

## Mobile Engineering for iOS

Quiz 01 First Name: \_\_\_\_\_

1. When should you use each of the following...

int: for integers (i.e. whole numbers) float: for numbers with a decimal point

bool: for Booleans (i.e. binary values such as Yes/No, True/False, or 1/0)

- 2. What is a universal app (in comparison to a iPhone or iPad app)?

  A Universal app is one that runs a single executable on both an iPhone and an iPad. A Universal app typically has different a different format/layout for each platform. This is distinguished from an iPhone app that will run on both an iPhone or an iPad (but a double the iPhone size). iPad only apps will only run on iPad
- 3. What do we use Interface Builder for? *Interface Builder is used to visually layout Storyboards and Xibs*
- 4. How is a UILabel similar to and different from a UITextField?

  Both generally display one line of text (though UILabel can display more). A UILabel doesn't allow user interaction by default, where a UITextField does. UITextField automatically brings up the keyboard for data entry, and has a series of delegate methods for managing interactivity
- 5. What are the main two ways we can make sure only the correct data is entered into a UITextField?

  Select the best keyboard, and use the shouldChangeCharactersInRange method
- 6. What are the first two steps of the View Controller Life Cycle? viewDidLoad viewWillAppear

7. Please fill in the following table...

Operator	Purpose
+	Add values together
-	Subtract one value from another
=	Assign a value to a variable
%	Get the remainder when dividing one integer from another
*	Multiply one number by another
++	Add 1 to a variable
	Subtract 1 from a variable
+=	Add one variable to another variable and place it in itself



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8. Please fill in the following table assuming float x = 12.345; int y = 6; int z = x;

Code	Output
[NSString stringWithFormat:@"%.0f",x]	12
[NSString stringWithFormat:@"%1.2f",x]	12.35
[NSString stringWithFormat:@"%05.1f",x]	012.3
[NSString stringWithFormat:@"%i",y]	6
[NSString stringWithFormat:@"%d",y]	6
[NSString stringWithFormat:@"%i",z]	12

9. What are the steps needed to create a button (in IB) that logs a message?

Add the button in IB

Add a method in the .m with a IBAction

Add an NSLog to the method

Wire up the button to the method in IB

## 10. Explain pointers:

Pointers create a reference to an object's location in memory, so when you pass a pointer around your only passing the object's reference not the object itself.