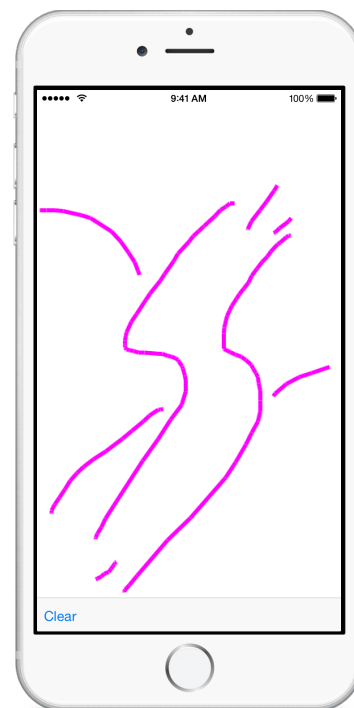# FingerPainter
Lesson 6

Description

Enable a button that clears the image from the screen.

Learning Outcomes

- Practice establishing an action connection from a view to a controller method.
- Replicate implementing button behaviors to add additional features to an app.

Vocabulary

controller action	@IBAction	UIImageView
nil		

Materials

- **FingerPainter Lesson 6** Xcode project

Opening

How can we clear the image so we can start a new drawing?

Agenda

- Using Interface Builder, select the default Item button in the toolbar, open the Attributes Inspector (⌥⌘4), and change the button title to **Clear**.

- Using the Assistant Editor (⌥⌘↩), Control-drag from the button to the `ViewController` class to create a controller action called `clearImage:`.

```
@IBAction func clearImage(sender: UIBarButtonItem) {
}
```

- Using the Xcode Documentation and API Reference (⇧⌘0), explore the `UIImageView` class reference, drawing attention to the `image` property.

- Implement the `clearImage:` method.

```
@IBAction func clearImage(sender: UIBarButtonItem) {
    canvas.image = nil
}
```

- Run the app (⌘R), create a drawing, tap the Clear button, and observe the image disappear.

Closing

How might you add buttons to change the color of the line? What about the thickness?

Modifications and Extensions

- Add the ability for the user to tweet or email the created image.
- Investigate algorithms for drawing smoother lines with the generated `CGPoint`s, and implement a FingerPainter app that renders less jagged lines.

Resources

Interface Builder Help: Configuring Object Attributes https://developer.apple.com/library/ios/recipes/xcode_help-IB_objects_media/Chapters/ObjectAttributes.html

Interface Builder Help: Creating an Action Connection https://developer.apple.com/library/ios/recipes/xcode_help-IB_connections/chapters/CreatingAction.html

Start Developing iOS Apps Today: Finding Information https://developer.apple.com/library/ios/referencelibrary/GettingStarted/RoadMapiOS/FindingInformation.html

UIKit User Interface Catalog: Image Views https://developer.apple.com/library/ios/documentation/UserExperience/Conceptual/UIKitUICatalog/UIImageView.html

UIImageView Class Reference https://developer.apple.com/library/ios/documentation/UIKit/Reference/UIImageView_Class/index.html