IS601 - Web System Development

Instructor

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Class Meetings

Tuesday 6:00 PM - 9:00 PM

Description

Students will gain experience in the development of web-based systems using Python and the Django web framework. Students will work with Python and Javascript, currently two of the three most in-demand programming languages. Students will learn to develop a web based system through an intensive, hands-on project that requires application of real-world problem-solving skills. Students will learn to utilize the Django web framework, one of the ten most popular web frameworks and currently in use by Instagram and Pinterest. Model-View-Template design, the Django templating language, and object relational mapping for database access will be covered in this course. At the conclusion of the course, students should be able to create a bespoke web interface for a standard internal business application.

Grading

Midterm	20%
Final Exam	20%
Final Project	20%
Assignments	40%

Academic Integrity

Students are expected to follow the <u>University Policy on Academic Integrity</u>. Any code used from an online resource should be cited in a comment. Any attempts to present other people's code as your own will be viewed as plagiarism. All violations of the Academic Integrity policy will be referred to the Dean of Students for review and possible disciplinary action.

Tentative Class Schedule

This class schedule is tentative and subject to change as the course develops.

Week	Topics
1	 Course Introduction Project Introduction Presentation - Tools Used in Modern Web Development Exercise - Setting up the Development Environment
2	 Presentation - Working from the Command Prompt / GitHub / HTML Exercise - Navigation Practice/Basic git workflow
3	 Presentation – CSS, bootstrap and PrimeNg Exercise and assignment 1
4	 Presentation – DOM, and JavaScript Exercise and assignment 2
5	Presentation - jQuery and ajax.Midterm Q/A
6	Midterm Exam
7	 Presentation - Beginning of python (conditional statement and loops) Exercise
8	 Presentation - Beginning of python (functions and I/O) Exercise and Assignment 3
9	 Presentation – intro to Django
10	 Presentation - Django
11	 Presentation - Django (Routing and Forms) Assignment 4
12	Presentation - sqlLite
13	Presentations - Docker
14	Presentations
15	Presentations