Info

- [http://www.cise.ufl.edu/class/cop3503fa12/](http://www.cise.ufl.edu/class/cop3503fa12/)

- E-mail: sjaved@cise.ufl.edu

- Office: CSE 337
Introduction

- Object-Oriented Programming
- Using Java
- Basic Algorithms/Problem Solving
- Data Structures
Introduction

- Form foundation for further programming.
- Should be able to write relatively complex programs on your own!
Why Programming?
Why Programming?

- A *tool* to **solve problems**.
- Use Algorithms:

  An algorithm is an effective procedure for solving a problem expressed as a finite sequence of instructions.

  “effective procedure” = program
Where is it used?

- Financial industry.
- All scientific fields.
- Complex websites.
- 3D Graphics and CAD
- Videogames
- Mobile devices
- Etc....
What about Java specifically?

- Very popular for servers (JSP, servlets, etc.)
- Lots of libraries
- Can be used for anything really...
- Used in a certain popular mobile operating system.
What about Java specifically?

- **Android!**

  *Well Blackberry too but...*

- Mobile market is huge now.

- Get into it while you can.

- Emulator for the OS provided by Google.
Personally...

- Started learning Java in 2004.
- Used it in projects like:
  - Classic turn-based game “Empire”
  - Scrabble
  - Interpreter for 2 different languages
  - Simulation of the MIPS architecture pipeline
  - Distributed programming (client-server across networks).
Personally...

- Simple 3D application to demonstrate shadows.
- Created using Android 2.2 and OpenGL ES 2.0
- 3D games on mobile very common now.
Thoughts on Java

- Very easy!
- Lots of libraries make it easy
- Great IDEs (Eclipse, NetBeans)
- Cross-platform support is great.
- Slow though...
In conclusion...

- Programming is mainly a tool to solve problems.
- Object-Oriented Programming and Java are just one of those tools.
- Learn as many tools as you can!
Next lecture

- Refresh of Java
- OOP, classes, objects
- Remember: No discussion tomorrow
- But have your CISE accounts ready