



Computer Science E-75

Building Dynamic Websites

Harvard Extension School

<http://www.cs75.net/>

Lecture 0: HTTP

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DNS



Prerequisites

- Prior programming experience in any language and familiarity with HTML are assumed

Expectations

- Attend all lectures
- Implement four assigned projects
- Implement one final project

Lectures

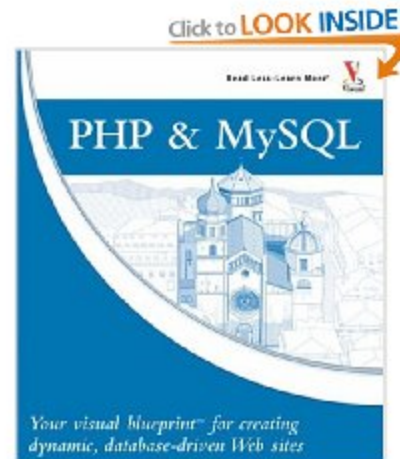
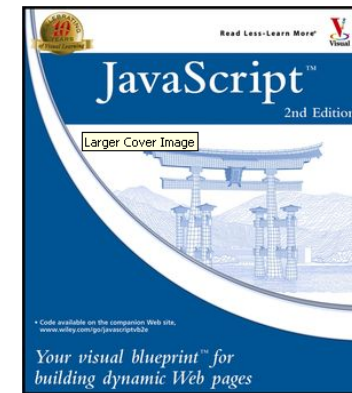
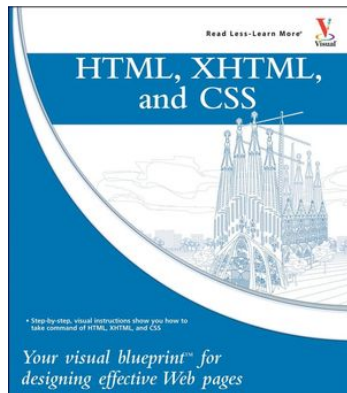
- Lecture 0: HTTP
- Lecture 1: PHP
- Lecture 2: PHP, Continued
- Lecture 3: XML
- Lecture 4: SQL
- Lecture 5: SQL, Continued
- Lecture 6: JavaScript
- Lecture 7: Ajax
- Lecture 8: User Interfaces
- Lecture 9: Security
- Lecture 10: Scalability



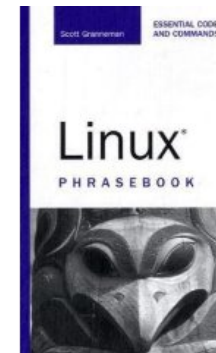
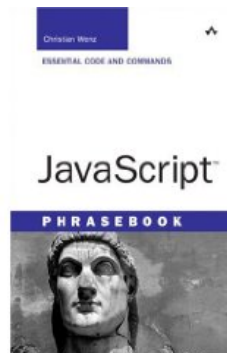
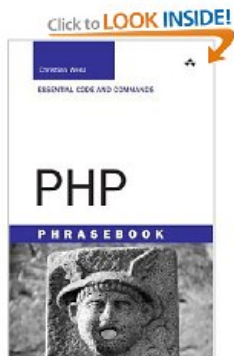
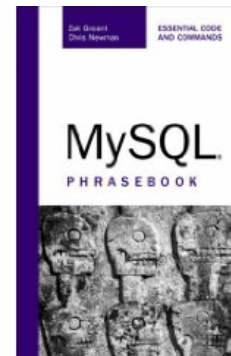
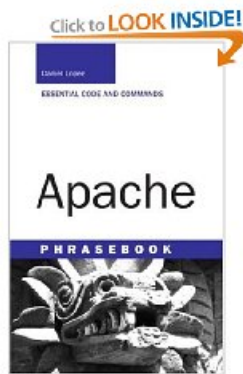
Sections

- TBD!

