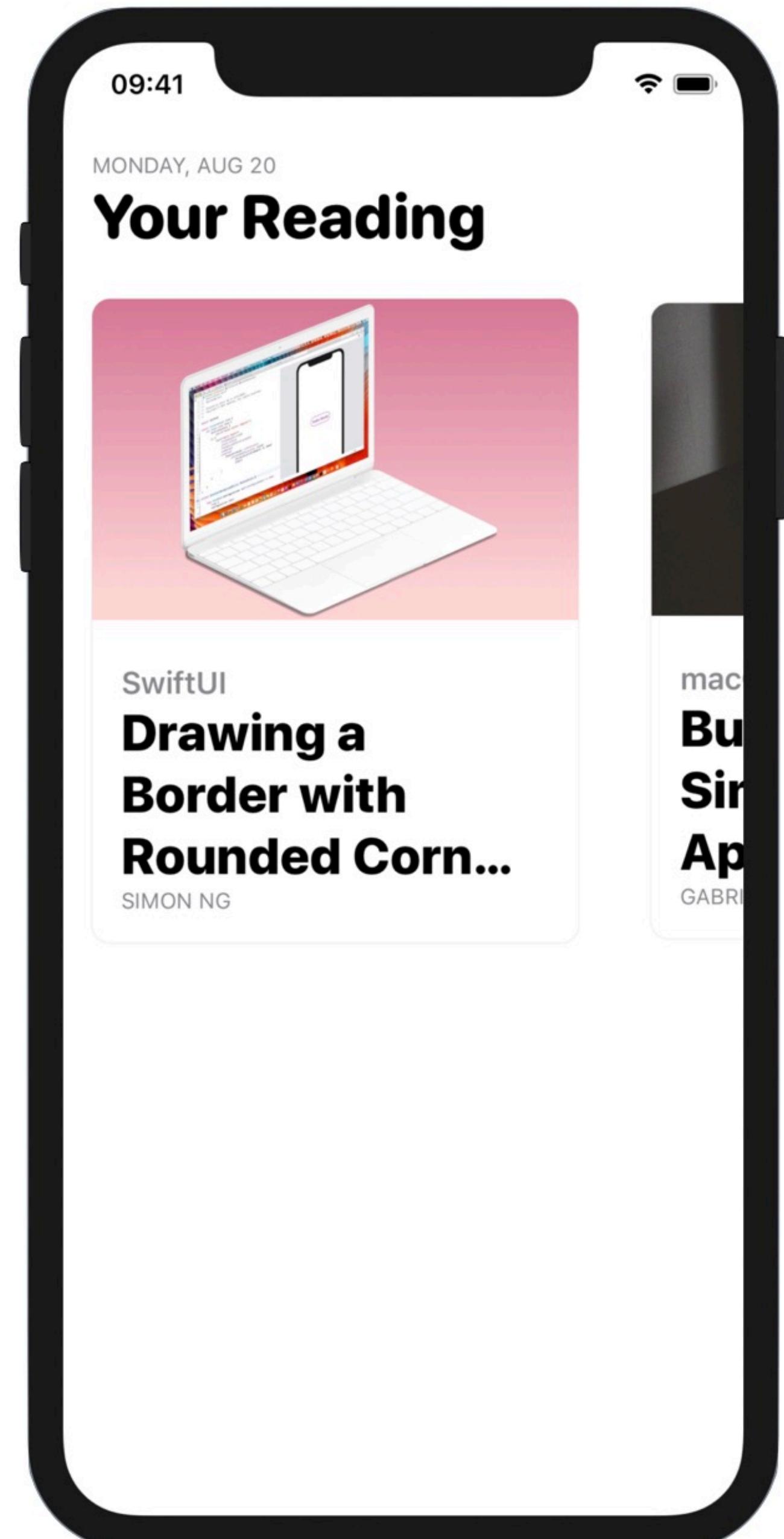
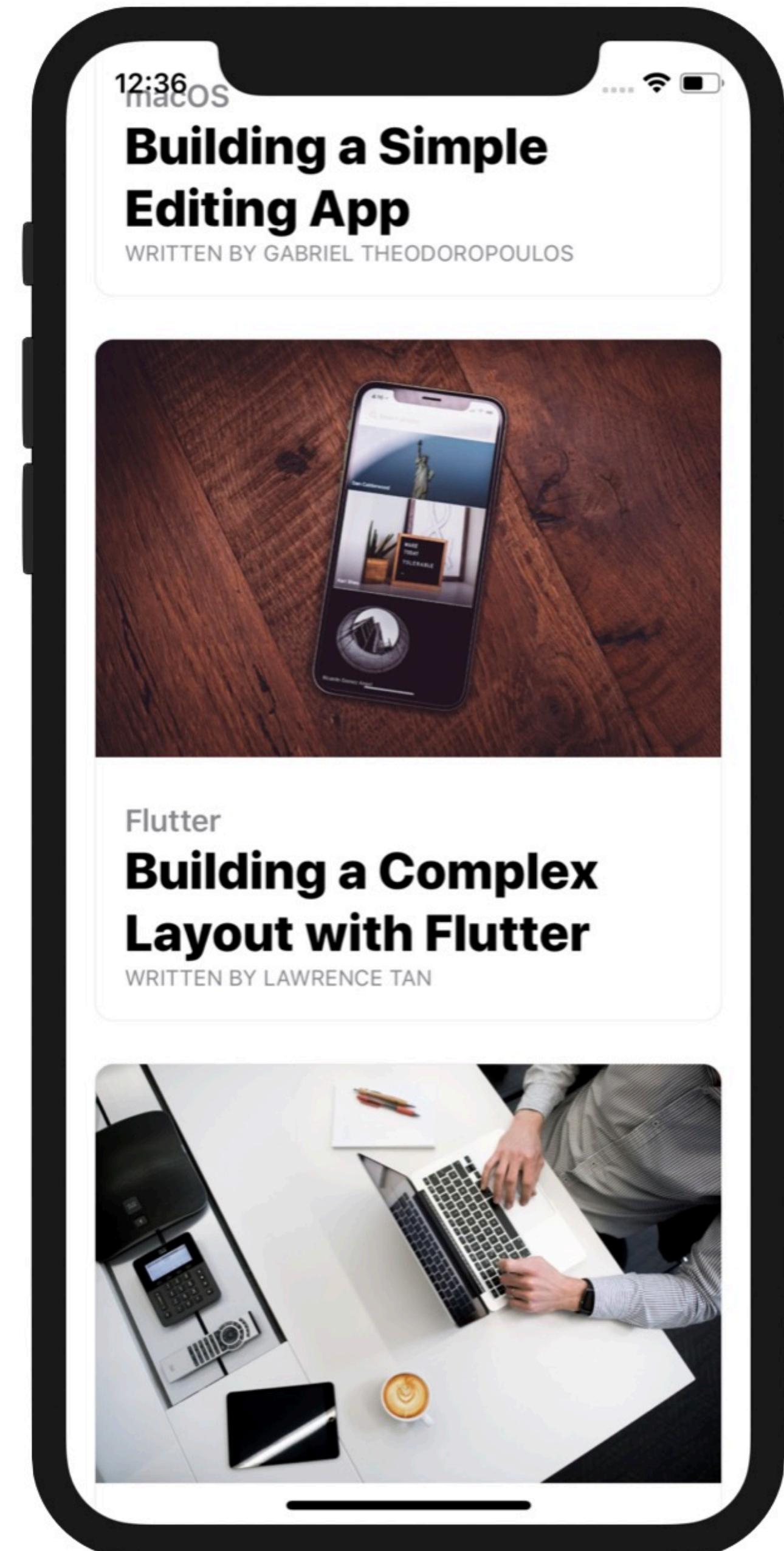
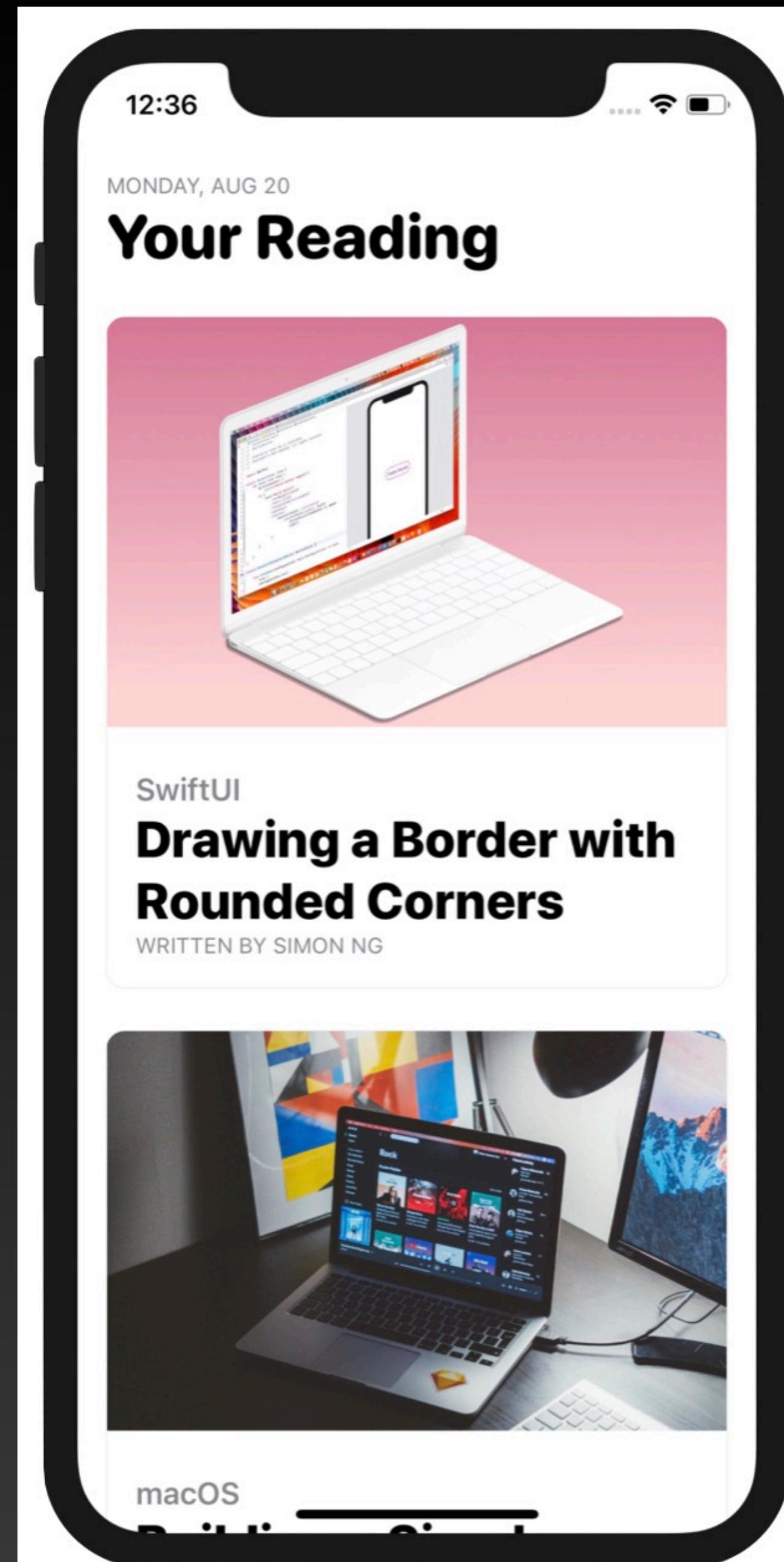


