

Chapter 4

Symbols

Initializing a Storyboard Segue

```
init(identifier: String?, source: UIViewController, destination: UIViewController)
```

Initializes and returns a storyboard segue object for use in performing a segue.

Accessing the Segue Attributes

```
var source: UIViewController  
The source view controller for the segue.
```

```
var destination: UIViewController  
The destination view controller for the segue.
```

```
var identifier: String?  
The identifier for the segue object.
```

Performing the Segue

```
func perform()  
Performs the visual transition for the segue.
```

Creating a Custom Segue

```
init(identifier: String?, source: UIViewController, destination: UIViewController, performHandler: @escaping () -> Void)
```

Creates a segue that calls a block to perform the segue transition.

prepareForSegue

```
if (segue.identifier == "showDetail") {  
    if let indexPath = self.tableView.indexPathForSelectedRow {  
        let bandsDetailViewController:BandsDetailViewController =  
            segue.destination as! BandsDetailViewController  
    }  
}
```

prepareForSegue

```
if (segue.identifier == "showDetail") {  
    if let indexPath = self.tableViewIndexPathForSelectedRow {  
        let bandsDetailViewController:BandsDetailViewController =  
            segue.destination as! BandsDetailViewController  
    }  
}
```

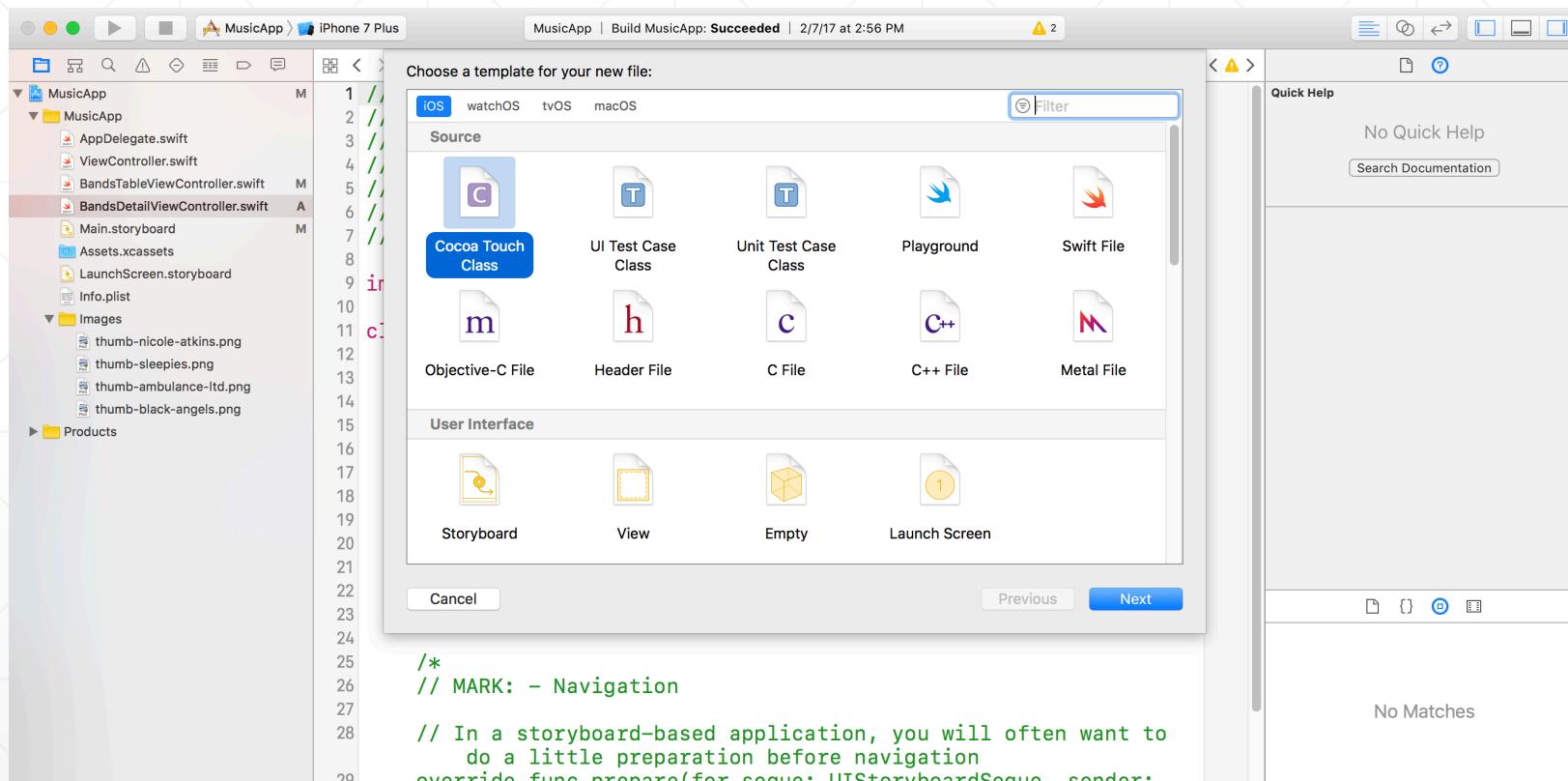


prepareForSegue

```
if (segue.identifier == "showDetail") {  
    if let indexPath = self.tableView.indexPathForSelectedRow {  
        let bandsDetailViewController:BandsDetailViewController =  
            segue.destination as! BandsDetailViewController  
    }  
}
```



Band Detail Object



Choose options for your new file:

Class: BandDetail

Subclass of: NSObject

Also create XIB file

Language: Swift

Cancel

Previous

Next

```
class BandDetail: NSObject {  
  
    var bandName:String?  
    var bandType:String?  
    var bandDescription:String?  
    var fullImageName:String?  
    var thumbImageName:String?  
    var nextShowDate:String?  
    var nextShowTime:String?  
    var venue:String?  
    var showDetails:String?  
