

Computers in Daily Life

10/15 11:00-12:00pm

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Introduction

Introduce myself

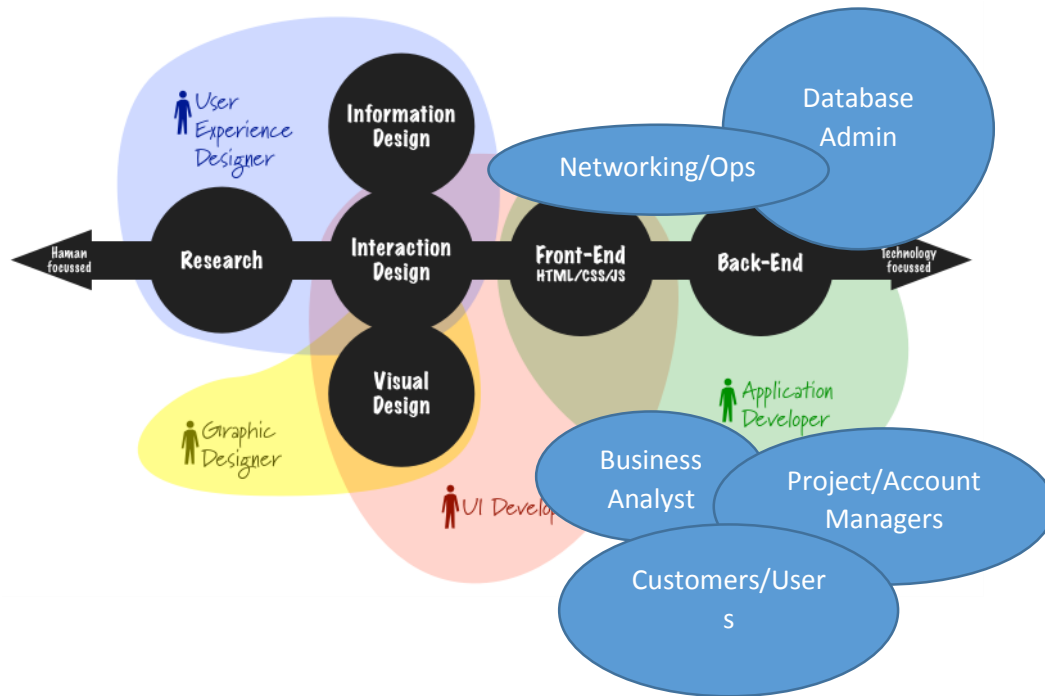
- Describe your current job at Subaru
 - Title is “Lead Programmer Analyst” on the B2C team
 - B2C (Business To Customer) team works with all applications that are customer facing (see below for list). Team consists of 4 Leads like myself
- What I do
 - Tech Lead: Lead projects and other developers(offshore 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!

Computers in Daily Life

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

Hands On Approach (Common Use Cases)

Using Google search

- A recent study at Illinois Wesleyan University found that fewer than 25% of students could perform a "reasonably well-executed search." Wrote researchers.
- Using operators in search
 - Using site: to search a specific web site, [Search nytimes for test scores](#)
 - Use " " to search phrase, otherwise will search for each of the words see above ! [Search nytimes for test scores](#)
 - Use – to remove search items. [Search nytimes for test scores remove SATS from 2008-2010](#)
 - Use filetype: if you know file type. [music of Drake](#), [movies of Drake](#)
 - Use intitle: if you want to search for works in title. [search pdfs that have velocity of any type of swallow](#)
 - Use author: if you know the author
 - Use allintext: [search for vermont ski house lake](#). This is different from " " ! How ?
 - Use intext:
 - [More operators](#) and [here too](#)
 - Get definition of word. [Definition of trending](#)
 - Calculator: [example](#)
 - Conversion of units, [example](#)
 - Use speak now !! click on microphone and talk instead of typing

Using Google Maps

- Find food in Camden, [Mexican Food in Camden NJ](#)
- Get directions, click directions enter "My Location", works on desktop and mobile, also can click on "your location" icon above zoom in lower right corner
- Need to stop at post office first before lunch, click add destination
- Need to pick up Aunt first at Ruby Tuesday because she likes Mexican too! click add destination
- When I get to the Mexican place what should I look for and where do I park ! use street view and/or add destination
- What's the traffic going to be like ? click hamburger, select traffic. Discuss how google knows traffic, anonymous location tracking on your mobile !!
- My car broke down. I need to take a bus, bike ... click on bike/bus icon
- Satellite Mode/Map Mode
- Move and Zoom the Map
- Rate and Review Places
- Measure Distance (right place on map, select distance)
- When signed into google can search by your contacts address or name
- Online help
 - <https://support.google.com/maps/answer/144349?hl=en>

Basic Finance with spreadsheets

- Creating a Budget
 - Should be updated weekly/monthly or whenever income/expenses change
 - Great tool for analyzing “what if” scenarios
 - Can I afford that Car/apartment/pet ?
- Useful links
 - [Basic Money Lessons You \(Probably\) Missed in High School](#)
 - [The Basic Monthly Budget Worksheet Everyone Should Have](#)
 - [Nine basic financial skills no young adult should leave home without](#)

Buying stuff

- comparing prices
 - [Best price comparison sites](#) and [this](#)
- [Best sites to Sell your stuff online](#)
- researching products
 - “for profit” companies should always be questioned about their motives (e.g. ends in .com), non profits(usually ends in .org e.g. www.consumerreports.org) are funded by government/state are a better option. See list of [domain name suffixes](#)
- Safety Tips
 - Always use sites that use https. Make sure you don't see broken SSL icon. Explain what https does and what http does
 - Limit data you share, they don't need your SSN or Birthday. Use paypal or some other site to put CC in 1 place
- Useful links
 - [Inc tips](#)
 - [Adweek tips](#)

Job Hunting

- Don'ts
 - Don't look for jobs while at your current job or on company time. You are being monitored
 - 32% of large companies read employee email. Almost 28% have terminated employees for e-mail policy violations, while another 45% have disciplined an employee for violating email policies.
 - Don't use company email address or resources (phone,fax,computer)
 - Don't comment or represent your company on personal social media sites
- Do
 - Use your lunch break away from work to conduct your job search
 - Use your network, Majority of jobs offers are from people you know or are referred by someone you know

- Build and expand your network using popular sites like Linked In. give demo how to use
- Jobs sites
 - [Top Tens Sites](#)

Social Media

- Personal
 - Keep personal life personal which means
 - Don't comment on your company good or bad.
 - Don't friend people you work with. If you really want to, use business oriented sites like linked in