

Let's make an interface.

Apple supports two ways of building user interfaces:

- **Programmatic layout**
- **Interface Builder**

**In Interface Builder you build
interfaces with a tool called a
Storyboard**

Why use a storyboard?

Form follows function

Interface Builder lets you build visual things in a visual way.

Why use a storyboard?

Objective-C and Swift are compiled languages.

Why use a storyboard?

That means, if you want to change the size of a button by 1 point, you will need to re-build your entire app to see what that looks like.

Making a button

```
let buttonFrame = CGRect(x: 0, y: 0, width: 50, height: 50)
let button = UIButton(frame: buttonFrame)
button.backgroundColor = UIColor.blackColor()
view.addSubview(button)
```


This isn't true for front-end web development.

**Let's build a small app
interface.**

In this lesson, I'm going to cover:

- **Interface Builder**
- **Storyboards**
- **Segues**
- **IBOutlets**
- **IBActions**

Let's look at Xcode.

Key Takeaways: What is a Storyboard?

- Interface Builder is a tool in Xcode that lets you build screens in a visual way.**
- Each sequence of screens is represented by a Storyboard**

Key Takeaways: Segues

- To move from one screen to another, use a segue.
- To make a segue, control-drag between a button and a new View Controller

Key Takeaways: IBOutlet

- IBOutlet lets you connect Storyboard views to files of code.
- To make an IBOutlet, control-drag from a view to a file.

Key Takeaways: IBActions

- IBActions also let you connect Storyboard views to files of code.
- They let us program things to happen when the user interacts with a Storyboard view.
- To make an IBAction, control-drag from a view to a file.

Important Troubleshooting Notes:

For IBOutlets and IBActions to work, you need to set the IB View Controller to have the name of the file you are dragging the outlet or action to.

You can delete actions and outlets after you make them.

Key Takeaways: XML

- Storyboards aren't not code -- they just let Apple write interface code for you.
- Apple writes storyboards in a language called xml.
- Keep this in mind but this will be more relevant to you later.

Tips

- Don't rush - play around
- Use the menu on the upper right to show different parts of Xcode
- Google everything

Let's do a lab:

<http://bit.ly/1LRwVfS>