Intermediate Programming

Leap@CMU 2016

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Who is it for?

- 1-2 semesters (or equivalent) programming experience
- Basic knowledge of programming
 - Variables
 - Loops
 - Boolean and Comparison Operators
 - Conditional Statements
 - Functions
- Knowledge of Java syntax (helpful but not required)

About the Track

- Taught in Java
- Topics covered:
 - Review of OOP
 - Recursion
 - O Data Structures: stacks, queues, trees, heaps
 - Sorting: insertion, selection, bubble, quick, merge, heap
 - Searching Algorithms
 - o GUI Programming

Why Java?

- Easy to learn
- Very popular
- Object-oriented
- Well-documented
- Excellent included libraries



Final Projects

- Usually written in Java with Swing
- Past projects:
 - OCR Algorithm
 - Random Music Generator
 - Audio Visualizer
 - o Risk Game
- 2-3 weeks to work on final project

Your Teaching Assistants!

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