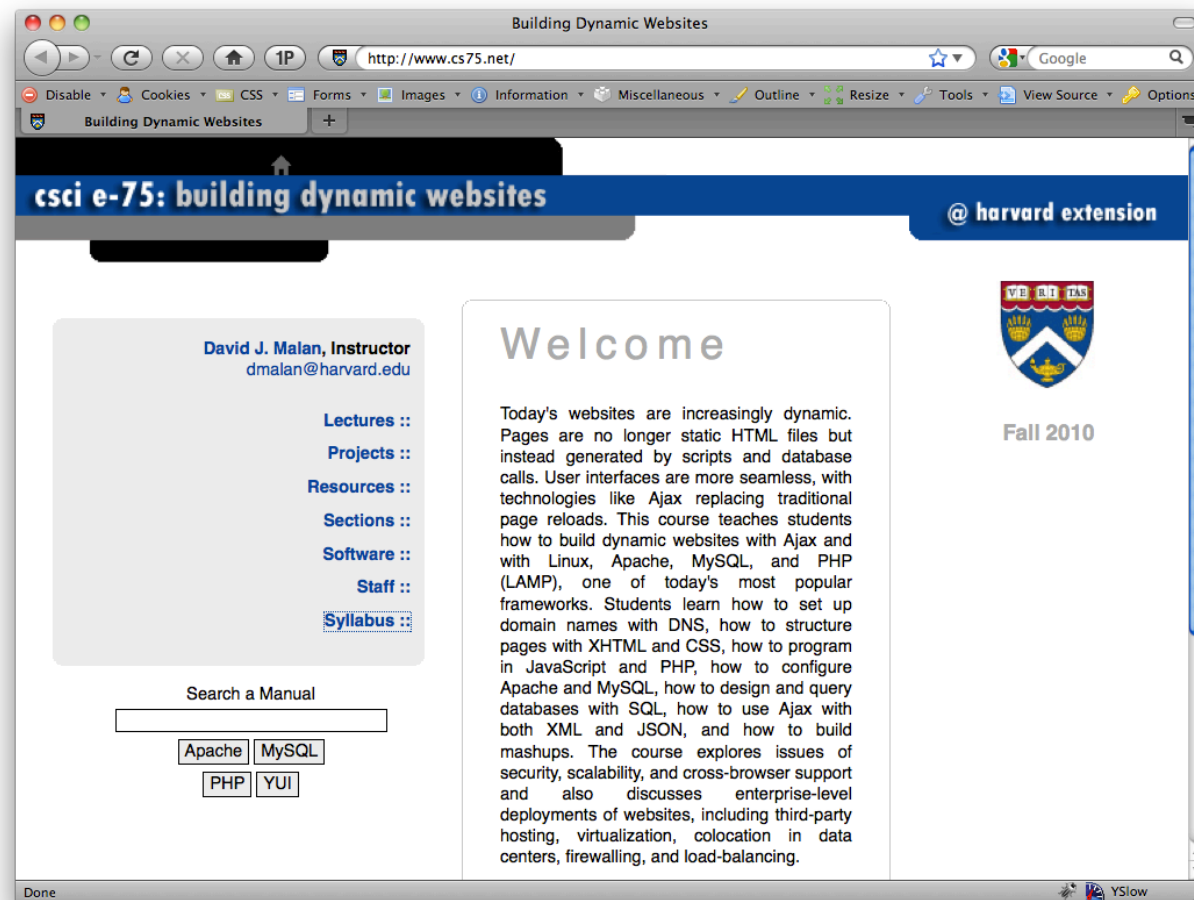
Books for Those Less Comfortable



Books for Those More Comfortable



www.cs75.net



DNS

- A
- CNAME
- MX
- NS
- ...







