

Intro To Web Development

(Javascript/HTML/CSS)

10/15 10:45-11:45pm

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Introduction

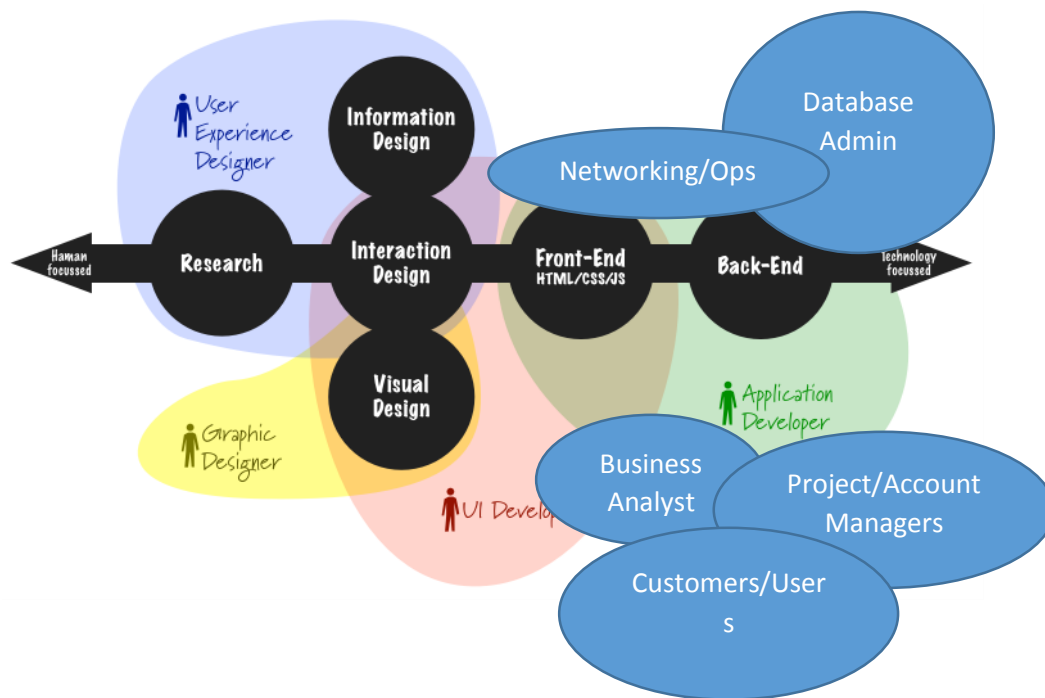
Introduce myself

- Describe your current job at Subaru
 - Title is “Lead Programmer Analyst” on the B2C team
 - B2C (Business To Customer) team works with all applications that are customer facing (see below for list). Team consists of 4 Leads like myself
- What I do
 - Tech Lead: Lead projects and other developers(offshore and onshore contractors) on getting work done
 - Developer: write/test/deploy code
 - Operations: Support/troubleshoot our applications/infrastructure in all our environments (local, dev, qa, prod)
 - Database: Design and Support
- Talk about projects you work on
 - Systems we develop/build/support as a Team

Application	Links	Comments
MySubaru	www.mysubaru.com	Used by customers who own Subaru cars to get customized info about their cars
MySubaru Mobile Site and App (Android, IOS, Windows Phone)	See Mobile app store to download and use	Same info as mySubaru site but easier and faster to use on your phone
Subaru.com	www.subaru.com	Landing page for all things Subaru
MySubaru remote services	See Mobile app store to download and use	Services to remotely control your Car. <ul style="list-style-type: none">- Lock/unlock doors- Turn on horns/lights- Locate- Remote start
In Car services	Interactive Car dashboard	Used by Car owner, inside car to perform various tasks (e.g. Schedule service with dealer)
Web Admin	webadmin.subaru.com	Internal portal app to support/configure/troubleshoot all our applications. Used by helpdesk and our team
Impact	impact.subaru.com	Internal application used by marketing to create/manage /collaborate/blog on all marketing campaigns

- People I work with in the company
 - See What [Developers do: Roles and Interactions](#)
- Talk about your background
- Why you like technology
- Talk about how you became an IT professional,
- Number of years in job, places you worked, what you did
- Questions ?

What Developers do: Roles and Interactions



Have class introduce themselves

- What's your name?
- What kind of careers you might be interested in and why? Or a better question if you had to do something 10 hours a day, 5 days a week what would it be ? and why !
- What do you see yourself doing in 4 years? 8 years ? if you don't know start making a plan
- How do these careers use technology ?
- What excites or scares you about technology ?
- What would you like to get out of this 1 hour session? Instructors take notes of the answers!

Computing and Computational Thinking

Talk about fields impacted by Computing?

- Poll class to discuss fields/subject areas important to them and how its impacted by Computing
- Safe to say Computing has impacted a “great many” fields/subjects

Importance of Computational Thinking?

- Computational Thinking, considered by many, as important as reading, writing and math [see](#)
- Computational thinking has already influenced the research agenda of all science and engineering disciplines. Starting decades ago with the use of computational modeling and simulation, through today’s use of data mining and machine learning to analyze massive amounts of data, computation is recognized as the third pillar of science, along with theory and experimentation

Keys points about Computational Thinking

- Computational thinking is the thought processes involved in formulating a problem and expressing its solution(s) in such a way that a computer—human or machine—can effectively carry out
- Computational thinking is not just about problem solving, but also about problem formulation.
- Computer science is the automation of abstractions[\[1\]](#). So, the most important and high-level thought process in computational thinking is the abstraction process. Abstraction is used in defining patterns, generalizing from specific instances, and parameterization. It is used to let one object stand for many. It is used to capture essential properties common to a set of objects while hiding irrelevant distinctions among them. For example, an algorithm is an abstraction of a process that takes inputs, executes a sequence of steps, and produces outputs to satisfy a desired goal.
- Abstraction gives us the power to scale and deal with complexity. Applying abstraction recursively allows us to build larger and larger systems, with the base case (at least for traditional computer science) being bits (0’s and 1’s). In computing, we routinely build systems in terms of layers of abstraction, allowing us to focus on one layer at a time and on the formal relations (e.g., “uses,” “refines” or “implements,” “simulates”) between adjacent layers.

Key ideas to remember about Computational Thinking and Computing

- All fields of study use and can benefit from Computational Thinking and Computing
- You don’t need to be computer science major or professional programmer to understand Computational thinking but I do highly recommend taking at least 1 intro programming course in any language to help in building and applying your understanding of Computational Thinking

Overview of technologies

Discuss each of the technologies and how they work together.

[Javascript](#)

[HTML](#)

[CSS](#)

Excercises

Download all exercises from <https://www.qa.mysubaru.com/hopeworks/index.html>

Click on zip of all files from Intro To web development and unzip to your computer

Exercise 1 – Hello World

Going to create a simple html page that's says "Hello world"

For instructions [see](#)

Exercise 2 – Eagles Season Predictor

See eagles.html in exercises folder.

Changes we want to make

- When you click on the "win all games checkbox". For each week make eagles the winner and update the record
- When you click on the a win or lose for a particular week, update the eagles record

Exercise 3 – Eagles Season Predictor based on Rank

See eagles - Ranking.html in exercises folder.

Changes we want to make

- Create a new button called "Wins based on Rank" when the user clicks on the button. For all the weeks, figure out which team is ranked higher. Mark the higher ranked team with a win. Go thru all the teams and update the record