# SwiftUI – ScrollView

- book
- <https://www.books.com.tw/products/0010877446>
- code
- <https://www.appcoda.com.tw/resources/swiftui>



# Create a Card-like UI

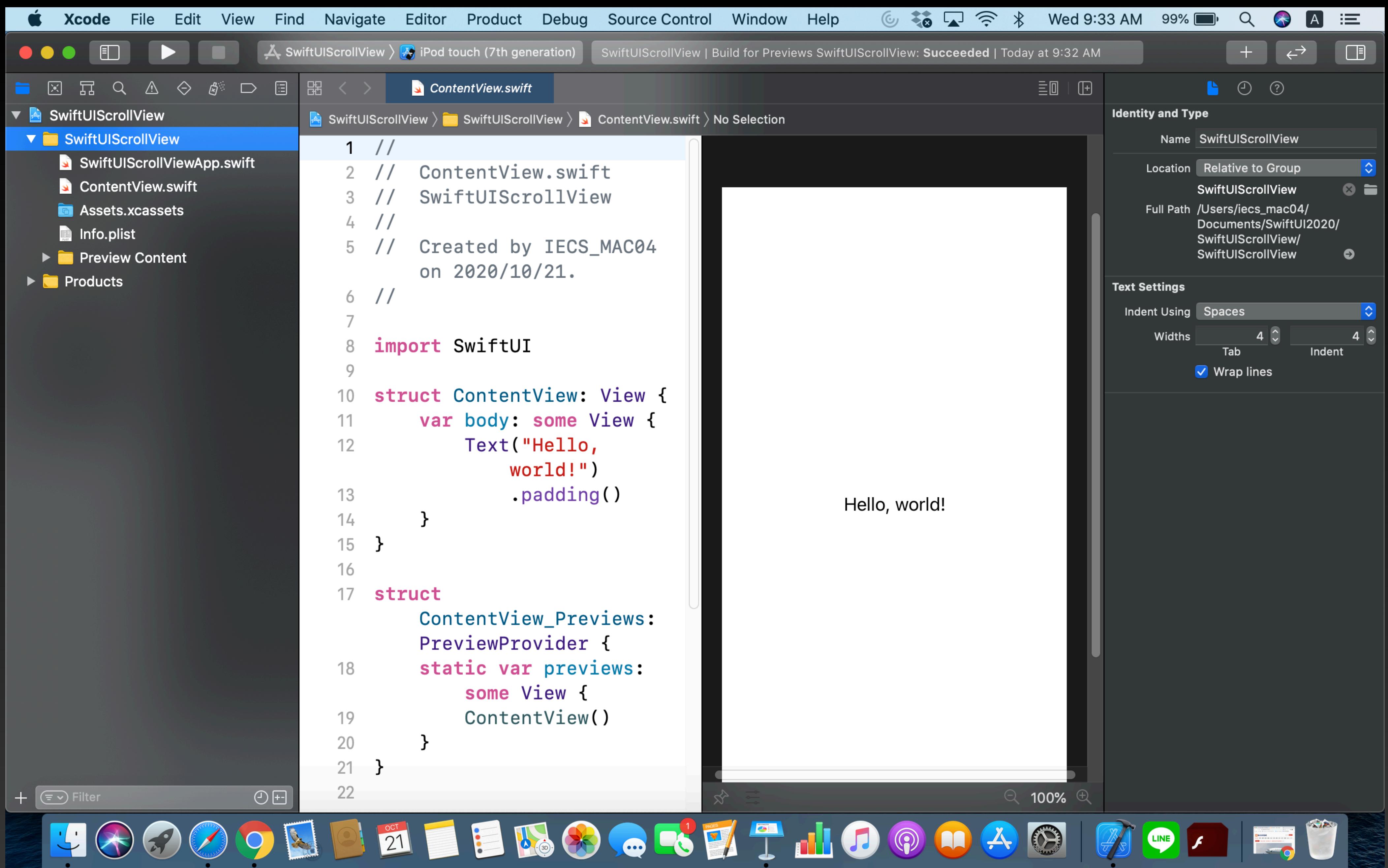


SwiftUI

## Drawing a Border with Rounded Corners

WRITTEN BY SIMON NG

Card View



# Create a new project: SwiftUI ScrollView

The screenshot shows the Xcode interface with the following details:

- Project Navigator:** On the left, the project "SwiftUIScrollView" is selected. Inside it, the "SwiftUIScrollView" group contains the following files:
  - ContentView.swift
  - SwiftUIScrollViewApp.swift
  - Assets.xcassets
  - Info.plist
- File Inspector:** The tab bar at the top shows "ContentView.swift" is selected.
- Context Menu:** A context menu is open over the "ContentView.swift" file in the "SwiftUIScrollView" group. The menu items include:
  - Show in Finder
  - Open in Tab
  - Open in New Window
  - Open with External Editor
  - Open As >
  - Show File Inspector
  - New File...** (highlighted with a blue selection bar)
  - Add Files to "SwiftUIScrollView"...
  - Delete
  - New Group
  - New Group without Folder
  - New Group from Selection
  - Sort by Name
  - Sort by Type
  - Find in Selected Groups...
  - Source Control >
  - Project Navigator Help
- Code Editor:** The main area displays the Swift code for "ContentView.swift".

```
import SwiftUI

struct ContentView: View {
    var body: some View {
        Text("Hello, world!")
            .padding()
    }
}

struct ContentView_Previews: PreviewProvider {
    static var previews: some View {
        ContentView()
    }
}
```

Create a new file

1. choose the SwiftUI View template
2. name the file: CardView

Choose a template for your new file:

iOS macOS watchOS tvOS Filter

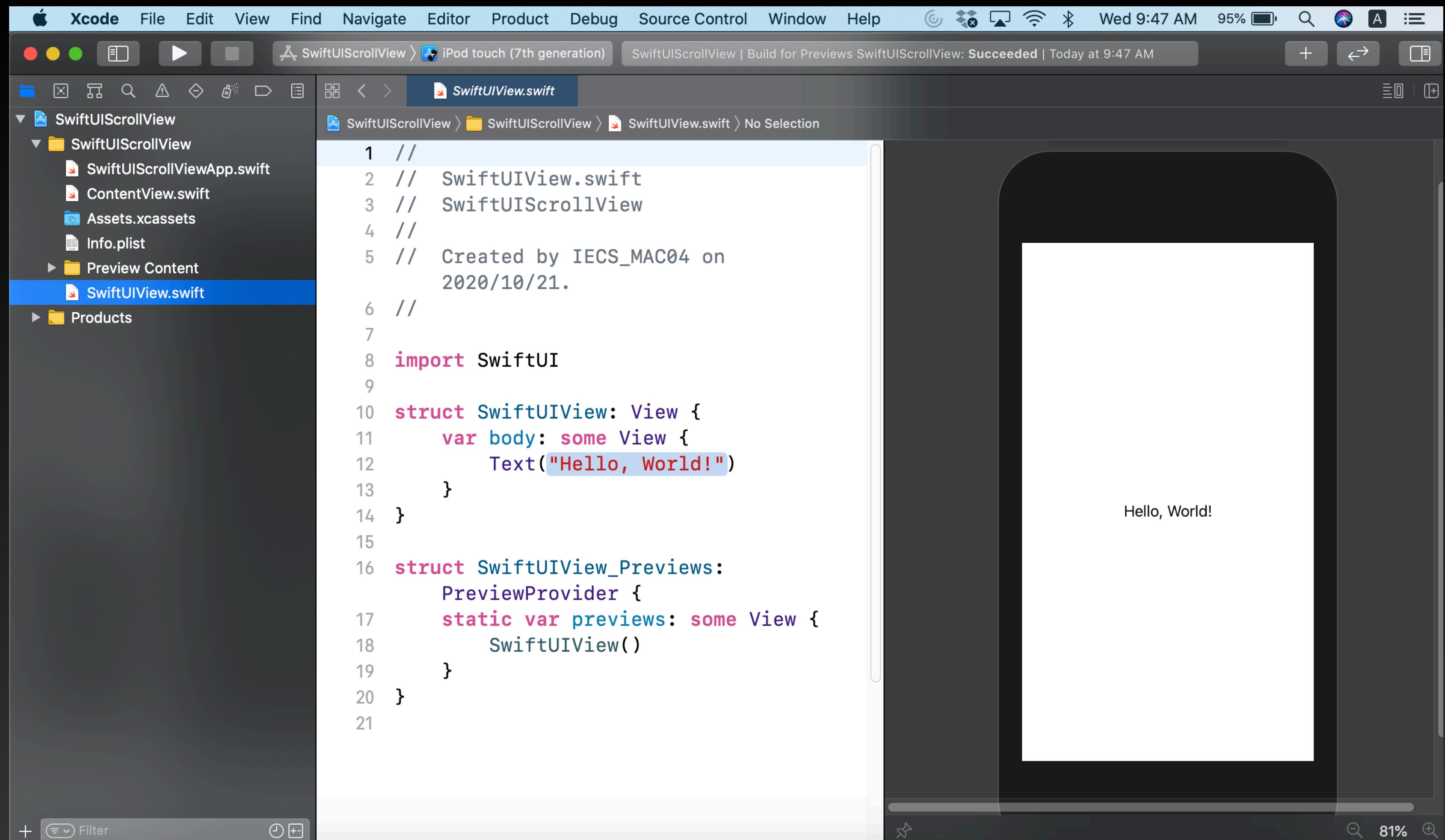
Source

Swift File	Cocoa Touch Class	UI Test Case Class	Unit Test Case Class	Objective-C File
Header File	IIG File	C File	C++ File	Metal File

User Interface

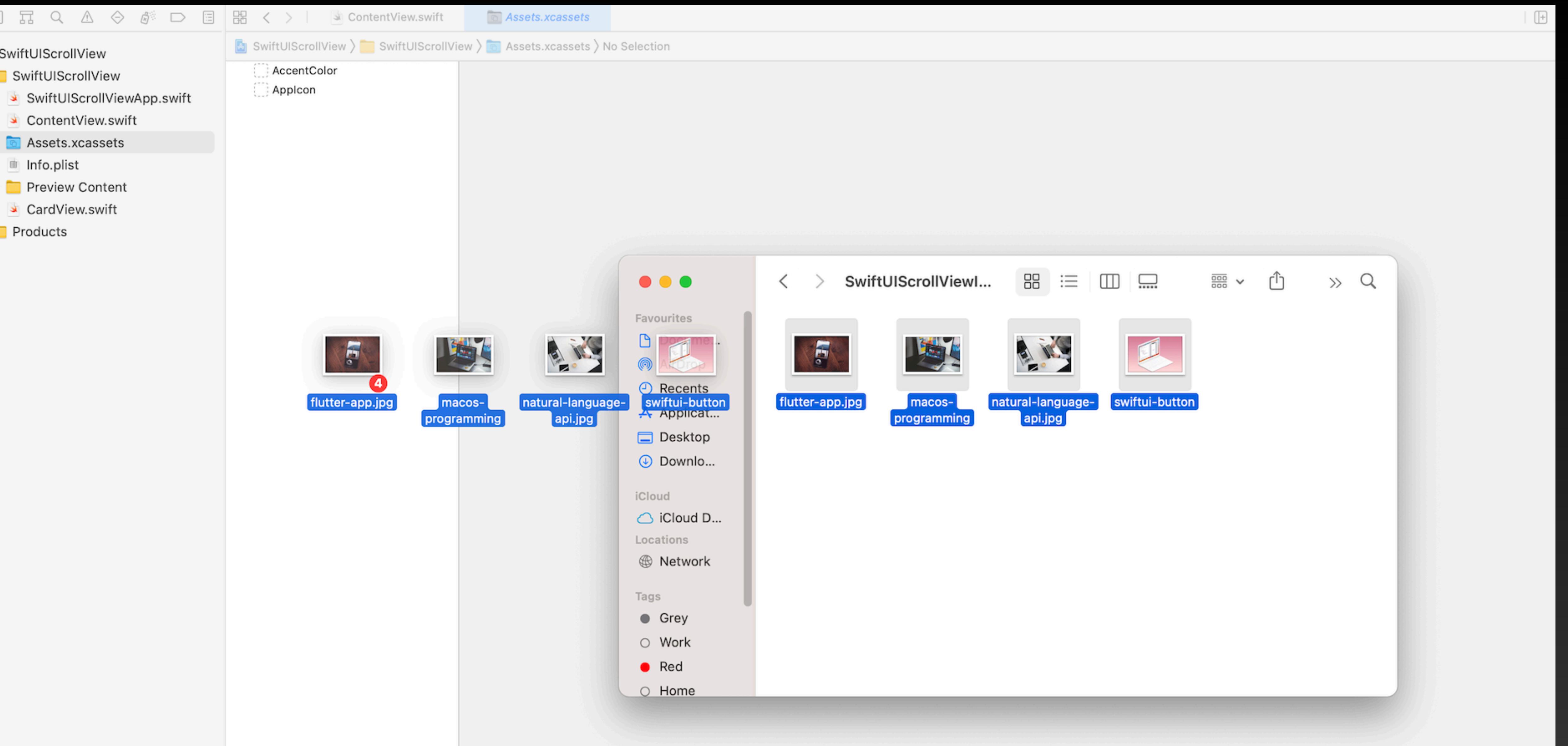
SwiftUI View	Storyboard	View	Empty	Launch Screen
--------------	------------	------	-------	---------------