Web Hosts

web hosting


All this for just \$5.95/month!*

Core Resources	SIGN UP NOW!
Disk Storage at signup	500 GB
Automatically Increases Weekly By:	2 GB
Monthly Bandwidth at signup	5.0 TB
Automatically Increases Weekly By:	40 GB
MySQL 5 Databases	Unlimited
Operating System	Debian Linux
User Accounts	SIGN UP NOW!
E-Mail Accounts (POP/IMAP)	Unlimited
Full Shell / FTP Users	Unlimited
E-Mail	SIGN UP NOW!
POP / SMTP Access	<input checked="" type="checkbox"/>
IMAP Access	<input checked="" type="checkbox"/>
Web-Based Email Access	<input checked="" type="checkbox"/>
Procmail Mail Filtering	<input checked="" type="checkbox"/>
Spam Filtering - SpamAssassin	<input checked="" type="checkbox"/>
Email Addresses (Aliases)	Unlimited
Announcement Lists	Unlimited
Discussion Lists	Unlimited
Vacation Auto-Responders	Unlimited
Domains	SIGN UP NOW!
Free Domain Registration (A \$9.95 Value!)	<input checked="" type="checkbox"/>
Free Domain WHOIS Privacy	<input checked="" type="checkbox"/>
Domains Hosted	Unlimited
Subdomains Hosted	Unlimited

Virtual Private Servers

	Linode 512	Linode 768	Linode 1024	Linode 1536	Linode 2048	Linode 4096
						
RAM	512MB	768MB	1024MB	1536MB	2048MB	4096MB
Storage	16GB	24GB	32GB	48GB	64GB	128GB
Transfer	200GB	300GB	400GB	600GB	800GB	1600GB
Price	\$19.95	\$29.95	\$39.95	\$59.95	\$79.95	\$159.95
	660 Available	467 Available	292 Available	140 Available	105 Available	21 Available
	Sign Up Now!	Sign Up Now!	Sign Up Now!	Sign Up Now!	Sign Up Now!	Sign Up Now!

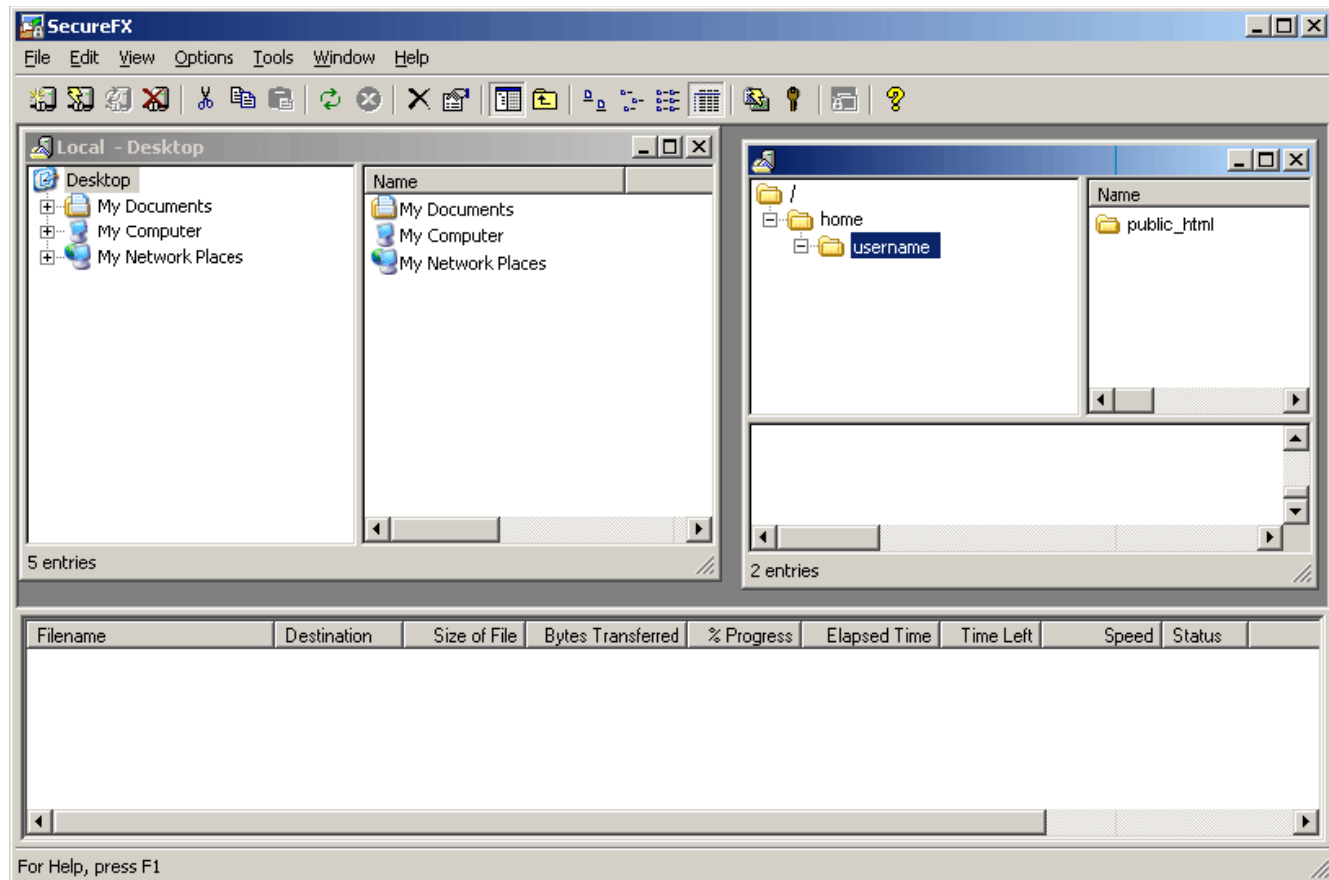
SSH



```
Terminal — tcsh — 80x24
Welcome to Darwin!
[mac:~] username% █
```