}
```

```
MusicApp < > MusicApp > BandsTableViewController.swift > viewDidLoad()
13     let bandTitles = ["Nicole Atkins", "Ambulance LTD",
14                       "Sleepies", "Black Angels"]
15     let bandSubTitles = ["Tue 5/1", "Fri 5/4", "Sat 5/5", "Sun
16                         5/6",]
17     let bandImageNames = ["thumb-nicole-atkins.png", "thumb-
18                           ambulance-ltd.png", "thumb-sleepies.png", "thumb-black-
19                           angels.png"]
20
21
22     let nicoleAtkinsBandDetail = BandDetail()
23     nicoleAtkinsBandDetail.bandName = "Nicole Atkins"
24     nicoleAtkinsBandDetail.bandType = "Rock"
25     nicoleAtkinsBandDetail.bandDescription = "Nicole will
26                 knock your socks off."
27     nicoleAtkinsBandDetail.fullImageName = "full-nicole-
28                 atkins.png"
29     nicoleAtkinsBandDetail.thumbImageName = "thumb-nicole-
30                 atkins.png"
31     nicoleAtkinsBandDetail.nextShowDate = "Tue 5/1"
32     nicoleAtkinsBandDetail.nextShowTime = "8pm"
33     nicoleAtkinsBandDetail.venue = "Bowery Ballroom"
34     nicoleAtkinsBandDetail.showDetails = "All ages - $35"
35
36     let ambulanceLtdDetails = BandDetail()
37     ambulanceLtdDetails.bandName = "Ambulance LTD"
38     ambulanceLtdDetails.bandType = "Indie Rock"
39     ambulanceLtdDetails.bandDescription = "It's been 2 years"
```

```
let bandImageNames = ["thumb-nicole-atkins.png", "thumb-ambulance-ltd.png",
"thumb-sleepies.png", "thumb-black-angels.png"]  
var bandDetails = [BandDetail]()
```

```
blackAngelsDetails.showDetails = "Over 21 - $15"  
bandDetails.append(nicoleAtkinsBandDetail)  
bandDetails.append(ambulanceLtdDetails)  
bandDetails.append(sleepiesDetails)  
bandDetails.append(blackAngelsDetails)  
}
```

BandsTableViewController Class

The following happens in the `viewDidLoad` method:

Using the `BandDetail` Class, we create 4 `bandDetails` Objects with all their info and put them into a `bandDetails` Array

The following happens in the `prepareForSegue` method:

Looks at which band is tapped, gets that index and matches it to the index in `bandDetails` array.