Cancel Previous Next



Just like ContentView.swift, you can preview CardView.swift in the canvas

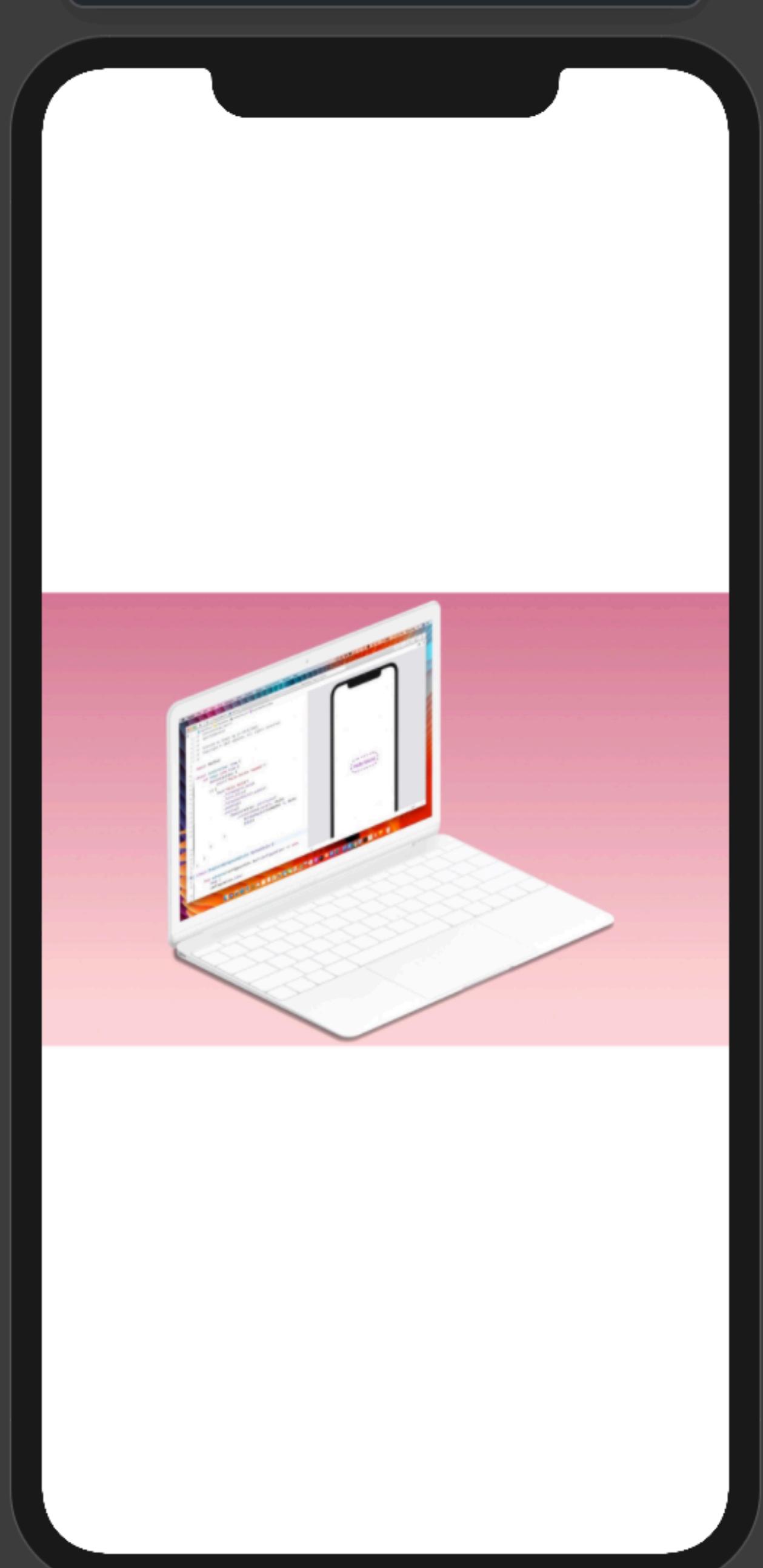
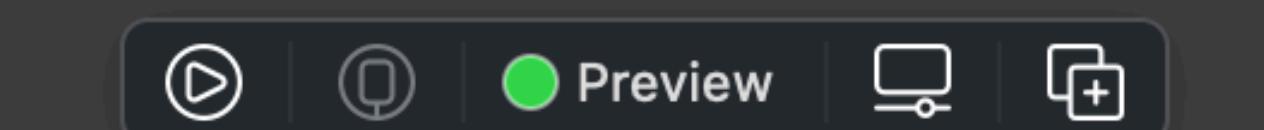




<https://www.appcoda.com/resources/swiftui/SwiftUIScrollViewImages.zip>

```
struct CardView: View {  
    var body: some View {  
        Image("swiftui-button")  
            .resizable()  
            .aspectRatio(contentMode: .fit)  
    }  
}
```

