Computer Science Principles

Class 12

In only 22 Hours of Class Time ...

- ... less than three 8 hour work days!
- Dual Class Focus:
- A. Career options. Includes salary info, career choices, etc
- B. Fundamental building blocks of code, portable to any language. We used pseudocode in this class.

Career Discussions

- Programming item of the week!
- Discussion of various career options. Field Trip!
- Salary discussion of career options
- Introduced and used Github! Students created their first pull requests within a week!
- Introduced and used Slack for a communications tool.
- Learned about Pair programming, its advantages, and completed their own Pair Programming Project
- Worked together as a "team" on a large scale Class Project.

Programming Basics

- Functions
- If statements
- Switch/Case Statements
- While loops
- For Loops
- TRUE/FALSE evaluation of statements
- AND/OR
- Arrays
- Data Types
- Test Driven Development
- Project Management Strategies (Waterfall and Agile)

Projects

- Class Project: Goal was to automate the entire McDonalds Menu, ala an automated kiosk.
- Pair Project: Use Pair programming. Did a letter conversion (i.e. input an 'A', output an 'F') using extensive Array logic and manipulation.
- Individual Project. Output an integer, with three integer inputs. Requirements for a for loop, a while loop, and an if-else block.