Sends one item from `bandDetails` array to the `BandsDetailViewController`

BandDetail Class

Defines properties for band details: name, show, time, etc.

4 bandDetail Objects

name, show, time, etc.

bandDetails Array

Holds the 4 Band Objects at specific, identifiable indexes

BandsDetailViewController Class

Gets the `bandDetails` that were passed and stores them into the `currentBandDetail` Object

Sets placeholder labels so the selected band's info is displayed on screen

currentBandDetail Object (BandDetail)

Stores the current band's info from `bandDetails`, so it can be accessed by the `BandsDetailViewController`

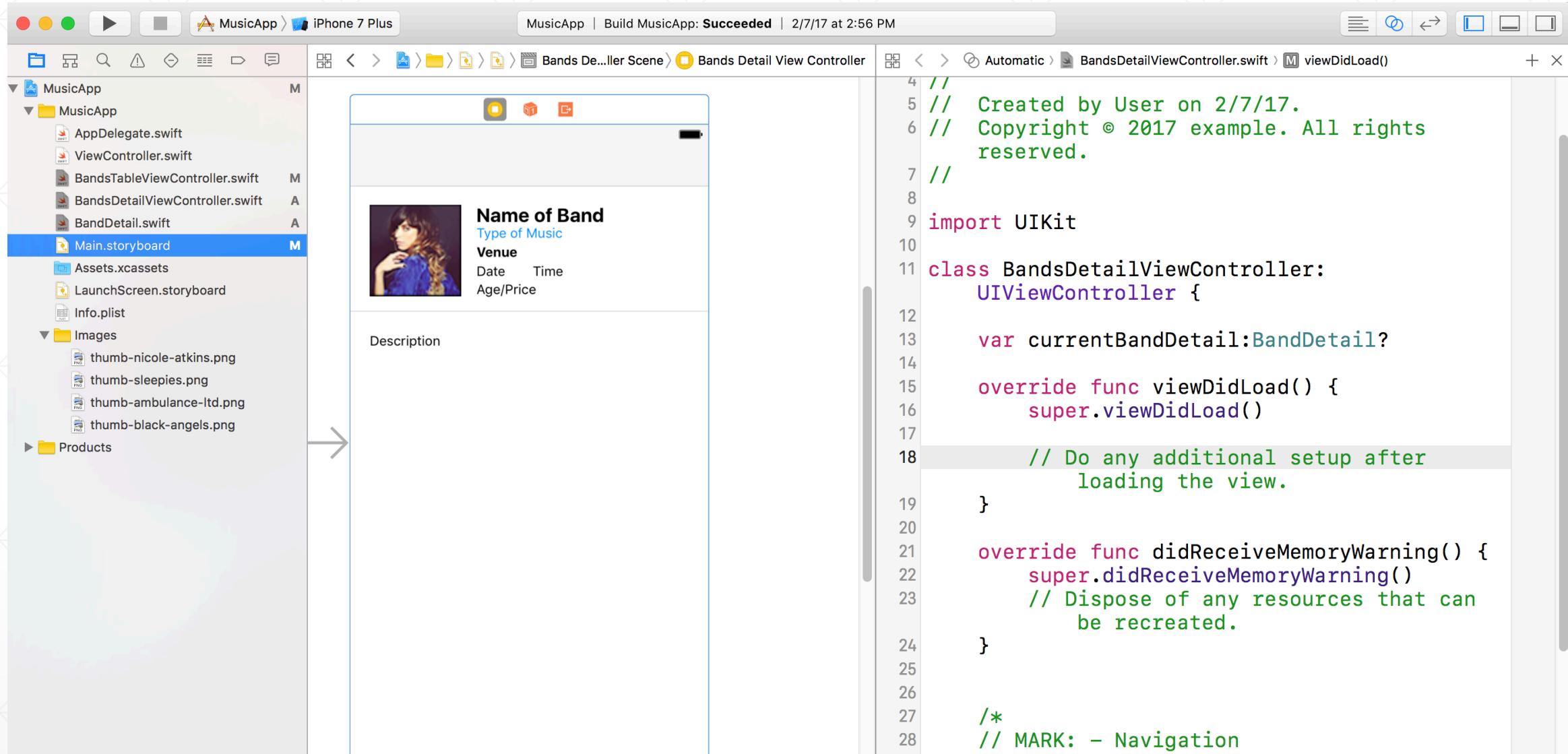
```
class BandsDetailViewController: UIViewController {
```

```
    var currentBandDetail: BandDetail?
```

```
    override func viewDidLoad() {
```



```
if (segue.identifier == "showDetail") {  
    if let indexPath = self.tableView.indexPathForSelectedRow {  
        let bandsDetailViewController:BandsDetailViewController =  
            segue.destination as! BandsDetailViewController  
bandsDetailViewController.currentBandDetail = bandDetails[indexPath.row]  
    }  
}
```



