

MOBILE DEVELOPMENT

INTRO TO SWIFT

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INTRO TO SWIFT

LEARNING OBJECTIVES

- › Define Swift and its value to the iOS ecosystem
- › Define and demonstrate playgrounds
- › Define Swift's fundamental data types
- › Use variables and constants, and understand the difference between the two
- › Apply optionals and understand when to use them
- › Utilize control flow to create a simple program flow in playgrounds

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**REVIEW ASSESSMENT AND
LAST CLASS**

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QUESTIONS

- What are the benefits of using nibs over storyboards and what are the downsides of storyboards?
- What are the benefits of using storyboards over nibs and what are the downsides of nibs?
- Give real world examples of nibs and storyboards (when one would use storyboards and nibs)?
- Why are segues important and how do you use them?
- Define navigation controllers and give a sample use case.
- Bonus question: What are outlets?

GETTING STARTED

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PROGRAMMING LANGUAGES

- Our code is like a recipe for a meal
- The computer will start with the first instruction, complete it...
 - Then move on to the second instruction, complete that...
 - Repeat until it is done with instructions
- Unlike a recipe, we have to be much more specific with computer code
 - Computers are fast and dumb. They will do exactly what you say, mistakes and all

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PROGRAMMING LANGUAGES

- Doing multiple steps of a recipe at the same time can shorten the amount of time it takes to complete the meal
 - This is possible with computers, too, but we won't be concerned with how to do that in this class
 - The computer will, for the most part, read each step of our recipe in order, complete it, and move on to the next
 - One step of the recipe can change the state of our food in preparation for the next step

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ENOUGH WITH THE RECIPE

TALK, LET'S CODE!

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RECAP

- Variables: Changeable state
- Constants: Unchangeable state
- Type: What a variable/constant is, e.g. String, Integer
- nil: Nothing
- Optional: A kind of type that can be nil

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CONTROL FLOW

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RECAP

- if *statement* { *code* } // Code runs if statement evaluates to true
- if *statement* { *code* } else { *moreCode* } // Code runs if statement evaluates to true, moreCode runs if statement is false
- if *statement* { *code* } else if *statement2* { *moreCode* } // Code runs if statement evaluates to true, moreCode runs if statement2 is true
 - You can stack as many if else blocks as you want.
- if let *name* = *optional* { *code* } // code runs and has access to a non-optional version of *optional* only if *optional* exists
- for, while // Loops