KIEI-924: Introduction to Software Development

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FIRST CLASS ATTENDANCE IS MANDATORY

Course Description

This course is geared for entrepreneurs and non-programmers who want to learn the essentials of building web applications. Students will build and publish a small website of their own design, gaining skills in software analysis and experience with tools for building modern web applications.

This course fulfills the prerequisite for KIEI-925.

Course Schedule

WEEK 1	Dev environment setup; intro to HTML5; source control systems; code publishing
WEEK 2	Semantic content vs. visual design; the Bootstrap framework; mobile design
WEEK 3	Intro to Javascript; fundamentals of computer programming
WEEK 4	Javascript: event handling and DOM manipulation
WEEK 5	Intro to SQL

Learning Goals

• Understand key concepts and patterns in modern web development

• Build a "static" website with modern HTML and CSS techniques

• Use cloud-based tools and resources to build and deploy a website

Student Expectations

Students should expect to spend 6-8 hours a week on assignments. Students are highly encouraged to work with a partner to help each other on their homework. Attendance at lectures is paramount, and participation is a significant part of the final grade.

Computer Requirements

Students must own or have access to a modern computer that is capable of running the development tools needed for class. MacBooks are highly recommended, though most PCs can be made to work as well. Detailed installation instructions for both platforms will be provided at the first class.

Assignments and Grading

Students must build a project of their choosing throughout the quarter as their final project. Students are encouraged to work in teams for all assignments including the final project, but each student must turn in their own project code that they developed themselves.

• Homework is worth 60% of your grade, based on 3 assignments worth 20% each.

• The Final Project is worth 30% of your grade. Students must deploy a live, functioning website to a public internet address as their final project.

• Class participation is worth 10% of your grade.