GENERAL ASSEMBLY

MOBILE DEVELOPMENT

LESSON 06
MORE CLASSES, STRUCTS, AND TYING INTERFACE BUILDER TO CODE

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READY?
SET?
GIT PULL!

LEARNING OBJECTIVES

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- Object Oriented Principles Review
- Reference vs. Value Types Review
    - Classes and Structs
- In-Class Sample Project
- In-Class Group Assignment

OBJECT ORIENTED PRINCIPLES REVIEW

WHAT ARE THE PRINCIPLES?

- 4 Principles
  - Encapsulation
  - Abstraction
  - Inheritance
  - Polymorphism

  - Examples in Playgrounds

ENCAPSULATION

- The implementation details (e.g., guts) of the function are hidden.

ABSTRACTION

- Abstraction in programming enables you, and enforces you to describe what you’re building as abstractly as possible.

INHERITANCE

- Inheritance is the idea that stating that something is a type of **Animal** gives it the properties of **Animal**.

POLYMORPHISM

- Polymorphism := “One Name, Many Forms”
  - A polymorphic concept in Swift is Function Overloading, which is having a function with the same name, but different parameters and return types.

CLASSES VS STRUCTS

CLASSES VS. STRUCTS

- Classes
  - Pass by Reference
  - Inheritance
- Structs
  - Pass by Value
  - Memberwise Initialization

IN-CLASS PROJECT
AIM PROFILE

IN-CLASS ASSIGNMENT

KEY OBJECTIVE(S)

Extend the AIM Profile to display the data that was entered in different labels. Change the fonts, background, and text colors.

Add some pictures!

TIMING

45 min 1. Code with partner

5 min 2. Debrief

DELIVERABLE

Work in groups (assigned by Arthur). Ask questions if you need help!

HOMEWORK

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- Read about:
  - Enumerated Types (e.g., enum, in the Enumerations chapter)
  - Switch Statements (in the Control Flow chapter)

  - Start Week 2 Homework
    - Found in Assessments folder
    - Due Sunday at Midnight

NEXT CLASS

NEXT CLASS

- Switch Statements (in the Control Flow chapter)
- Enumerated Types (e.g., enum, in the Enumerations chapter)
- View Controller Lifecycle
- Properties
- Gestures