss.ide.eclipse.xdoclet.core_1.5.0"/>
<property name="jboss.net.version" value="4.0"/>
<path id="project.classpath"><pathelement location="bin"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.j2ee.core_1.5.0/lib/j2ee-
1.4/ejb-api.jar"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.j2ee.core_1.5.0/lib/j2ee-
1.4/jacc-api.jar"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.j2ee.core_1.5.0/lib/j2ee-
1.4/jca-api.jar"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.j2ee.core_1.5.0/lib/j2ee-
1.4/jms-api.jar"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.j2ee.core_1.5.0/lib/j2ee-
1.4/jsp-api.jar"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.j2ee.core_1.5.0/lib/j2ee-
1.4/jta-api.jar"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.j2ee.core_1.5.0/lib/j2ee-
1.4/servlet-api.jar"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.j2ee.core_1.5.0/lib/j2ee-
1.4/sql-api.jar"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.ws.core_1.5.0/lib/wsi-
1.0/jaxr-api.jar"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.ws.core_1.5.0/lib/wsi-
1.0/jaxrpc-api.jar"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.ws.core_1.5.0/lib/wsi-
1.0/saaj-api.jar"/>
<pathelement
location="\${eclipse.home}/plugins/org.jboss.ide.eclipse.jdt.ws.core_1.5.0/lib/wsi-
1.0/xml-api.jar"/>
</path>
<path id="xdoclet.classpath">
<path refid="project.classpath"/>
<fileset dir="\${xdoclet.basedir}">
<include name="*.jar"/>
<exclude name="xdoclet-module-jboss-net-*.jar"/>
</fileset>
<fileset dir="\${xdoclet.basedir}">
<include name="xdoclet-module-jboss-net-\${jboss.net.version}*.jar"/>
</fileset>
</path>
<target name="_xdoclet_generation_" depends="N65540,N66256"/>
<target name="N65540" description="EJB">

```

```

<taskdef name="ejbdoclet" classname="xdoclet.modules.ejb.EjbDocletTask"
classpathref="xdoclet.classpath"/><ejbdoclet ejbSpec="2.0" destDir="src" >

<fileset dir="src" includes="**/*Bean.java" >
</fileset>
<deploymentdescriptor destDir="src/META-INF" >
</deploymentdescriptor>
<jboss Version="3.0" destDir="src/META-INF" >

</jboss>

<packageSubstitution packages="ejb" substituteWith="interfaces" >

</packageSubstitution>

<remoteinterface>
</remoteinterface>

<homeinterface>
</homeinterface>

</ejbdoclet></target>

<target name="N66256" description="Web">
<taskdef name="webdoclet" classname="xdoclet.modules.web.WebDocletTask"
classpathref="xdoclet.classpath"/><webdoclet destDir="src/WEB-INF" >

<fileset dir="src" includes="**/*Servlet.java" >
</fileset>

<deploymentdescriptor Servletspec="2.3" >
</deploymentdescriptor>

<jbosswebxml Version="3.0" >
</jbosswebxml>
</webdoclet></target>
</project>

```