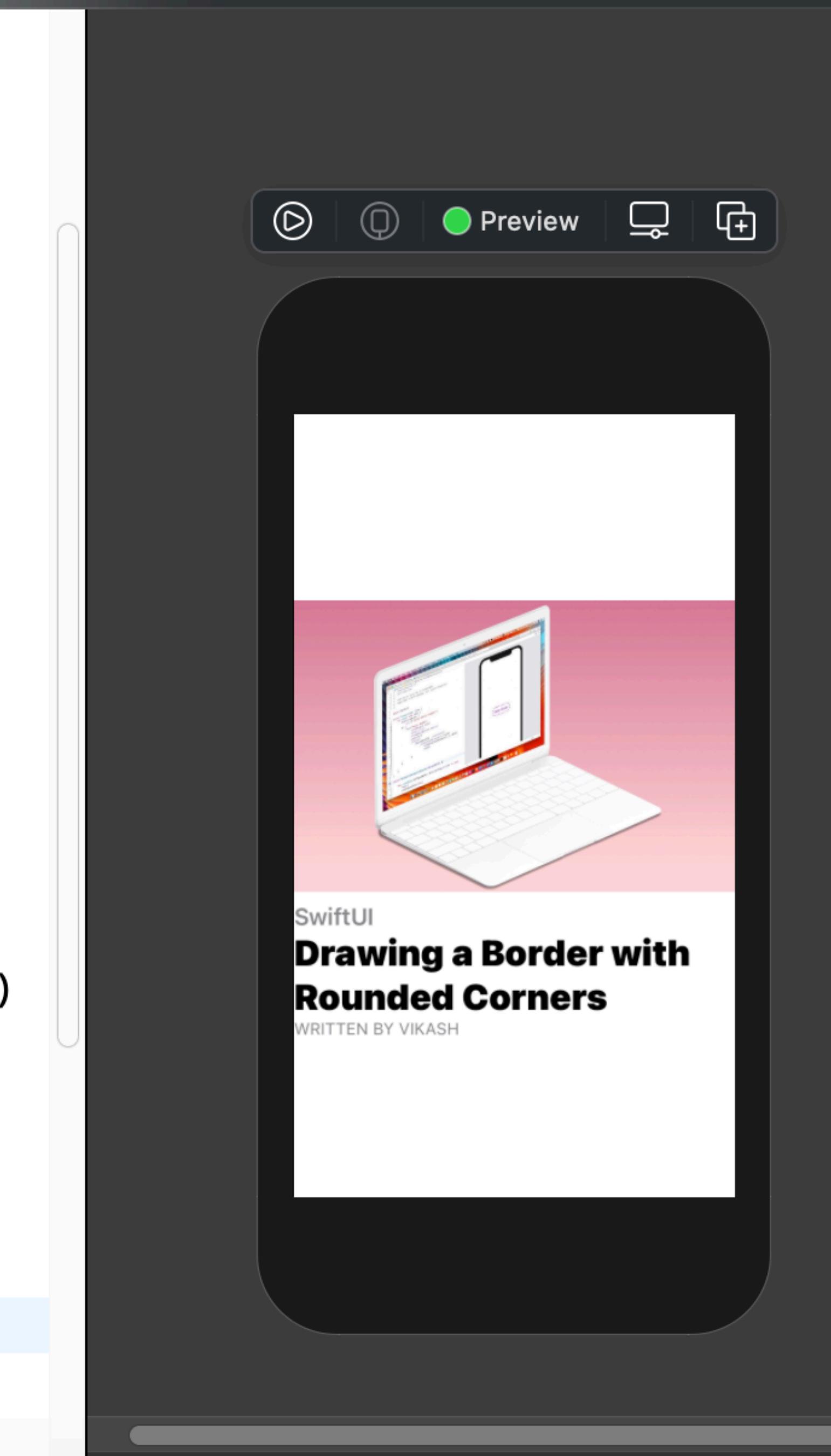
implement Card View



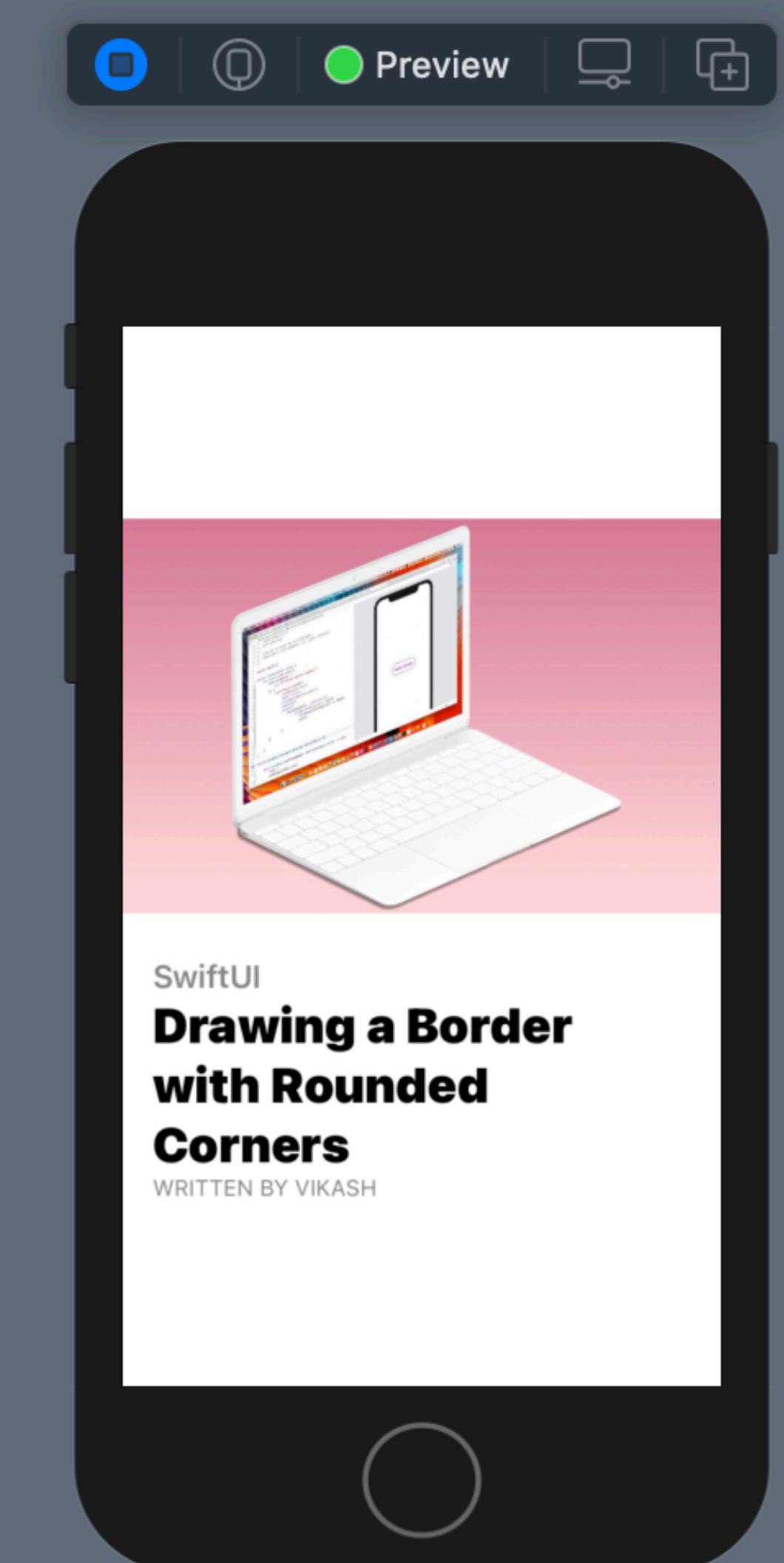
```
 VStack(alignment: .leading) {  
     Image("swiftui-button")  
         .resizable()  
         .aspectRatio(contentMode: .fit)  
     Text("SwiftUI")  
         .font(.headline)  
         .foregroundColor(.secondary)  
     Text("Drawing a Border with Rounded Corners")  
         .font(.title)  
         .fontWeight(.black)  
         .foregroundColor(.primary)  
         .lineLimit(3)  
     Text("Written by Vikash".uppercased())  
         .font(.caption)  
         .foregroundColor(.secondary)  
 }
```

Embed the image and text views in a VStack

```
9  
10 struct CardView: View {  
11     var body: some View {  
12         VStack(alignment: .leading) {  
13             Image("swiftui-button")  
14                 .resizable()  
15                 .aspectRatio(contentMode:  
16                     .fit)  
17             Text("SwiftUI")  
18                 .font(.headline)  
19                 .foregroundColor(.secondary)  
20             Text("Drawing a Border with Rounded  
21                 Corners")  
22                 .font(.title)  
23                 .fontWeight(.black)  
24                 .foregroundColor(.primary)  
25                 .lineLimit(3)  
26             Text("Written by Vikash".uppercased())  
27                 .font(.caption)  
28                 .foregroundColor(.secondary)  
29         }  
30     }  
31 }  
32 struct CardView_Previews: PreviewProvider {
```



