Deploying Web Applications (in Tomcat)

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SWE 642
Software Engineering for the World Wide Web

The Webapps Directory

Root installation directory for tomcat

All web applications (contexts) go in here
“application directory”
A Web Application Directory

**Deployment Descriptors**

- An XML document
  - Describes how a web resource (servlet, JSP, etc.) is accessed
  - Some elements specific to servlets, some to JSPs

- Has lots of capabilities:
  - Defining a URL for a resource
  - Specifying levels of security
  - Adding filters in front of resources
  - Specifying default servlets to run
  - Telling tomcat to load servlets when it starts
  - …

- Here is a brief introduction …
Example web.xml

```
<?xml version="1.0" encoding="ISO-8859-1"?>

<!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>
  ...  
</web-app>
```

Example web.xml (2)

```
<web-app>
  <!- Servlet Mapping Example -->
  <servlet>
    <servlet-name>watermelon</servlet-name>
    <servlet-class>myservlets.watermelon</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>watermelon</servlet-name>
    <url-pattern>/fruit/summer/*</url-pattern>
  </servlet-mapping>
</web-app>
```

URL will be:

http://host:port/mywebapp/fruit/summer/index.html
or:
http://host:port/mywebapp/fruit/summer/index.xyz
Deploying Web Apps

• Book has a lot more details

• This is more like system administration than software engineering

• Most software companies have staff who specialize in deployment

• The naming choices require knowledge of the user’s expectations and mental model (swe 632)