Building Web Applications in PHP - University of Michigan - Course Info | Coursera

Building Web Applications in PHP

by University of Michigan

About this Course

In this course, you'll explore the basic structure of a web application, and how a web browser interacts with a web server. You'll be introduced to the request/response cycle, including GET/POST/Redirect. You'll also gain an introductory understanding of Hypertext Markup Language (HTML), as well as the basic syntax and data structures of the PHP language, variables, logic, iteration, arrays, error handling, and superglobal variables, among other elements. An introduction to Cascading Style Sheets (CSS) will allow you to style markup for webpages. Lastly, you'll gain the skills and knowledge to install and use an integrated PHP/MySQL environment like XAMPP or MAMP.

"The Missing Link" Textbook: Chapters 1, 3, 4

Slides & Embedded Links

Our Technologies

01-Introduction-1-Our-Technologies.ppt
01-Introduction-1-Our-Technologies.pdfPDF File

- Brian Behlendorf - Apache Foundation
- Rasmus Lerdorft - PHP Inventor - Yahoo!
- Brendan Eich: JavaScript
- Douglas Crockford - "Discovered" JSON
- John Resig - jQuery

HyperText Transfer Protocol (HTTP) & Request/Response Cycle

01-Introduction-2-HTTP-Request-Response.ppt
01-Introduction-2-HTTP-Request-Response.pdfPDF File

- GET Request Page
- Response Page
- HyperText Transfer Protocol
- What happens when you click a link?

Week 2: HyperText Markup Language (HTML)

"The Missing Link" Textbook: Chapters 7-14

Sample Code

HTML Sample Code Example (Browse)

[HTML Sample Code Example Zip (Download)](#)

Slides & Embedded Links

HTML

[02-HTML.ppt](#)
02-HTML.pdfPDF File

- [Robert Cailliau - Co-founder of the World Wide Web](#)
- [World Wide Web Consortium](#)

Week 3: Cascading Style Sheets (CSS)

["The Missing Link" Textbook Chapters: 19-22](#)

Sample Code

[CSS Sample Code (Browse)](#)

[CSS Sample Code Zip (Download)](#)

Slides & Embedded Links

[03-CSS.ppt](#)
03-CSS.pdfPDF File

Images, Colors, and Links in CSS

- [CSS Images Sample Code](#)
- [W3C: HTML Colors](#)
- [W3C: Advanced Colors](#)

Other Resources

- [Web Developer Plugin by Chris Pedrick](#)
- [CSS Cheat Sheet by Leslie Frank](#)

["The Missing Link" Textbook Chapter: 1, 3, 4, 37, 39, 41](#)

Installation Handouts

In this page, you will install a programmer text editor, install a bundled all-in-one PHP/MySql application, and explore that application briefly.

You should only install 1 of these XAMPP or MAMP.

We have separate pages for each of the commonly used Operating Systems:

- [Setting up the MAMP PHP/MySql Environment on a Macintosh](#)
- [Setting up the MAMP PHP/MySql Environment on a Windows](#)
- [Setting up the XAMPP PHP/MySql Environment in Microsoft Windows](#)

You can use any software you like - I've done most of my demos using MAMP on the Macintosh so using MAMP might be easier on Windows. If you encounter a problem getting MAMP to work on Windows, it is OK to use XAMPP.

Other Resources

- [Bonus: Brian Behlendorf on the Apache Software Foundation](#)

Week 5: Introduction to PHP

["The Missing Link" Textbook Chapters: 23, 24, 25, 26, 27, 28, 31](#)

Slides

[05-Introduction-to-PHP.ppt](#)
05-Introduction-to-PHP.pdfPDF File

Week 6: PHP Arrays

["The Missing Link" Textbook Chapters: 27, 28, 31](#)

Sample Code

- [Sample Array Code](#) & [Sample Array Example](#)
- [Sample Array Code (Download)](#)

Slides & Embedded Links

[06-Arrays.ppt](#)
06-Arrays.pdfPDF File

Week 7: PHP Functions

"The Missing Link" Textbook Chapter: 14, 23-28, 31, 32

Slides & Embedded Links

07-Functions.ppt
07-Functions.pdfPDF File

PHP - Functions

http://php.net/manual/en/function.sort.php

PHP - Variable Scope

http://php.net/manual/en/language.variables.scope.php

http://php.net/manual/en/language.variables.superglobals.php

http://php.net/manual/en/function.array-key-exists.php

PHP - Modularity

https://github.com/csev/wa4e

Week 8: PHP Forms

"The Missing Link" Textbook Chapter: 14, 27

Sample Code

- Sample Forms Code (Browse)
- Sample Forms Code (Download)

Slides & Embedded Links

08-Forms.ppt
08-Forms.pdfPDF File

HTML Forms

http://www.wa4e.com/code/forms/form1.php

Using GET and POST with Forms

http://www.wa4e.com/code/forms/form3.php

HTML Input Types

http://www.wa4e.com/code/forms/more.php

HTML5 Input Types

http://www.wa4e.com/code/forms/html5.php

Processing Form Data and HTML Injection

http://www.wa4e.com/code/forms/form4.php

http://www.wa4e.com/code/forms/form5.php

Guessing Game

http://www.wa4e.com/code/forms/guess.php?guess=200

Model View Controller (MVC)

http://www.wa4e.com/code/forms/guess_mvc.php

Taught by: **Charles Russell Severance**, Clinical Professor

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