MusicApp > iPhone 7 Plus

MusicApp | Build MusicApp: Succeeded | 2/7/17 at 2:56 PM

Main.storyboard

MusicApp

MusicApp

AppDelegate.swift

ViewController.swift

BandsTableViewController.swift

BandsDetailViewController.swift

BandDetail.swift

Main.storyboard

Assets.xcassets

LaunchScreen.storyboard

Info.plist

Images

thumb-nicole-atkins.png

thumb-sleepies.png

thumb-ambulance-ltd.png

thumb-black-angels.png

Products

Name of Band

Type of Music

Venue

Date Time

Age/Price

Description

Connection: Outlet

Object: Bands Detail View C...

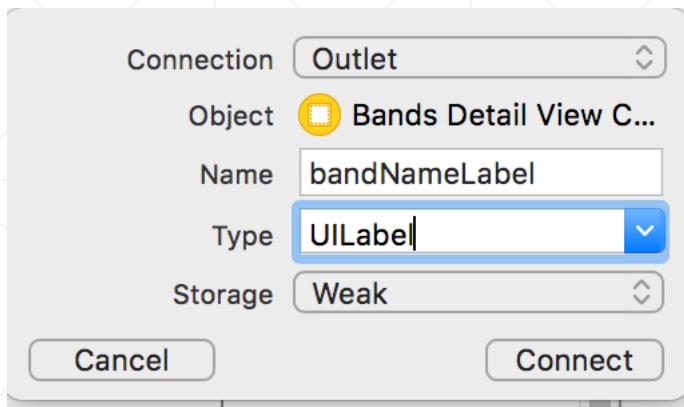
Name: [empty]

Type: UILabel

Storage: Strong

Cancel Connect

```
// Created by User on 2/7/17.  
// Copyright © 2017 example. All rights reserved.  
  
import UIKit  
  
class BandsDetailViewController: UIViewController {  
  
    var currentBandDetail: BandDetail?  
  
    override func viewDidLoad() {  
        super.viewDidLoad()  
  
        // Do any additional setup after loading the view.  
    }  
  
    override func didReceiveMemoryWarning() {  
        super.didReceiveMemoryWarning()  
        // Dispose of any resources that can be recreated.  
    }  
}
```



- Type of music: bandTypeLabel
 - Venue: venueLabel
 - Date: showDateLabel
 - Time: showTimeLabel
 - Age / price: showDetailsLabel
 - Description: bandDescriptionLabel
 - Band image: bandImage
-

```
var currentBandDetail:BandDetail?  
  
@IBOutlet weak var bandNameLabel: UILabel!  
  
@IBOutlet weak var bandTypeLabel: UILabel!  
  
@IBOutlet weak var venueLabel: UILabel!  
  
@IBOutlet weak var showDateLabel: UILabel!  
  
@IBOutlet weak var showTimeLabel: UILabel!  
  
@IBOutlet weak var showDetailsLabel: UILabel!  
  
@IBOutlet weak var bandDescriptionLabel: UILabel!  
  
@IBOutlet weak var bandImage: UIImageView!
```

```
override func viewDidLoad() {
```

```
override func viewDidLoad() {  
  
    super.viewDidLoad()  
    // Do any additional setup after loading the view.  
    bandNameLabel.text = currentBandDetail?.bandName  
    bandTypeLabel.text = currentBandDetail?.bandType  
    venueLabel.text = currentBandDetail?.venue  
    showDateLabel.text = currentBandDetail?.nextShowDate  
    showTimeLabel.text = currentBandDetail?.nextShowTime  
    showDetailsLabel.text = currentBandDetail?.showDetails  
    bandDescriptionLabel.text = currentBandDetail?.bandDescription  
    bandImage.image = UIImage(named:  
    currentBandDetail!.thumbImageName!)  
}
```

iPhone 7 Plus – iOS 10.2 (14C89)

Carrier 2:19 PM

[Bands](#)

 **Nicole Atkins**
Rock
Bowery Ballroom
Tue 5/1 8pm
All ages - \$35

Nicole will knock your socks off.

oard > Main...Base) > Band...Scene > Band...troller > View > L Band Description Label

The screenshot shows the Xcode interface with a storyboard scene on the left and its corresponding label settings on the right.

