Prerequisite Knowledge Programming and Ability

CIS 399, Android Application Development

What do you need to already <u>know</u> and <u>be able to apply</u> to succeed in this class?

Basic Principles of Object Oriented Programming:

- Polymorphism
- Inheritance
- Encapsulation



<u>Intermediate Java Language Features</u>

- Interfaces
- Abstract classes
- Overriding base class methods
- Generics
- Collections (especially the List and HashMap classes)
- Annotations

Best Practices for Software Development

- DRY (Don't Repeat Yourself) code Don't copy and paste blocks of code
- Separation of concerns

For example, use separate modules for:

- o UI (User Interface)
- o Business logic (computation)
- Data manipulation (back-end)
- Highly cohesive, loosely coupled
 - o Classes should have a single responsibility
 - o Each method should do just one thing
 - o Public APIs should be minimal (only what is really needed)
- Programming style
 - o Use meaningful names
 - o Write comments that explain "why"
 - o Follow the style conventions of the community in which you are working