GIMM 300: Mobile Web Development

Section 001: Monday 6pm - 8:30pm Section 002: Tues 6pm - 8:30pm Instructor: Dr. Daniel Hampikian

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Course Description:

The dense saturation of the web and mobile devices throughout our culture has changed the way that our minds work and the nature of human existence in intricate and interesting ways. In this class you will learn the ability to use existing structures in the web and mobile devices to create interactive and dynamic apps and websites while simultaneously reflecting on and exploring the philosophical implications of this ability.

Through internet and mobile technology we can extend our senses, enhance our memory, create new realities in virtual space, invent and direct web based social practices, collect and visualize data patterns, use those data patterns to modify or control behaviors, and have immediate access to almost any factual information that is known.

Some of the questions that these developments in human society raise are: How are we being shaped by technology and the things that it allows individuals and corporations to do? What are we now? How does it compare to what we were? What are we becoming? Can we ourselves shape our own human existence through technology for the better? Can we shape others? Should we? How does the human will (if it exists) factor into this extended interconnectivity and mental dependence that mobile devices and the internet create? And how should we conceive of living a good life amongst the information structures within which we are embedded?

On a more practical note, a large part of who you are to other people - of what truthfully or falsely represents you as a person - is your online identity. Strangers, future employers, and future friends will all know you by this identity in part or in whole. Another piece of who you are is made up by your artistic expression of yourself, and that is determined in part by your audience, your effort, and the mediums in which you can express your creativity. This class will provide you with the ability to create in several artistic and informational mediums that are both themselves expressions of creativity and also capable of hosting and displaying other artistic and academic achievements. I hope you get a lot out of this course, and look forward to seeing your abilities and reflections continuously develop.

Course Materials:

Required:

The Internet of Us: Knowing More and Understanding Less in the Age of Big Data by Michael P. Lynch

Optional:

Adobe Dreamweaver CC Classroom in a Book

Scrum: the art of doing twice the work in half the time Book by Jeff Sutherland

Clean Code A Handbook of Agile Software Craftsmanship by Robert C. Martin

Web Programming Step by Step Second Edition by Stepp, Miller, and Kirst

Course Objectives:

Students who successfully complete this course will:

- 1. Be able to create and modify via plugins a wordpress website
- 2. Utilize a foundational knowledge of javascript, html, and css to make websites
- 3. Have a knowledge of node.js and the ionic framework for cross platform development
- 4. Use a basic understanding of firebase and the google maps sdk to create realtime location based apps and websites
- 5. Use a basic understanding of typescript and angular to make websites and apps.
- 6. Setup and host websites on amazon web services (AWS)
- 7. Have a basic knowledge of servers and databases
- 8. Create and maintain an AWS server/database
- 9. Have a basic understanding of Bootstrap
- 10. Be able to utilize Bootstrap templates in their websites
- 11. Be able to deploy Unity games to web and mobile platforms
- 12. Be able to use agile (scrum) methodology to accomplish complex group projects
- 13. Be able to use git to organize, backup, and structure long term projects
- 14. Have a reflective understanding of how cutting edge technology impacts personal identity, knowledge, and social dynamics.
- 15. Reflectively engage with the deep philosophical implications of the fact that information structures through the medium of the web and mobile devices have and continue to change the nature of what it is to be human.

Tools:

Dreamweaver, AWS Console, Unity, MobaXterm, Github, Ionic

Students will become familiar with cutting edge developer tools and learn industry standard best practices using these development tools.

Skills:

Html, css, bootstrap, javascript, jquery, typescript, aws, ec2, node, ionic, angular, git, agile methodology/scrum, cordova, firebase, google maps sdk.

Assessment:

- In class quizzes, hmw completed, participation in group discussion and attendance: 20% (without a documented medical excuse you cannot make these up, you must attend class and keep up with the assignments to learn the skills so these will be unannounced.
 - Quiz 1: basic html and css, philosophical topic: epistemology
 - Quiz 2: aws and wordpress: philosophical topic: identity
 - Quiz 3: javascript and php: philosophical topic: ethics
 - Quiz 4: frameworks: ionic and react: philosophical topic: metaphysics
 - Quiz 5: Php/mysql and c#/typescript/javascript firebase Databases for web, ionic, and unity: philosophical topic: metaphilosophy
- Completed freecodecamp assignments, completed discussion questions, participation in discussion, blog post reflections on discussion 20%
- Wordpress and Bootstrap websites: 20%
- Agile methodology and mobile geolocational game development project 20% total broken up as follows:
 - 2% Proposal is completed, agreed on by group, and sensible and appropriately ambitious.
 - 3% Confidential self assessment from group leaders of code academy progress and tutorial progress
 - 5% Trello assignment and correct github use from scrum master and members
 8 % Completed proposal specifications for original app and website with database and geolocation team app and website functionality using either mysql, firebase, or amazon S3
 - 2% Presentation on finals of app and each group member able to claim an appropriate fractional amount of work.

Disclaimers:

I reserve the right to modify this syllabus and the course to fit the needs and abilities of the class. You can work in groups and seek guidance from other students, other websites, etc., but the projects, guizzes, and hmw should be your own work.

Student Conduct and Academic Integrity: Suggested language below.

In order to create a safe space for learning, I expect all of us (peer mentors, students and myself) to exhibit behavior that reflects Boise State's Statement of Shared Values (http://deanofstudents.boisestate.edu/statement-of-shared-values/) and is characterized by

Academic Excellence	Caring	Citizenship	Fairness
Respect	Responsibility	Trustworthiness	

In addition, students in this course are expected to uphold standards outlined in the Boise State University Student Code of Conduct

(http://deanofstudents.boisestate.edu/student-code-of-conduct/). Any work submitted by a student in this course for academic credit will be the student's own work. For this course, collaboration is allowed in the following instances: group work in team assignments, using unity asset store for prototype resources, using stackoverflow or similar sites for coding solutions WITH ATTRIBUTIONS!!! To the website and author of the solution.

Accommodations for students with disabilities:

Students with disabilities needing accommodations to fully participate in this class should contact the Educational Access Center (EAC). All accommodations must be approved through the EAC prior to being implemented. To learn more about the accommodation process, visit the EAC's website at https://eac.boisestate.edu/new-eac-students/.

Inclusivity Statement:

We understand that students in this class represent a rich variety of backgrounds and perspectives. The GIMM program/department is committed to providing an atmosphere for learning that respects diversity. While working together to build this community we ask all members to:

- share their unique experiences, values and beliefs
- be open to the views of others
- honor the uniqueness of their colleagues
- appreciate the opportunity that we have to learn from each other in this community
- value each other's opinions and communicate in a civil manner
- keep confidential discussions that the community has of a personal (or professional) nature
- use this opportunity together to discuss ways in which we can create an inclusive environment in this course and across the campus community