The image shows a terminal window titled "Terminal — tcsh — 80x24". The window contains the text "Welcome to Darwin!" followed by a prompt "[mac:~] username% █".

SFTP



CSS

```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <style type="text/css">
      <!--
        body { background: #fff; }
      -->
    </style>
    <title>hello, world</title>
  </head>
  <body>
    hello, world
  </body>
</html>
```

CSS

```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <link href="styles.css" rel="stylesheet" type="text/css" />
    <title>hello, world</title>
  </head>
  <body>
    hello, world
  </body>
</html>
```




Validity

<http://validator.w3.org/>

Cross-Browser Issues

- Chrome
- Firefox
- Internet Explorer
- Safari
- ...

Yahoo! UI Library (YUI)

- YUI Reset CSS

<http://developer.yahoo.com/yui/reset/>

- YUI Fonts CSS

<http://developer.yahoo.com/yui/fonts/>

YUI Reset CSS

```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <link rel="stylesheet" type="text/css" href="http://yui.yahooapis.com/2.8.1/build/
    reset/reset-min.css" />
    <title>hello, world</title>
  </head>
  <body>
    hello, world
  </body>
</html>
```

YUI Fonts CSS

```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <link rel="stylesheet" type="text/css" href="http://yui.yahooapis.com/2.8.1/build/
    fonts/fonts-min.css" />
    <title>hello, world</title>
  </head>
  <body>
    hello, world
  </body>
</html>
```

Forms

- Text Fields
`<input name="email" type="text" />`
- Password Fields
`<input name="password" type="password" />`
- Hidden Fields
`<input name="id" value="123" />`
- Checkboxes
`<input checked="checked" name="remember" type="checkbox" />`
- Radio Buttons
`<input name="gender" type="radio" value="F" />`
`<input name="gender" type="radio" value="M" />`
- Drop-Down Menus
`<select name="state">`
 `<option value=""></option>`
 `<option value="MA"></option>`
 `<option value="NY"></option>`
`</select>`



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