Day 1

Saturday, July 9, 2022 12:04 PM

Training Overview

12 weeks
- 9 weeks Content
  - 5 week foundations
- 3 weeks capstone

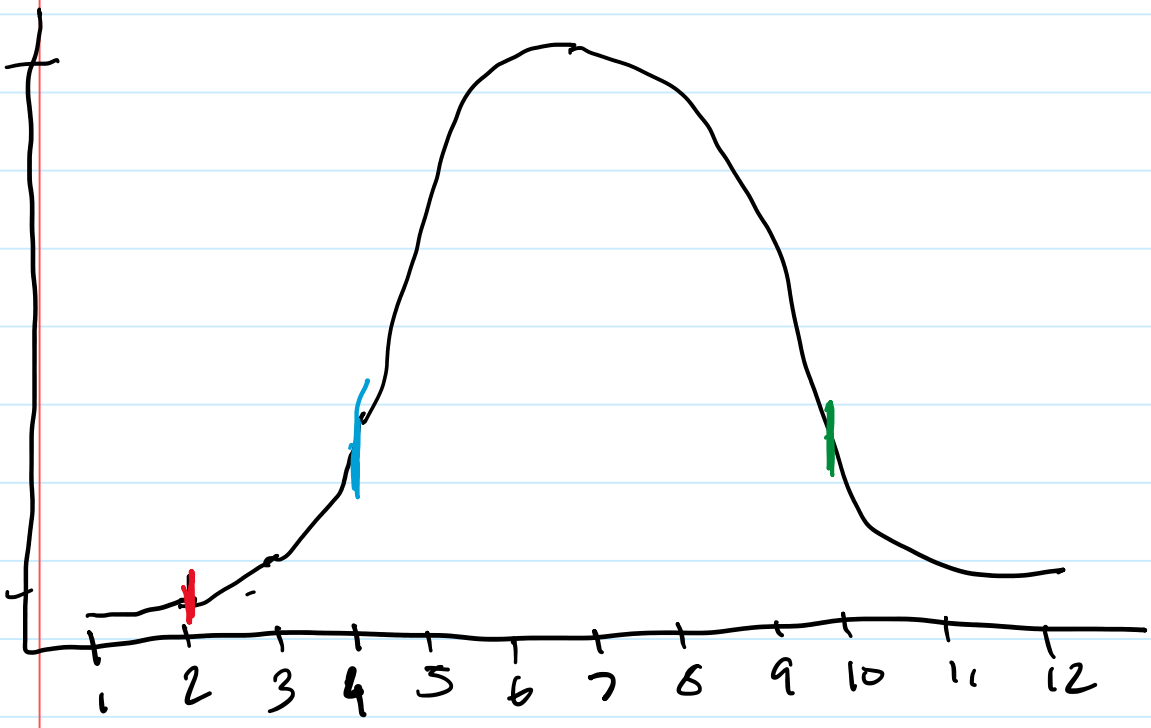
Normal Day
- Content Delivery
- One on Ones
- Self Study / hands on practice

3 Projects
- p1 individual
- p2 small groups
- p3 capstone

Evaluations
- Projects
- QC / foundation Quizes
- Coding Challenges

Extremely Difficult

- Will require 100% effort
- fast paced



Attendance

- Be on time
- This your job

Project Presentations

- Present what you have no matter what

We will be looking for effort and improvement

Computer foundations

Central Processing Unit CPU
- Brain of the computer
- Processes a request sent from elsewhere

Motherboard
- Nervous System
- 100's to 1000's of wires connecting everything
- Sends IO to the cpu
- Allows cpu to access memory

Memory
- Registers / Cache
  - Very smalls > mb
  - Store byte addresses to memory elsewhere

- Random Access Memory
  - Info being used directly by the CPU
  - I allows for quick read / write
  - Lost when computer is powerd off
  - Relatively small gbs
  - Dynamic RAM

- Dynamic RAM
  - Continually refreshed in order to maintain data
  - typically used for system memory
- Static Ram
  - Every thing is retained until powered off
  - Used for smaller caches

- Storage
  - Hard Drives / SSD
  - Cheapest form of memory
  - Data is persisted through power cycles

Operating Systems

Software that makes it easier to use our computer
- Connection between the user and hardware
- In charge of executing programs

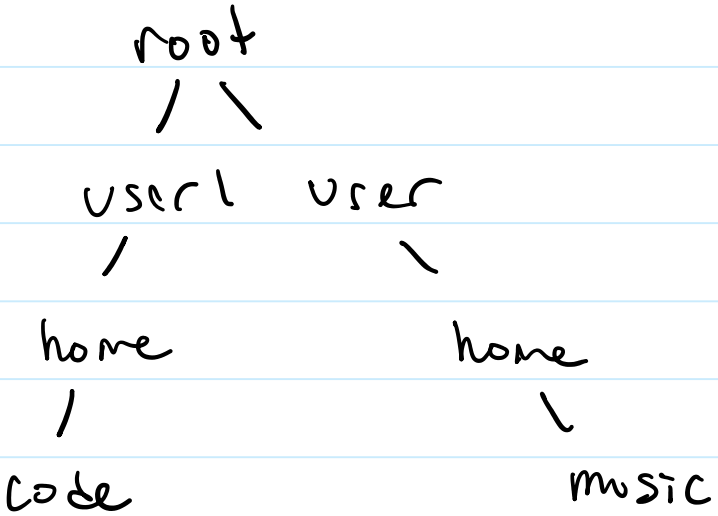
OS also acts like a manager
- what processes the CPU is running
- finding files
- memory management
- Security

- Memory Management
- Security

Different OS's
- Windows
  - XP
  - Vista
  - 7
  - 8
  - 10
  - 11
- MacOS
  - High Seirra
  - Majave
  - Catalina
  - Bic Sur
- Unix
  - MacOS
  - Linux
    - Ubuntu
    - Redhat
    - fedora
    - Arch

Unix

Unix
- Open Source family of operating systems
- Created in the early 1970's
- Started as a terminal based OS
  - file tree



Originally used a shell called sh
- bourne again shell (bash)

Linux:
- Created by Linus Torvalds
- one of the larges open source projects
  - pioneered open source

Basic Unix Comands
- first thing to understand is the main directories
- "root" means /

main directories
- "root" mapped to /
- "home" mapped to ~
  - user specific information on this computer/server

Command Arguments and flags
- Arguments are extra information for the command
  - commandname argument
- flag are built in arguments that give extra fontionality
  - these are a dash (-) followed by a letter
  - comand ars -f

Most impoctant Command
- man (manual)
  - gives you details about a certain command