Storyboard Scene:

- View Controller: Band...troller
- Label: Band Description Label
- Content:
 - Name of Band
 - Type of Music
 - Venue
 - Date Time
 - Age/Price
 - Description

Label Inspector (Right Panel):

Label

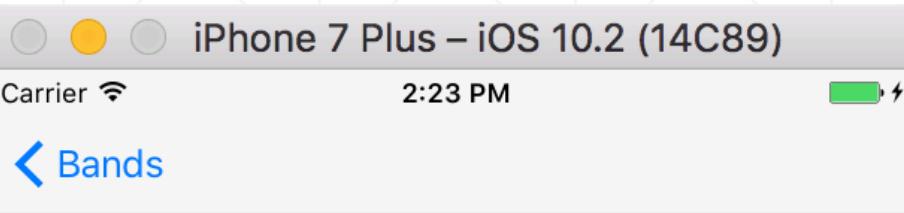
- Text: Plain
- Description: Description
- Color: Default
- Font: System 14.0
- Alignment: Center
- Lines: 2
- Behavior:
 - Enabled (checked)
 - Highlighted (unchecked)
- Baseline: Align Baselines
- Line Break: Truncate Tail
- Autoshrink: Fixed Font Size
- Tighten Letter Spacing (unchecked)
- Highlighted: Default
- Shadow: Default
- Shadow Offset: 0 (Width), -1 (Height)

View

- Content Mode: Left
- Semantic: Unspecified

View Controller - A controller that manages a view.

Storyboard Reference - Provides a



Ambulance LTD

Indie Rock

Mercury Lounge

Fri 5/4 10:30pm

All ages - \$18

It's been 2 years since Ambulance LTD has
played in NYC. Don't miss them!