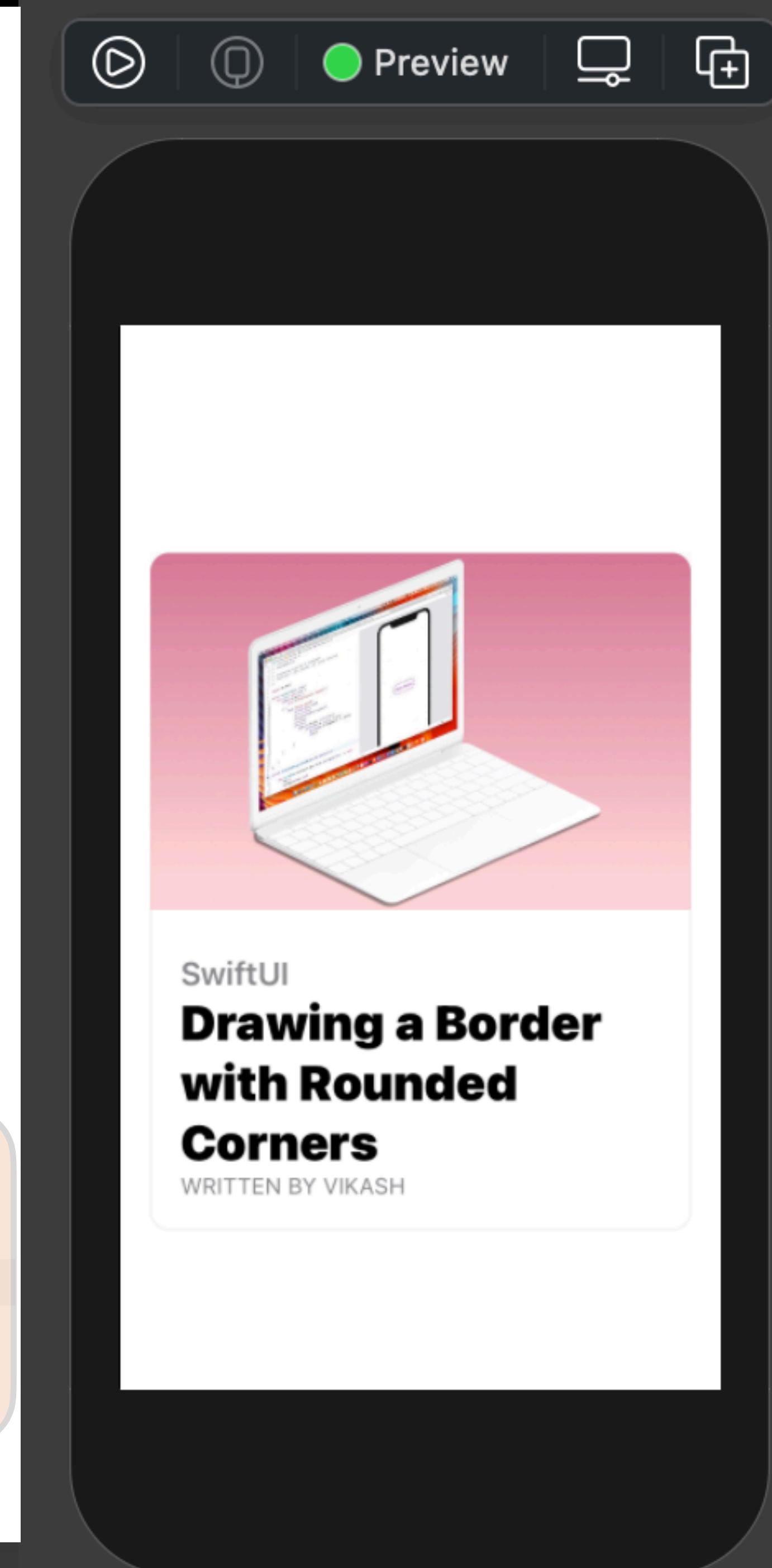
```
struct CardView: View {  
    var body: some View {  
        VStack(alignment: .leading) {  
            Image("swiftui-button")  
                .resizable()  
                .aspectRatio(contentMode: .fit)  
            HStack {  
                VStack(alignment: .leading) {  
                    Text("SwiftUI")  
                        .font(.headline)  
                        .foregroundColor(.secondary)  
                    Text("Drawing a Border with Rounded Corners")  
                        .font(.title)  
                        .fontWeight(.black)  
                        .foregroundColor(.primary)  
                        .lineLimit(3)  
                    Text("Written by Vikash".uppercased())  
                        .font(.caption)  
                        .foregroundColor(.secondary)  
                }  
                Spacer()  
            }  
            .padding()  
        }  
    }  
}
```



Using more HStack, VStack to control

# Adding a border and rounded corners

```
struct CardView: View {
    var body: some View {
        VStack {
            Image("swiftui-button")
                .resizable()
                .aspectRatio(contentMode: .fit)
            HStack {
                VStack(alignment: .leading) {
                    Text("SwiftUI")
                        .font(.headline)
                        .foregroundColor(.secondary)
                    Text("Drawing a Border with Rounded Corners")
                        .font(.title)
                        .fontWeight(.black)
                        .foregroundColor(.primary)
                        .lineLimit(3)
                    Text("Written by Simon Ng".uppercased())
                        .font(.caption)
                        .foregroundColor(.secondary)
                }
                Spacer()
            }
            .padding()
        }
        .cornerRadius(10)
        .overlay(
            RoundedRectangle(cornerRadius: 10)
                .stroke(Color(.sRGB, red: 150/255, green: 150/255,
blue: 150/255, opacity: 0.1), lineWidth: 1)
        )
        .padding([.top, .horizontal])
    }
}
```



# Make the Card View more Flexible

in **CardView**

```
var image: String  
var category: String  
var heading: String  
var author: String
```

```
 VStack {  
     Image(image)  
         .resizable()  
         .aspectRatio(contentMode: .fit)  
     HStack {  
         VStack(alignment: .leading) {  
             Text(category)  
                 .font(.headline)  
                 .foregroundColor(.secondary)  
             Text(heading)  
                 .font(.title)  
                 .fontWeight(.black)  
                 .foregroundColor(.primary)  
                 .lineLimit(3)  
             Text("Written by \\" + author + "\\").uppercased()  
                 .font(.caption)  
                 .foregroundColor(.secondary)  
         }  
         Spacer()  
     }  
     .padding()  
 }
```

```
53  
54 struct CardView_Previews: PreviewProvider {  
55     static var previews: some View {  
56         CardView()  
57     }  
58 }  
59
```

Missing argument for parameter 'image' in call

## Missing parameters when calling the CardView

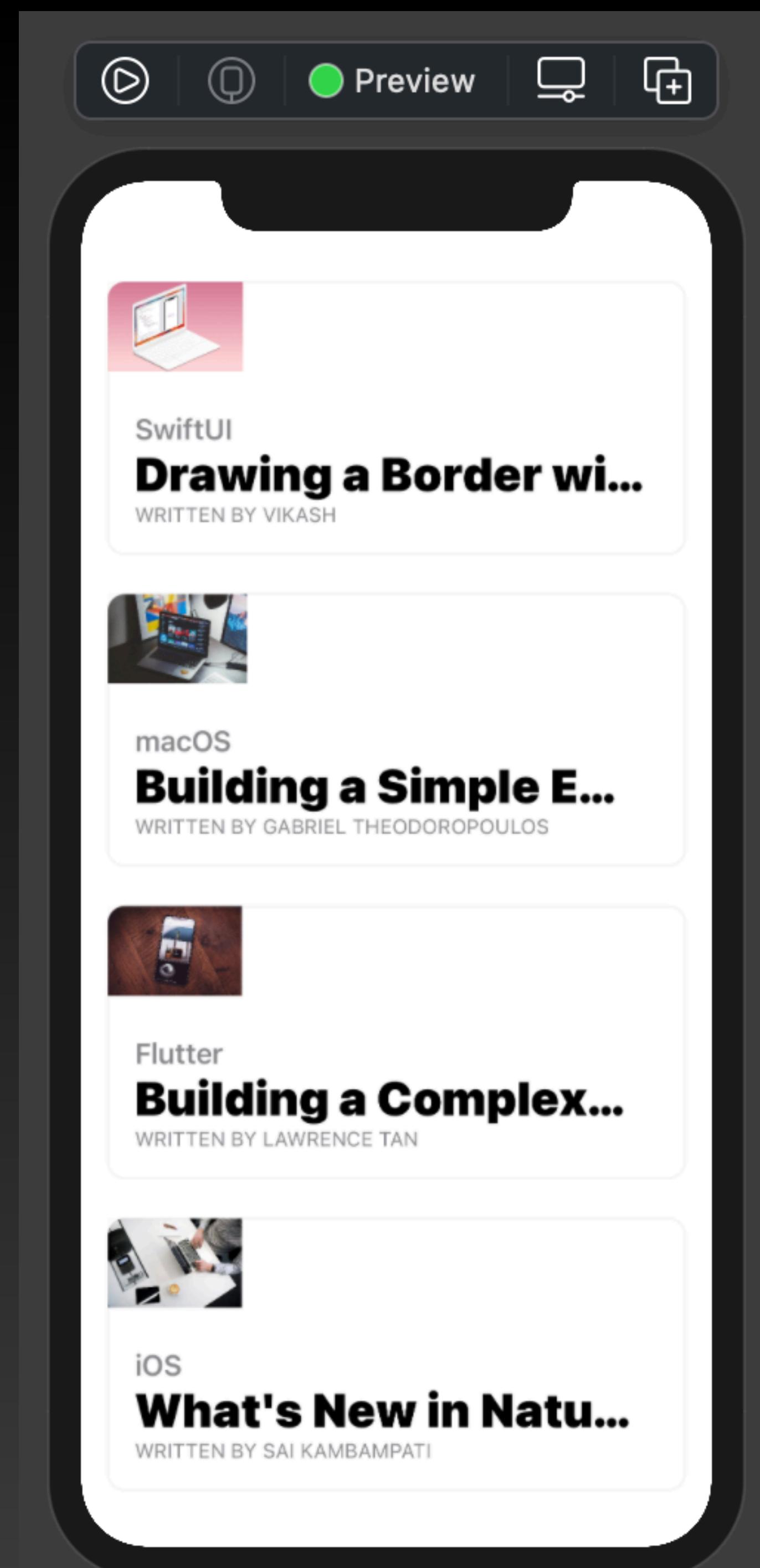
```
struct CardView_Previews: PreviewProvider {  
    static var previews: some View {  
        CardView(image: "swiftui-button",  
                 category: "SwiftUI",  
                 heading: "Drawing a Border with Rounded Corners",  
                 author: "Vikash")  
    }  
}
```

