APP EVOLUTION

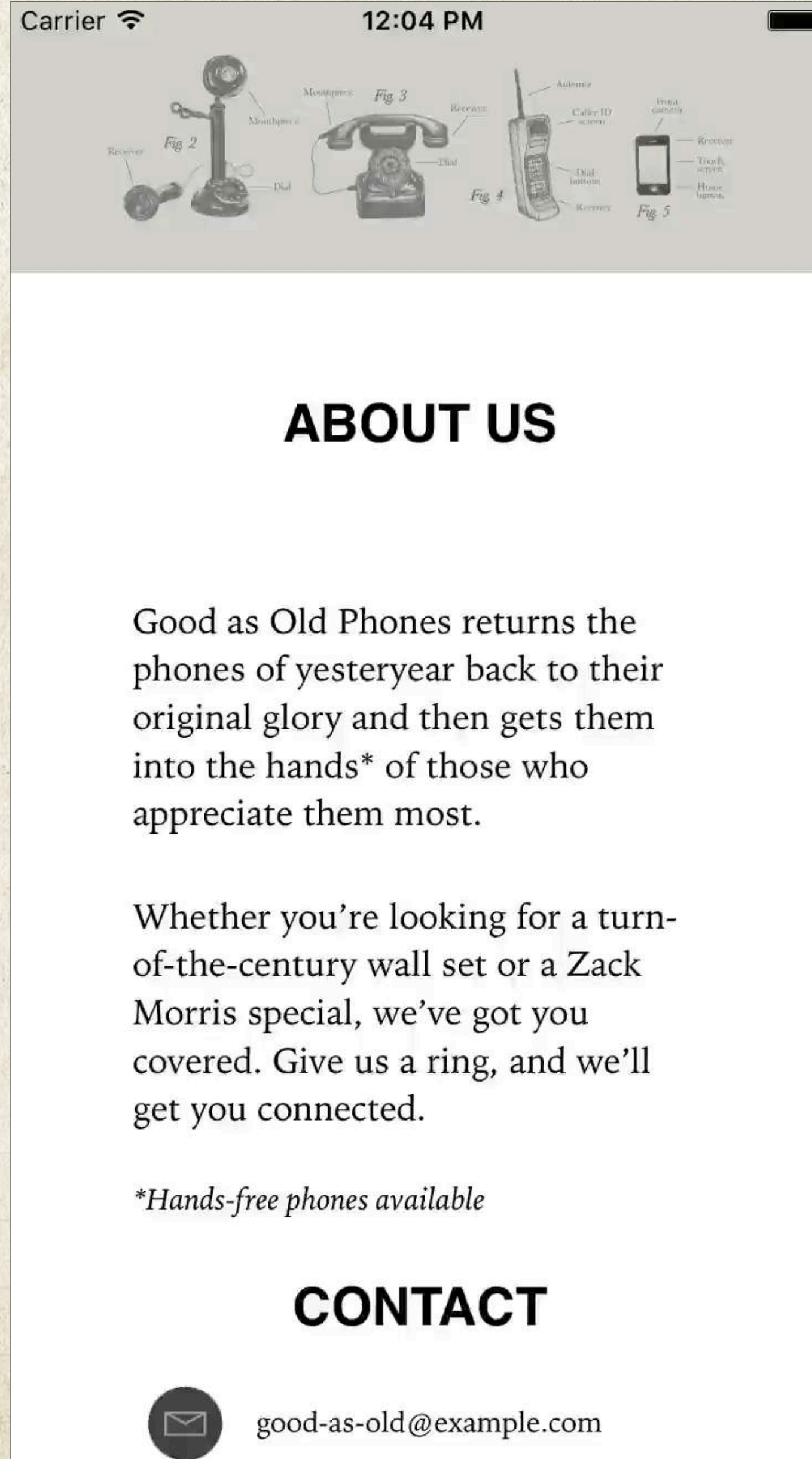## with *Swift*

Level 3
Scroll Views

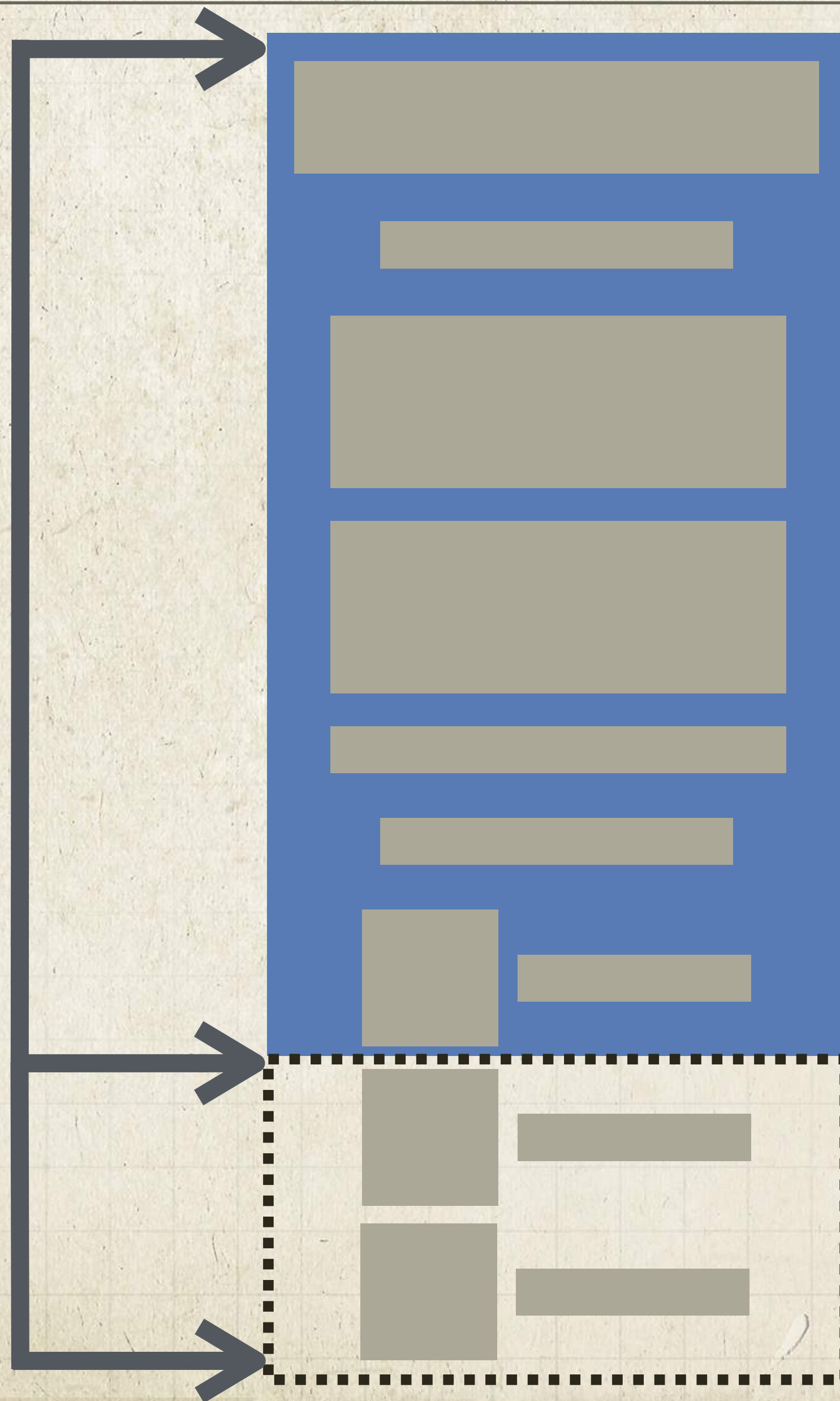# Demo: Content Scrolling on the Screen

How a Scroll View Works

The available space
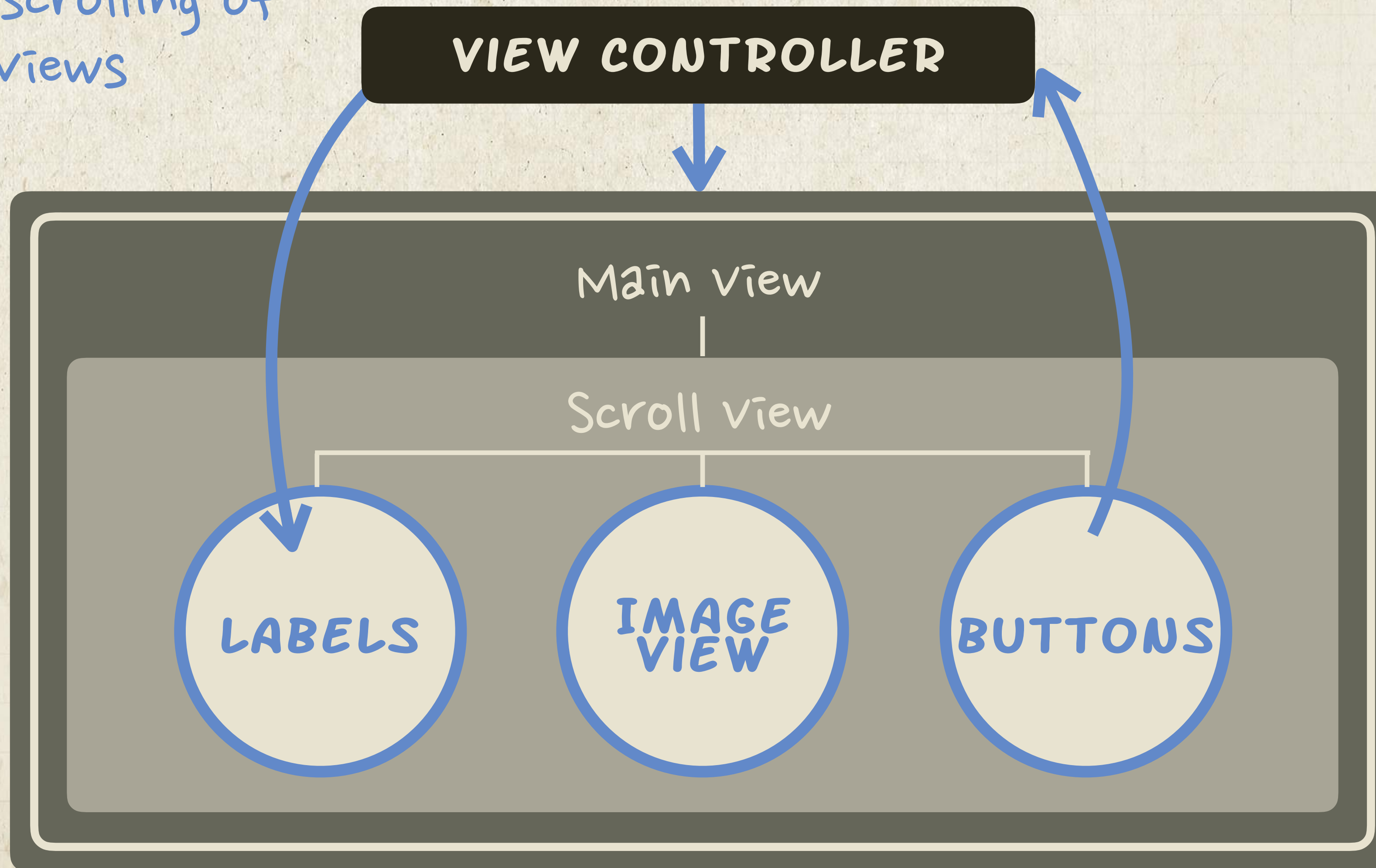on the iPhone screen

Sometimes your
content needs more
space than that

APP
EVOLUTION
with Swift

Scroll Views Contain Any Subviews That Can Be Scrolled

A **UIScrollView** object manages the scrolling of all of its subviews

VIEW CONTROLLER

Main View

Scroll View

LABELS

IMAGE VIEW

BUTTONS

Screencast: Creating a Scroll View in the Storyboard

Problem: Scroll View Isn't Connected

The scroll view in our storyboard scene isn't a subview of the main view, so we need to manually set that in code.

CONTACT VIEW CONTROLLER

Main View

Scroll View

LABELS

IMAGE VIEWS

The scroll view isn't connected to anything right now!