Sleepies

Sat 5/5



Black Angels

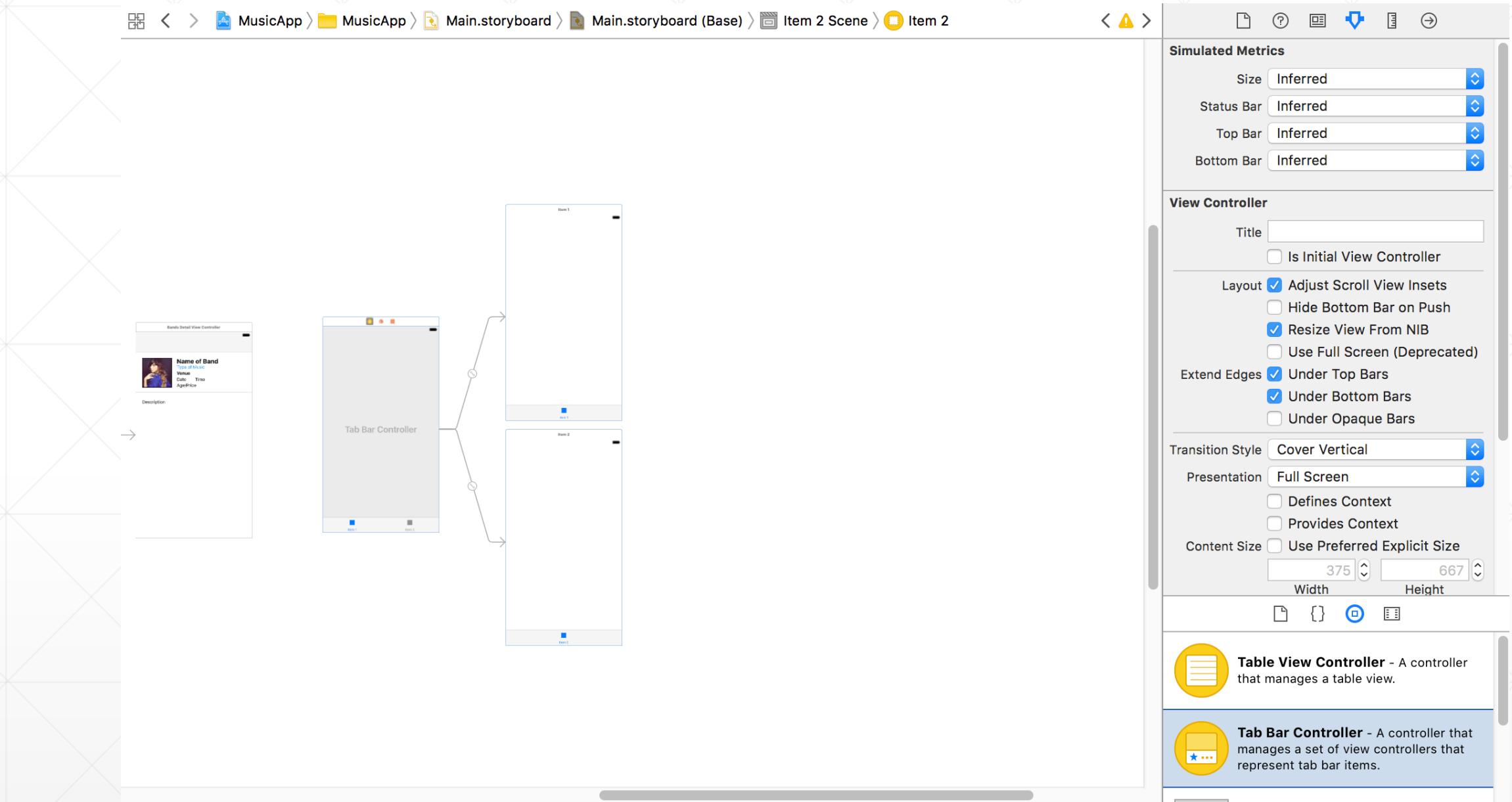
Sun 5/6

