

Internet Application Development

Overview

This course provides an introduction to Internet application development. This introduction includes both client and server side technologies. Client side technologies include HTML for structure, CSS for presentation and Java Script for interactivity. Server-side technologies include PHP for middleware and MySQL for online database activities.

The course combines conceptual knowledge with hands-on experiences. Given our time constraints, it will not be possible to become an expert with each technology. Though, it is expected that each student will demonstrate a 'Hands On' understanding of Internet application development. This course is designed to prepare students to do well in future classes and class projects.

Since Computer Information Systems, as a discipline, contains both technical and organizational attributes, the course is structured to provide students with the opportunity to reflect on the business context for web applications. Within this context, students will learn how properly employed Internet technologies can make a significant contribution to an organization's goals.

Learning Objectives

At the end of this course, you will be able to:

1. Compare, contrast, and demonstrate static and dynamic web sites.
2. List and explain relevant standards organizations.
3. Explain how the World Wide Web began and the basic technologies it employs.
4. Develop an online learning portfolio.
5. Compare and contrast Internet technologies used for site content and structure.
6. Compare and contrast client and server side scripting.
7. Design, develop, and deploy a dynamic web site utilizing HTML, CSS, PHP, and MySQL.
8. Explain server side technologies including PHP and MySQL.
9. Write and run simple online SQL queries.
10. Create a MySQL Database. Demonstrate online access to it.
11. Develop an Internet application that dynamically updates and queries an online MySQL database.
12. Demonstrate and explain the purpose of client side scripting with JavaScript.

Textbook

Ullman, PHP and MySQL for Dynamic Web Sites, Fourth Edition, Peachpit Press, Berkeley, CA, 2012, ISBN-13: 978-0-321-78407-0, ISBN-10: 0-321-78407-3

Text readings supplemented with selections from current Academic Journals, Safari Online, and other sources.

Note: In class, instructor will provide each student with a web server.

Grading

Final class grades determined through a weighted average that is projected to include exams, class activities, an online assignment portfolio, and an online learning portfolio. Portfolio descriptions and assignments are available online.

Exams & Quizzes	65%
Learning Portfolio	15%
Assignment Portfolio	20%

Projects, Assignments, and Activities

Class participation, that is, the active engagement in questions and answers, taking part in analyses, assignments, and lab work is expected from all students. Each class may include participatory “Hands On” activity that may be posted to our online portfolios. Only students present in that class can participate in the participatory assignments.

Hybrid Class Attendance

Attendance is expected at all class meetings. As expected in a hybrid class, there will be regular (weekly) assignments. These assignments will include readings as well as active assignments. While these assignments are available online, they may be modified in class. Any content covered in an assignment or in class should be considered testable.

Exams

As specified in the class schedule, there will be four class exams. If you miss one exam, during the scheduled final exam period, you will be able to take a makeup exam. Note that it is only possible to makeup one exam. Anyone not confident of being present for the remainder of the exams should consider dropping. In extreme circumstances, early exams may be arranged.

Class Interruptions

During class, mobile phones and pagers should have their audible alarms turned off. Students are expected to be respectful toward their classmates at all times. This includes arriving to class on time.

Class	Internet Application Development
Bldg. T2, Room 100 Day Monday 4:00 – 5:30	CIS 2336, Hybrid Section 16398
Instructor	Office
Ed Crowley	T2, Room 331
Phone: 713-743-4096 E-mail: ecrowley@uh.edu	Scheduled Office Hours 2:30 -- 3:45 Monday 3:00 – 5:15 Tuesday <i>Other hours by appointment.</i>

Table One *Class Information*

Online Support

This class will have both an online support site and an online forum. Note that the web site is constantly evolving. By sending the instructor an email concerning the class, you are implying consent to have your email posted to the forum. The support site will link to the forum.

Disabilities

The University of Houston System complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for students who have a disability. In accordance with Section 504 and ADA guidelines, University of Houston strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please contact Center for Students with DisABILITIES

Internet Application Development Projected

Topics/Exam Schedule

Date	Topics
Week 1 23 Jan	Overview Website Access (HostGator) Codecademy: HTML & CSS Introduction to HTML HTML Structure: Using Lists HTML Structure: Tables, Divs, and Spans
Week 2 30 Jan	Cpanel Overview Web Site Structure Codecademy: HTML & CSS Introduction to CSS CSS Classes and Ids CSS Element Positioning
Week 3 6 Feb	Liquid CSS Design Plus Labor Day holiday
Week 4 13 Feb	Frameworks for developing responsive, mobile first web sites. Bootstrap/W3.CSS
Week 5 20 Feb	Exam One (Codecademy plus Assignments) Module One Assignments Due
Week 6 27 Feb	Codecademy: PHP Introduction to PHP Control Flow If/Else Control Flow: Switch Arrays in PHP Loops:For and Foreach Loops:While and Do-While Functions in PHP, Parts I and II Object-Orientated Programming, Parts I and II Advanced Arrays and Maps
Week 7 6 March	Chapter 1, Introduction to PHP Chapter 2, Programming with PHP
Week 8 13 March	Chapter 3, Creating Dynamic Web Sites <i>(13 -18 March Spring Break no F2F Meeting!)</i>
Week 9 20 March	Exam 2 (Codecademy: PHP, Chapters 1,2,3 plus assignments) Module Two Assignments Due
Week 10 27 March	Chapter 4, Introduction to MySQL Chapter 5, Introduction to SQL
Week 11 3 April	Chapter 9, Using PHP with MySQL Advanced PHP/MySQL Applications
Week 12 10 April	Exam Three (Chapters 4, 5, and 9 plus assignments) Module Three Assignments Due
Week 13 17 April	Chapter 10, Common Programming Techniques
Week 14	In Class, Portfolio Review

24 April	Codecademy: JavaScript Introduction to JavaScript Functions 'FOR' Loops in JavaScript 'While' Loops in JavaScript Control Flow Module Four Assignments Due
Week 15 1 May	In Class, Portfolio Review. Exam Four (Codecademy JavaScript plus assignments)
Final Exam Week	Week of 2 May. Specific time to be determined.

Note that in addition to what is listed here, there may be outside readings, additional homework, and in class assignments.