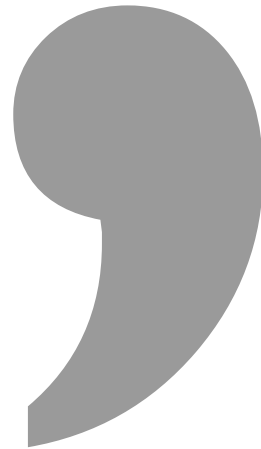
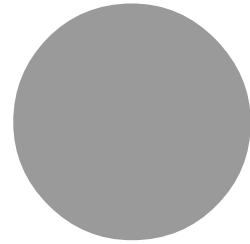


Code Basics

Every Line of Code Ends with...




(a semi-colon)

Declaring Properties

Syntax

```
@property (nonatomic, weak) IBOutlet UILabel *nameLabel;
```



The diagram illustrates the syntax of a property declaration. It shows the line of code: `@property (nonatomic, weak) IBOutlet UILabel *nameLabel;`. Below this line, there are six curly braces, each with a downward-pointing arrow. These arrows point to the following components of the code: `@property`, `(nonatomic, weak)`, `IBOutlet`, `UILabel`, `*`, and `nameLabel;`.

Naming Conventions

Apple says to use Camel Case

```
int thisIsCamelCase = 1;
```

Other Cases

```
int ThisIsWordCase = 1;  
int Thisissentencecase = 1;  
int THISISUPPERCASE = 1;  
int thisislowercase = 1;  
int some_languages_suggest_underscores = 1;
```

Tip: use object type in name

```
@property (strong, nonatomic) NSString *nameString;  
@property (strong, nonatomic) NSArray *nameArray;  
@property (strong, nonatomic) UILabel *nameLabel;
```

Declaring Methods

Syntax

- (void)doSomethingCool;



Object to Return Method Name

Declaring Methods

Syntax

- (void)doSomethingCool;
- (float)squareWithNumber:(float)number;



Object to Return Method Name Parameter Type Parameter Name
(Internal to Method)

Declaring Methods

Syntax

- (void)doSomethingCool;
- (float)squareWithNumber:(float)number;
- (IBAction)myButtonPressed:(id)sender;



Available to Interface Builder Method Name Object Parameter

Naming Conventions

Apple says to use Camel Case

Use verbs for method names and be clear

– (**Activity** *)fetchActivityForDate:(**NSDate** *)activityDate;

Two Words About AutoComplete...

USE IT!!!

- ▶ Tab through to accept the text
- ▶ Pay attention to the parameter types is asking for and give it what it wants!
- ▶ If it's not trying to AutoComplete, something's probably wrong with your code, so go back and fix it first!
- ▶ Be careful to choose the right AutoComplete

Controls

UITextField

UITextField

What events might you want to know?



Text Field – Displays editable text and sends an action message to a target object when Return is tapped.

Events

Editing Did Begin

Text Did Change

Editing Did End

...but also...

Should Change Characters

Should Return

UITextField Instance Methods

```
- (void)textFieldDidBeginEditing:(UITextField *)textField;
- (void)textFieldDidEndEditing:(UITextField *)textField;
- (BOOL)textFieldShouldReturn:(UITextField *)textField {
    [textField resignFirstResponder];
    return YES;
}
- (BOOL)textField:(UITextField *)textField
    shouldChangeCharactersInRange:(NSRange)range
    replacementString:(NSString *)string {
    NSMutableCharacterSet *numbersCharSet = [[NSMutableCharacterSet
        characterSetWithCharactersInString:@"1234567890"]
        invertedSet];
    NSString *filteredString = [[string
        componentsSeparatedByCharactersInSet:
        numbersCharSet] componentsJoinedByString:@""];
    return [string isEqualToString:filteredString];
}
```

Where's Did Change??

```
- (IBAction)textFieldDidChange:(UITextField *)textField;
```

Delegates

Usually, an object houses it's own code

Sometimes, it's easier for an object to “delegate” it's code to another object (often a parent)

```
@interface MainViewController :  
    UIViewController <UITextFieldDelegate>  
_myTextField.delegate = self; // OR by wiring it up in IB
```

So, by declaring **and** setting a delegate, it says:

Look for my code over here

AutoComplete method names (yay)!

Warn if any required methods are missing

**HelloWorld
+Text**

HelloWorld+TextField Instructions

1. Add a text field and a new button
2. The button changes the label to the value of the text field, but only accepts vowels
3. The Done button dismisses the keyboard

```
- (BOOL)textFieldShouldReturn:(UITextField *)textField {
    [textField resignFirstResponder];
    return YES;
}
- (BOOL)textField:(UITextField *)textField
    shouldChangeCharactersInRange:(NSRange)range
    replacementString:(NSString *)string {
    NSMutableCharacterSet *numbersCharSet = [[NSMutableCharacterSet
        characterSetWithCharactersInString:@"1234567890"]
        invertedSet];
    NSString *filteredString = [[string
        componentsSeparatedByCharactersInSet:
        numbersCharSet] componentsJoinedByString:@""];
    return [string isEqualToString:filteredString];
}
```

Git

Why Version Control?

- ▶ Create a history of your changes
- ▶ Rollback to a point that works
- ▶ Work on new features without damaging main project
- ▶ Have a backup, if using a remote server
- ▶ Collaborate with others by sharing same code
- ▶ For potential employers to evaluate

But we'll worry about that stuff later. For now...

▶ **It's where you turn in homework**

Common Git Terms

Repository - where files & history are stored

Local/Remote - location of a repo

Fork - creating your separate copy of a repo

Clone - creating a local copy of a repo

Commit - saving and documenting changes

Push - moves all changes to the remote repo

+++