Replace

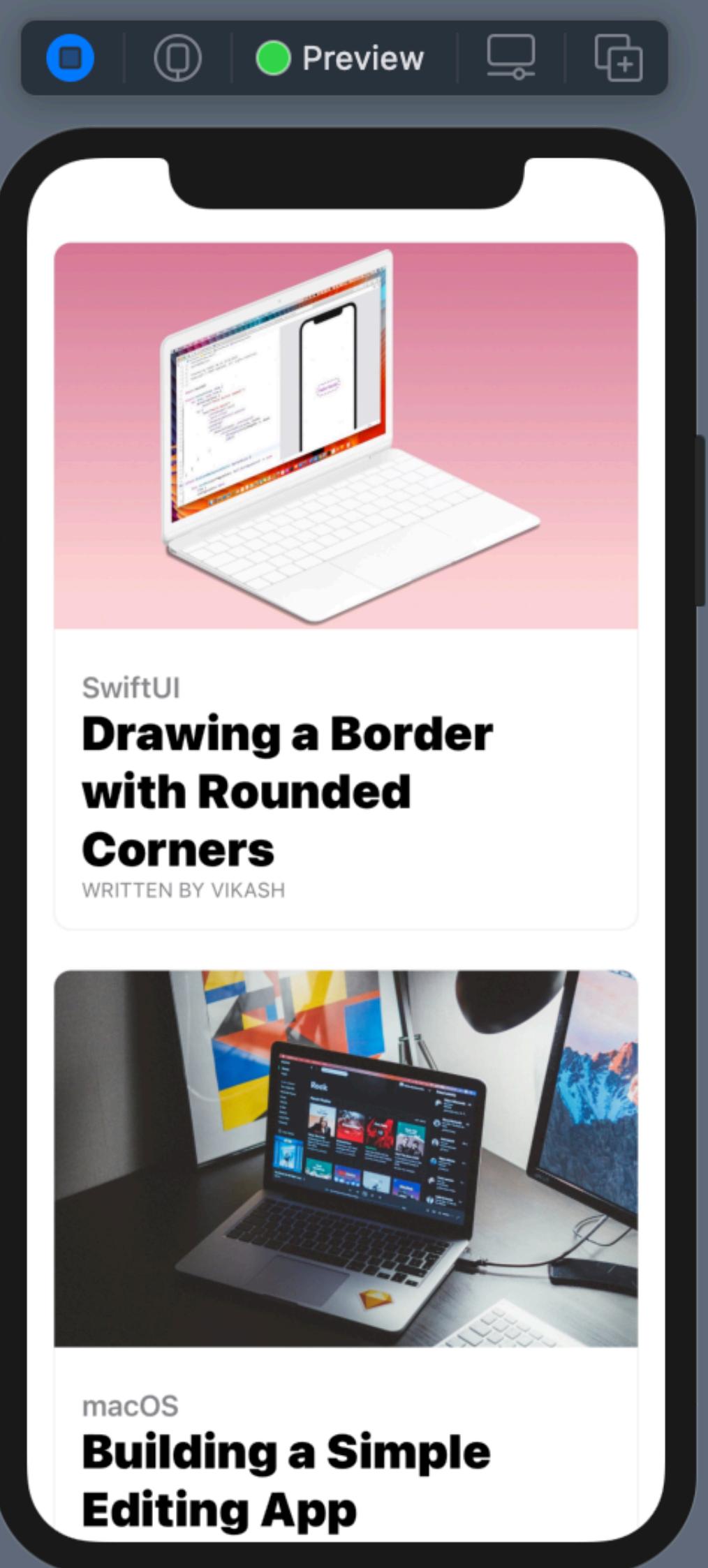
# Introducing ScrollView

```
struct ContentView: View {  
    var body: some View {  
        VStack {  
            CardView(image: "swiftui-button", category: "SwiftUI", heading: "Drawing a Border with Rounded Corners", author: "Vikash")  
            CardView(image: "macos-programming", category: "macOS", heading: "Building a Simple Editing App", author: "Gabriel Theodoropoulos")  
            CardView(image: "flutter-app", category: "Flutter", heading: "Building a Complex Layout with Flutter", author: "Lawrence Tan")  
            CardView(image: "natural-language-api", category: "iOS", heading: "What's New in Natural Language API", author: "Sai Kambampati")  
        }  
    }  
}
```

