IBActions and More UI Components

IBAction

- Is a property of an object that references another object
- That reference is archived through **Interface Builder**
- Connects **storyboard**/ **xib** elements to **event handlers** in code
- **IMPORTANT**: When deleting, you **MUST** remove the code from the **.swift** file *as well as* the reference in the **.storyboard** / **.xib** file

UIButton

- A control that executes custom code in response to user interactions
- Is configurable
- Can display images
- Can display strings
- Can display attributed strings

UISwitch

- A control that offers a binary choice, such as On/Off
- When the user manipulates the switch control (“flips” it) a `valueChanged` event is generated
- Check value programmatically with:

```
var isOn: Bool { get set }
```

- Set value programmatically with:

```
func setOn(_ on: Bool,
  animated: Bool)
```

UIImageView

- An object that displays a single image or a sequence of animated images

- Is configurable

- Has an optional `UIImage` property

```
var image: UIImage? { get set }
```

UIImage

- An object that manages image data
- Can be created from `Data`
- Can be created from `Assets`
- Can be drawn

Assets.xcassets

- A catalog to organize and manage the different asset types and image resolutions used by the app's user interface

- Common types of assets include:

    - image
    - data
    - audio

- Allows objects in the app to access the stored assets by name

    - Example:

```
let image = UIImage(named: "file_name_of_image")
```

App Bundle

- A directory with a standardized hierarchical structure that holds

    1. **Compiled executable code**
    2. **The resources used by that code**

- Any non-Swift files that you include in your app (`images, text files, json files, sprites, etc.`) will be packaged together into the app's main bundle

- Has Different bundle extensions (.app, .framework)