

# CSC 498: Web Programming

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## Today

- Course information
- Assignment
- Overview of the web area

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## Who am I?

- Haidar M. Harmanani – Associate Professor of Computer Science
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- 09.547254 x2360
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## Course Goal

- Understanding web programming
- Client technologies
  - Static vs. responsive
- Server technologies
- Current web languages
- And much more :-)



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## Course Information

- Course web page:
  - <http://vlsi.byblos.lau.edu.lb/classes/csc449/>



## Course Overview

- Project-based course with a lot of self learning
- You have to eventually develop a web project
  - You choose the problem
  - You choose the technology
  - You choose the solution
  - You do what you want!
- Work in groups of 2
- Seminar and demo at the end
- Written report



## Grade

- Final grade = report + assignments + final application + innovation [idea and solution]



## Book Info

- Recommended books:
  - Required:
    - Learning PHP 5 by David Sklar, O'Reilly
    - Head First Html with CSS and XHTML by E. Freeman and E. Freeman, O'Reilly
  - Recommended
    - Web Programming - Building Internet Applications by Chris Bates
    - Pragmatic Ajax: A Web 2.0 Primer by Justin Gettland, Ben Galbraith and Dion Almaer



## CSS

- Cascading Style Sheets
- Adapting the presentation of web content
- Separate the content from the presentation



## Ajax

- Asynchronous JavaScript and XML, Ajax
  - The current buzzword – Web 2.0
  - Ecma-262
  - Gives a rich experience
  - No need for additional installation
- Google pioneer and leader in the field
- Dynamic HTML - DHTML



## Ajax Examples

- Google Reader
- Google Maps



## XML

- Extensible Markup Language – XML
- Grammar for creating new languages

- `<?xml version="1.0" ?>`
- `<recipes>`
- `<category type="meat">`
- `<name>Meat loaf</name>`
- `</category>`
- `</recipes>`



## Java Applets

- Running Java code in the browser
- Compiled code
- Running in a protected environment
- Requires special installation in browser
  
- I recommend Ajax for this course though

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## PHP

- General-purpose scripting language
  - For web applications
- Hello.php
- ```
<html>
<head>
  <title>PHP Test</title>
</head>
<body>
  <?php echo 'Hello World';?>
</body>
</html>
```

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## PHP

- ```
<html>
<head>
  <title>PHP Test</title>
</head>
<body>
  Hello World
</body>
</html>
```

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## Java Server Pages

- Generate Web pages using Java on the server
  - JSP
- Very powerful
- More complicated than PHP
  - But more maintainable
- Lets you do anything you can with “normal” Java

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## Ruby

- Simple scripting/programming language
- I have never used Ruby
- <http://www.ruby-lang.org/en/>



## Ruby on Rails

- Ruby for the Web
- <http://www.rubyonrails.org/>
- Very powerful for creating advanced application quickly
- I have not used Ruby on Rails either



## MySQL

- Database
- Recommended for this course



## Other Technologies

- Perl5 – programming language
- CGI – interface for running web apps
- Hibernate – persistent database Java
- JavaServer Faces – Ajax UI via Java
- JSON - JavaScript Object Notation
- JBOSS – Application platform
- BEA – Application platform
- Jakarta – Application platform (Apache)



## Assignment

- Write an html page that gives some info about yourself by Monday!



- Questions?