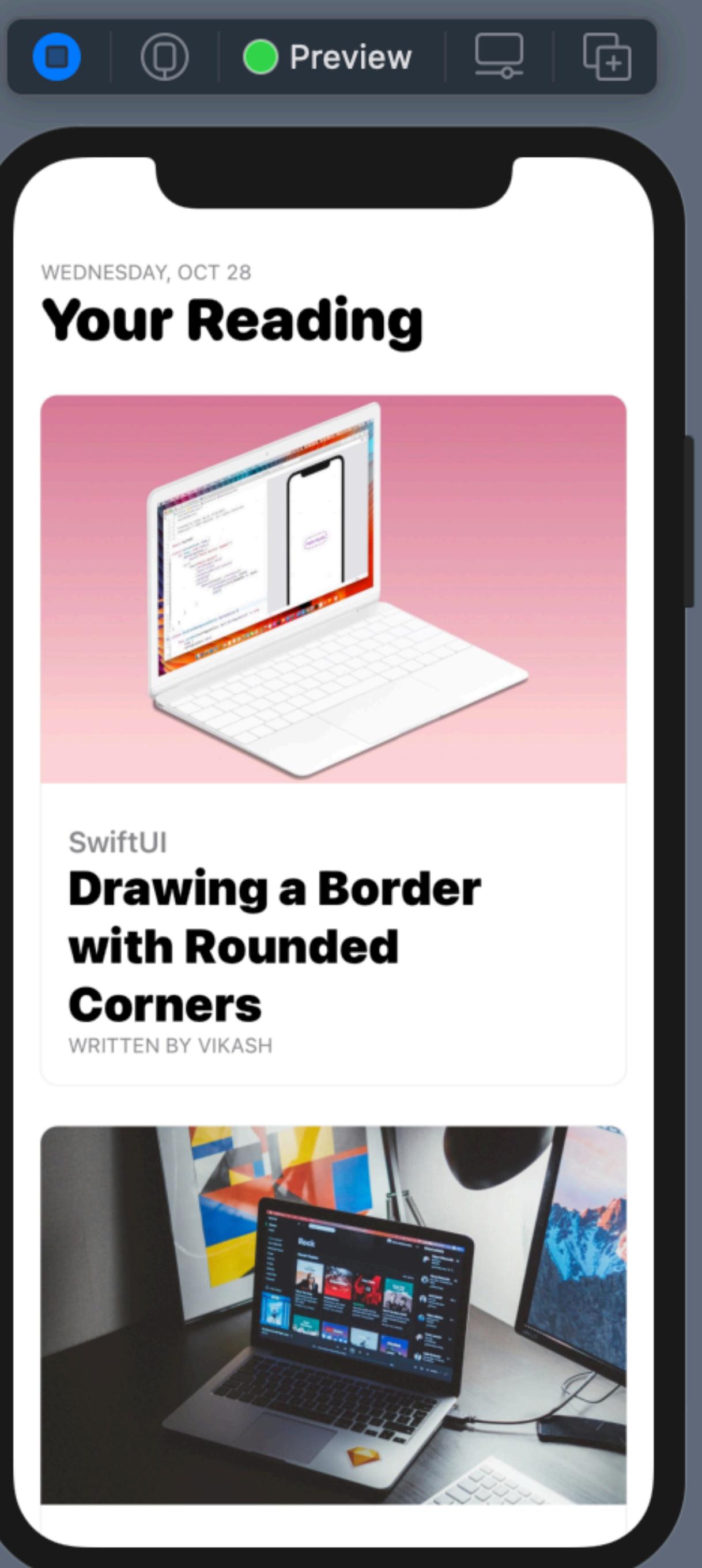
Embedding the card views in a VStack



```
8 import SwiftUI
9
10 struct ContentView: View {
11     var body: some View {
12         ScrollView {  
13             VStack {  
14                 CardView(image: "swiftui-button", category: "SwiftUI",  
15                     heading: "Drawing a Border with Rounded Corners", author:  
16                     "Vikash")  
17                 CardView(image: "macos-programming", category: "macOS",  
18                     heading: "Building a Simple Editing App", author: "Gabriel  
19                     Theodoropoulos")  
20                 CardView(image: "flutter-app", category: "Flutter", heading:  
21                     "Building a Complex Layout with Flutter", author:  
22                     "Lawrence Tan")  
23                 CardView(image: "natural-language-api", category: "iOS",  
24                     heading: "What's New in Natural Language API", author:  
25                     "Sai Kambampati")  
26             }  
27         }  
28     }  
29 }
30
31 struct ContentView_Previews: PreviewProvider {
```

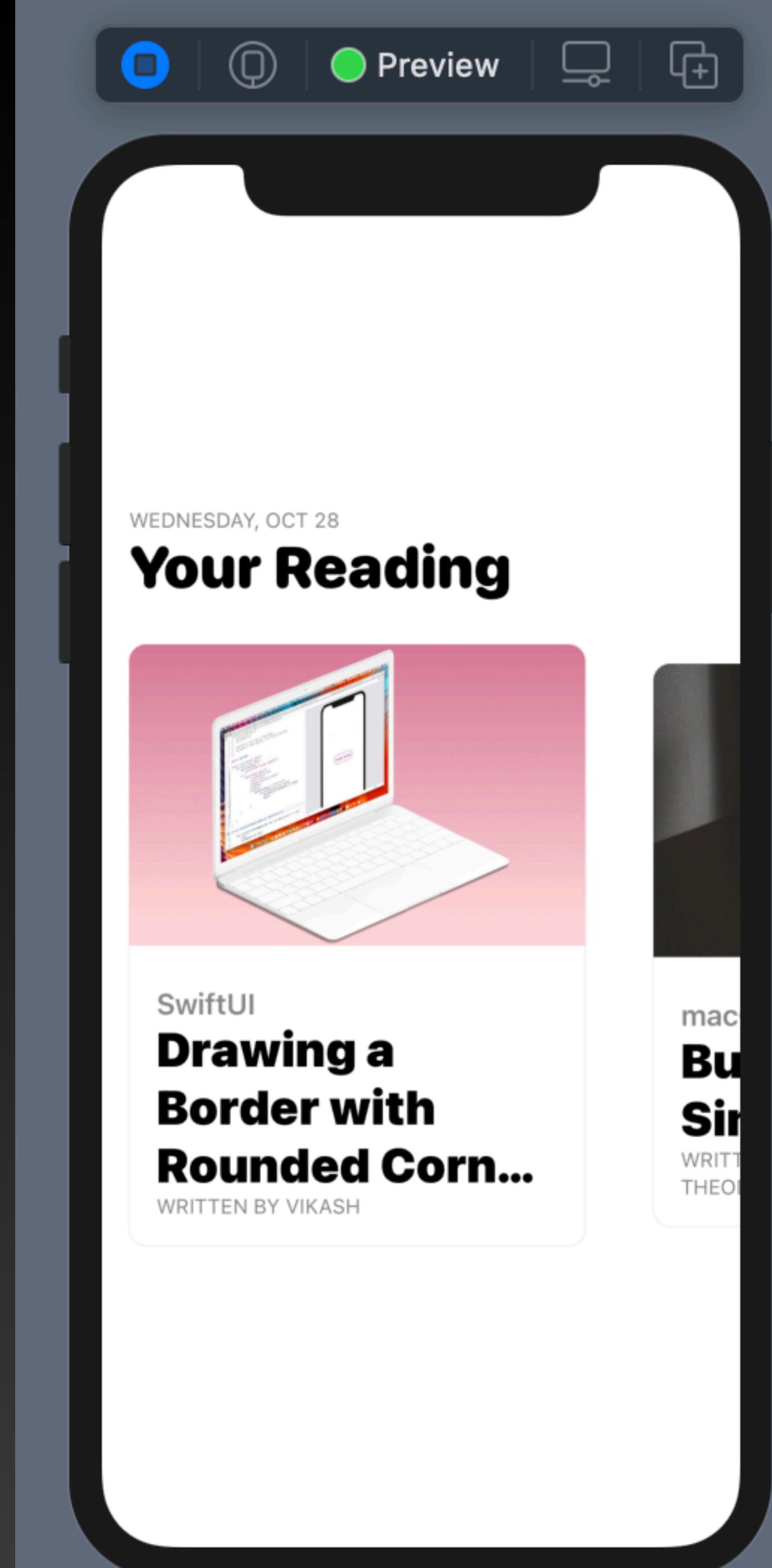


**Exercise:**  
Add a header to the existing scroll view



# Creating a Carousel UI with ScrollView

```
struct ContentView: View {
    var body: some View {
        ScrollView(.horizontal) {
            // Your code for exercise #1
            HStack {
                CardView(image: "swiftui-button", category: "SwiftUI",
heading: "Drawing a Border with Rounded Corners", author: "Vikash")
                    .frame(width: 300)
                CardView(image: "macos-programming", category: "macOS",
heading: "Building a Simple Editing App", author: "Gabriel Theodoropoulos")
                    .frame(width: 300)
                CardView(image: "flutter-app", category: "Flutter", heading:
"Building a Complex Layout with Flutter", author: "Lawrence Tan")
                    .frame(width: 300)
                CardView(image: "natural-language-api", category: "iOS",
heading: "What's New in Natural Language API", author: "Sai Kambampati")
                    .frame(width: 300)
            }
        }
    }
}
```



# Hiding the Scroll Indicator

```
ScrollView(.horizontal, showsIndicators: false)
```

## Grouping View Content

```
Group {  
    CardView(image: "swiftui-button", category:  
    "SwiftUI", heading: "Drawing a Border with Rounded  
    Corners", author: "Vikash")  
  
    CardView(image: "macos-programming", category:  
    "macOS", heading: "Building a Simple Editing App",  
    author: "Gabriel Theodoropoulos")  
  
    CardView(image: "flutter-app", category:  
    "Flutter", heading: "Building a Complex Layout with  
    Flutter", author: "Lawrence Tan")  
  
    CardView(image: "natural-language-api",  
    category: "iOS", heading: "What's New in Natural  
    Language API", author: "Sai Kambampati")  
}.frame(width:300)
```