

Building Dynamic, Scalable Websites

Lecture 0: HTTP

①

Image from godaddy.com

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Image from dreamhost.com.

Image from servint.com.

Image from servint.com.

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Image from wikipedia.org

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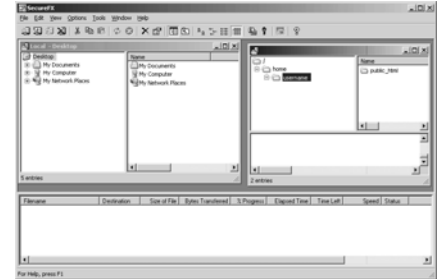
SSH



SSH

- cd
- chmod
- cp
- emacs
- ls
- mkdir
- mv
- nano
- pwd
- rm
- rmdir
- vim
- ...

SFTP



Prerequisites

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

Expectations

- Attend or watch all lectures
- Implement five projects

Lectures

- Lecture 0: HTTP
- Lecture 1: PHP
- Lecture 2: PHP, Continued
- Lecture 3: XML
- Lecture 4: XML, Continued
- Lecture 5: SQL
- Lecture 6: SQL, Continued
- Lecture 7: JavaScript
- Lecture 8: JavaScript, Continued
- Lecture 9: Ajax
- Lecture 10: Ajax, Continued
- Lecture 11: Security
- Lecture 12: Scalability

Sections

- To Be Announced

Projects

- Project 0: Setup
- Project 1: PizzaML
- Project 2: C\$75 Finance
- Project 3: Google Mashup
- Final Project

Computer Science Fair

Monday, 18 May 2009, 6:30 p.m. – 8:30 p.m.



Books for Those Less Comfortable



Images from fahy.com, wiley.com, and amazon.com.

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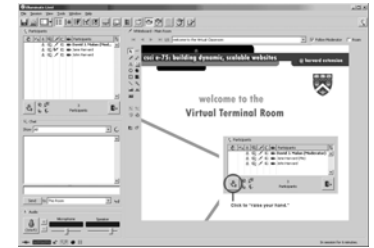
Books for Those More Comfortable



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Virtual Terminal Room



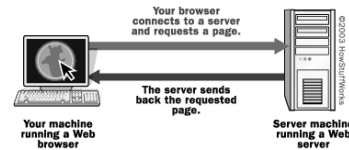
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www.cs75.net



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HTTP



Images from howstuffworks.com.

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XHTML

```

<!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>
    <title>hello, world</title>
  </head>
  <body>
    hello, world
  </body>
</html>
  
```

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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>
  
```

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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>
  
```

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Validity

- XHTML
<http://validator.w3.org/>
- CSS
<http://jigsaw.w3.org/css-validator/>

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Cross-Browser Issues

- Firefox
- Internet Explorer
- Safari

<http://browsershots.org/>

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Yahoo! UI Library (YUI)

- YUI Reset CSS
<http://developer.yahoo.com/yui/reset/>
- YUI Fonts CSS
<http://developer.yahoo.com/yui/fonts/>

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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/2.5.2/build/reset/reset-min.css" />
<title>hello, world</title>
</head>
<body>
hello, world
</body>
</html>
```

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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/2.5.2/build/fonts/fonts-min.css" />
<title>hello, world</title>
</head>
<body>
hello, world
</body>
</html>
```

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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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Computer Science E-75 Building Dynamic, Scalable Websites

Harvard Extension School
<http://www.cs75.net/>

Lecture 0: HTTP

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