

# CS 100: Hypertext Markup Language

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Week 10-2

# Logistics

## Upcoming

- ▶ HW 5: Due *Next* Friday
- ▶ One week extension

## Goals Today

- ▶ Text Files
- ▶ FTP : File Transfer
- ▶ HTML Fun

## Review FTP: File Transfer Protocol

- ▶ A way to move files from one computer to another
- ▶ What programs are we using to **communicate** using the FTP protocol?
- ▶ What are some commands used in those programs and what do they do?
- ▶ What program are we using to **create text and HTML** files for HW5?

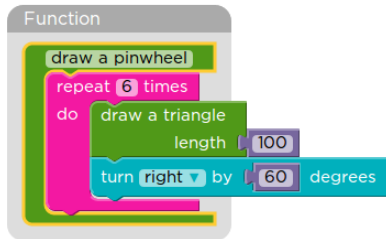
## Pretty Up that Text

- ▶ `how-the-internet-works.txt` is just a text file
- ▶ Want to give it some pizzazz: mark it up using the **Hypertext Markup Language**, better known as HTML or "web page"
- ▶ Will **convert** the plain text to HTML
- ▶ Visit <http://mason.gmu.edu/~ckauffm2/how-the-internet-works.txt>
- ▶ Save the file someplace (like your desktop)
- ▶ Use Sublime 2 Text Editor to open the text file
- ▶ Save As and rename the file `how-the-internet-works.html`

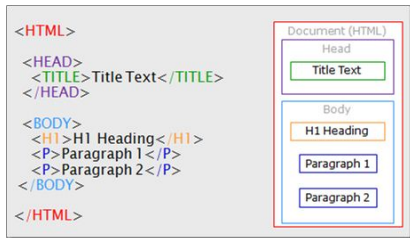
# Overall Structure of HTML

Like programming blocks and Python code, HTML nests elements

## Blocks



## HTML



Source

HTML is a descriptive/display language

- ▶ Python: *do this thing*
- ▶ HTML: *show this thing somehow*
- ▶ The *somehow* part is interpreted by your web browser

# Many Views of a Thing

The contents of files

- ▶ `how-the-internet-works.html`
- ▶ `how-the-internet-works.txt`

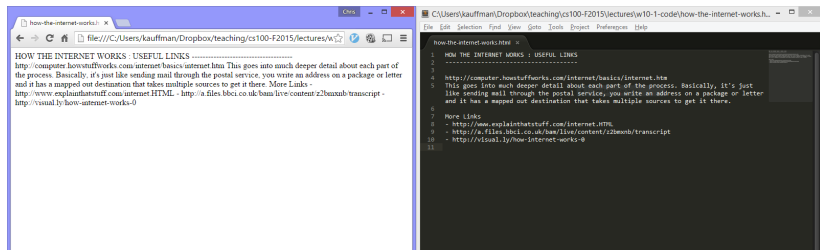
are identical but the *extension* is different

- ▶ `.txt` usually means "text file"
- ▶ `.html` usually means "web page"

but both of them are just bits and bytes. A text editor like Sublime can modify either one.

- ▶ Open Sublime
- ▶ Go to File->Open and find `how-the-internet-works.html`
- ▶ Start messing around

# Side by Side Editing



**Simultaneous** view a page in text editor and web browser

- ▶ Double click `how-the-internet-works.html` to open it in a web browser
- ▶ Make a change to the text of `how-the-internet-works.html`
- ▶ Refresh the web browser to see the changes

# HTML Basics

## Bare Bones

```
<html>
  <body>
    A page!
  </body>
</html>
```

- ▶ **Tags** like `<html>` (almost) always have a closing `</html>`
- ▶ Stuff in the `<body>` gets displayed
- ▶ Indentation doesn't matter

## A Little More Fun

```
<html>
  <head>
    <title>The page title</title>
  </head>
  <body>
    <h1>A Big Heading</h1>
    <p>A paragraph</p>
    <p>Another paragraph</p>
  </body>
</html>
```

- ▶ Adding a title to the page, shown in titlebar
- ▶ Headings and paragraphs are easy

Edit `how-the-internet-works.html` to have a title and heading



# Search Tasks

We have a list of links in `how-the-internet-works.html`

`http://computer.howstuffworks.com/internet/basics/internet-infrastructure.htm`  
`http://web.stanford.edu/class/msande91si/www-spr04/readings/week1/InternetWhite`  
`http://computer.howstuffworks.com/internet/basics/internet.htm`

## Groups

1. Research how to make a **list** in HTML
2. Research how to make links **clickable and pretty** in HTML
3. Find a cool image and find out how to show it on your page

We'll regroup, make modifications in a few minutes

# Spot the Differences

[http://en.wikipedia.org/wiki/File:  
Spot\\_the\\_difference.png](http://en.wikipedia.org/wiki/File:Spot_the_difference.png)



How about [this](#) versus [that](#)

# Facebook is Good for Something

I needed an example of a phishing email.

good day chris . candice explained me this web page  
--> socialipadmini . com <<<--  
is giving away an ipad mini to people which are  
usually at face book for free...almost all these  
people need is your own opinion about it and u can  
keep it forever. however u should hurry up just  
before they close it

See also [Department of Grants](#)

# General Rules

- ▶ Don't give anyone your password
- ▶ Check the web address you are visiting *carefully*
- ▶ If an email looks funny, don't click any links
- ▶ Install annoying security updates for browsers and OS
- ▶ Back your stuff up
- ▶ HW 6 will involve some security updates

