CS260: Object Oriented Programming

Some Vocab - October 20, 2016

Overview

• Quiz next Thursday...

Java Bytecode

- a. Portable machine code created by an interpreter
- b. Can be understood and run by any compatible JVM

2. JVM

- a. A program written in C or C++ that understands and runs Bytecode instructions
- b. Acts a 'middleman' between Bytecode and the machine

3. javac

- a. Program that translates Java Code into portable(?!) Bytecode
- b. Reads in *.java files and outputs *.class files

4. java

- a. Program that runs Java Programs
- b. Creates a JVM that calls the main() method of the class given
- c. Doesn't understand Java code
- d. Understands Bytecode

5. Java vs. C

- a. C
- i. Faster directly talks to the system
- ii. You have to build everything yourself (data structures)
- b. Java
 - i. Slower abstractions on top of abstractions on top of...
 - ii. Tons of included libraries and functionality
- c. Overall:
 - i. Do you want a fast program? Use C or another low level language
 - ii. Do you want a program, fast? Use Java or another high level language

6. Classes

a. What does a class declaration look like?

```
public class ClassNameHere {
    //this is where fields go
    ClassNameHere(){
        //this is where we set up the class
    }
    //this is where methods go
}
```