

# FingerPainter

## Lesson 6

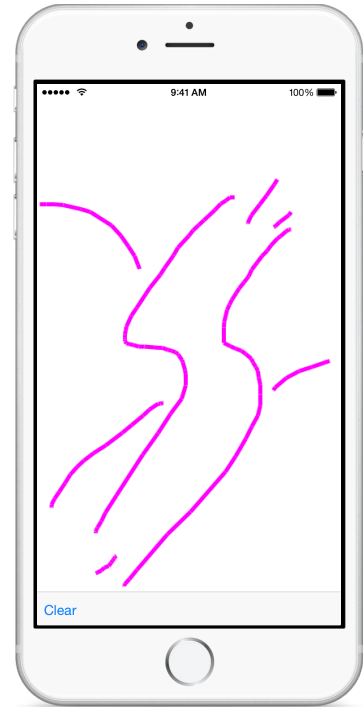


### Description

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 `CGPoints`, 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](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](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/UINavigationController.html>

UIImageView Class Reference [https://developer.apple.com/library/ios/documentation/UIKit/Reference/UIImageView\\_Class/index.html](https://developer.apple.com/library/ios/documentation/UIKit/Reference/UIImageView_Class/index.html)