Connecting the Scroll View to the Main View

ContactViewController.swift

```swift
class ContactViewController: UIViewController {

    @IBOutlet weak var scrollView: UIScrollView!

    override func viewDidLoad() {
        super.viewDidLoad()

        view.addSubview(scrollView)
    }

}
```

This makes the scroll view part of the main view

CONTACT VIEW CONTROLLER

Main View

Scroll View

LABELS

IMAGE VIEWS

Problem: The Scroll View Isn't Scrolling

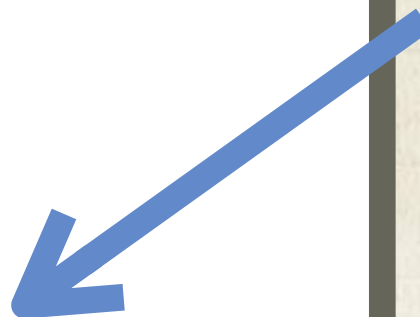Need to tell the scroll view the height and width of the extra content it contains

Adding a Function That Runs After viewDidLoad

ContactViewController.swift

```swift
class ContactViewController: UIViewController {

    @IBOutlet weak var scrollView: UIScrollView!

    override func viewDidLoad() {
        super.viewDidLoad()

        view.addSubview(scrollView)
    }


    override func viewWillLayoutSubviews() {
        super.viewWillLayoutSubviews()
    }
}
```

Any time you're changing the size of a subview, do it in this function

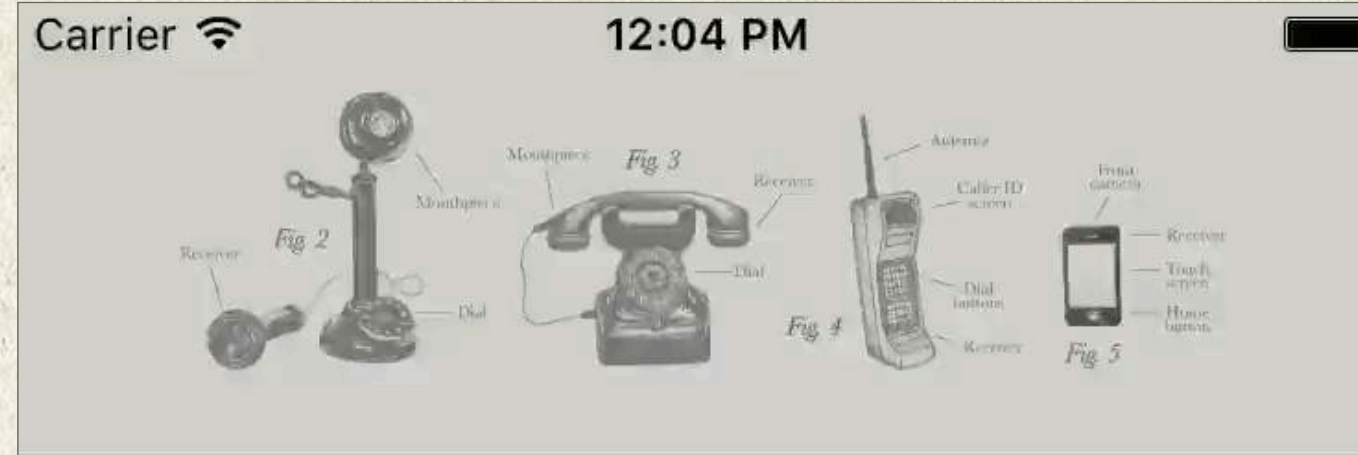# Setting the Scroll View's Content Size

ContactViewController.swift

```swift
class ContactViewController: UIViewController {

    @IBOutlet weak var scrollView: UIScrollView!

    override func viewDidLoad() {
        super.viewDidLoad()

        view.addSubview(scrollView)
    }


    override func viewWillLayoutSubviews() {
        super.viewWillLayoutSubviews()

        scrollView.contentSize = CGSizeMake(375, 800)
    }
}
```

This number should be big enough to hold all of the content

Demo: The Working Scroll View