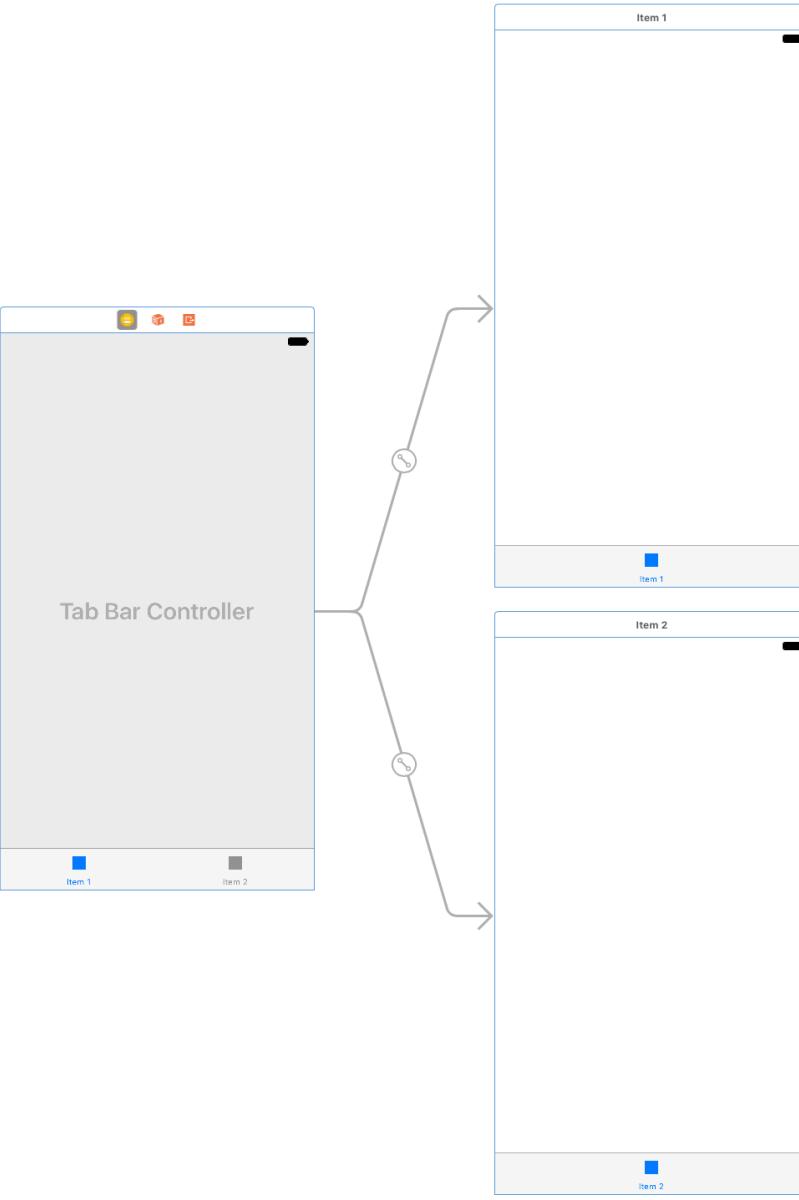


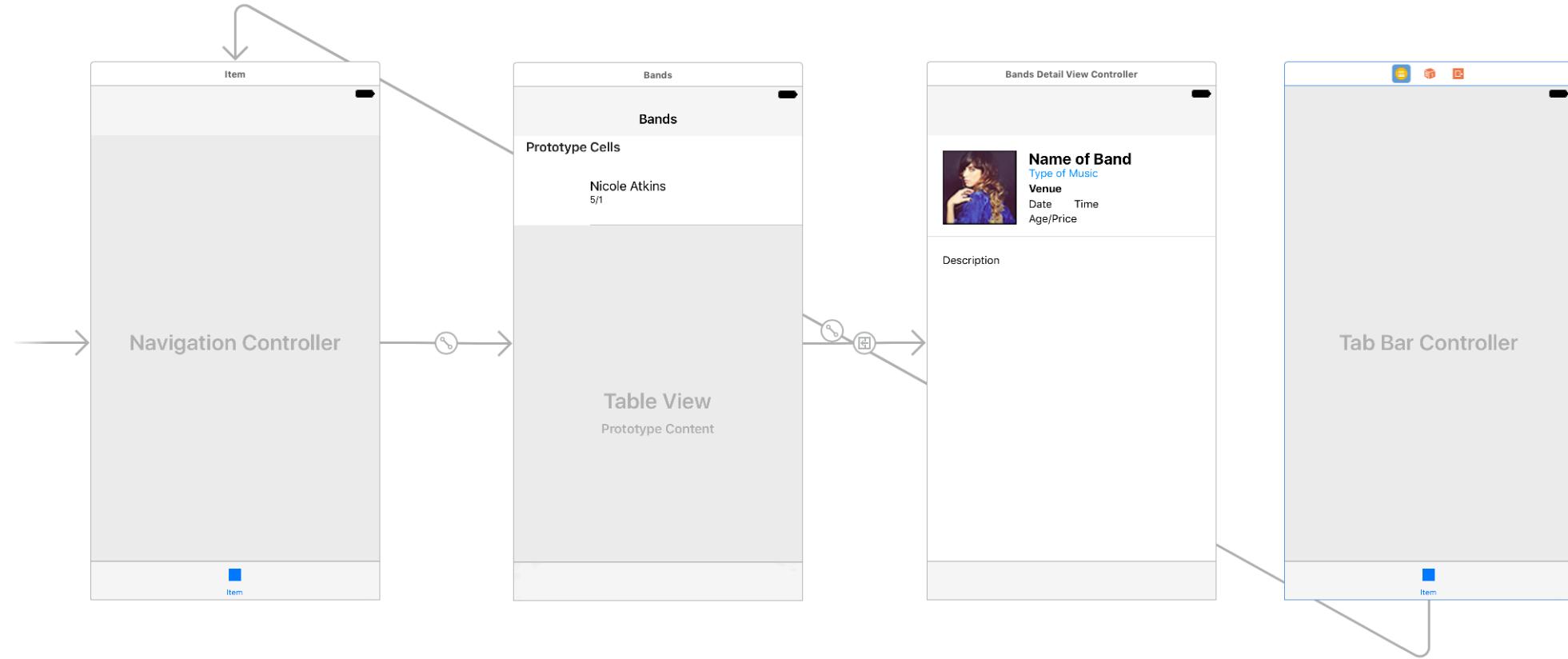
Featured

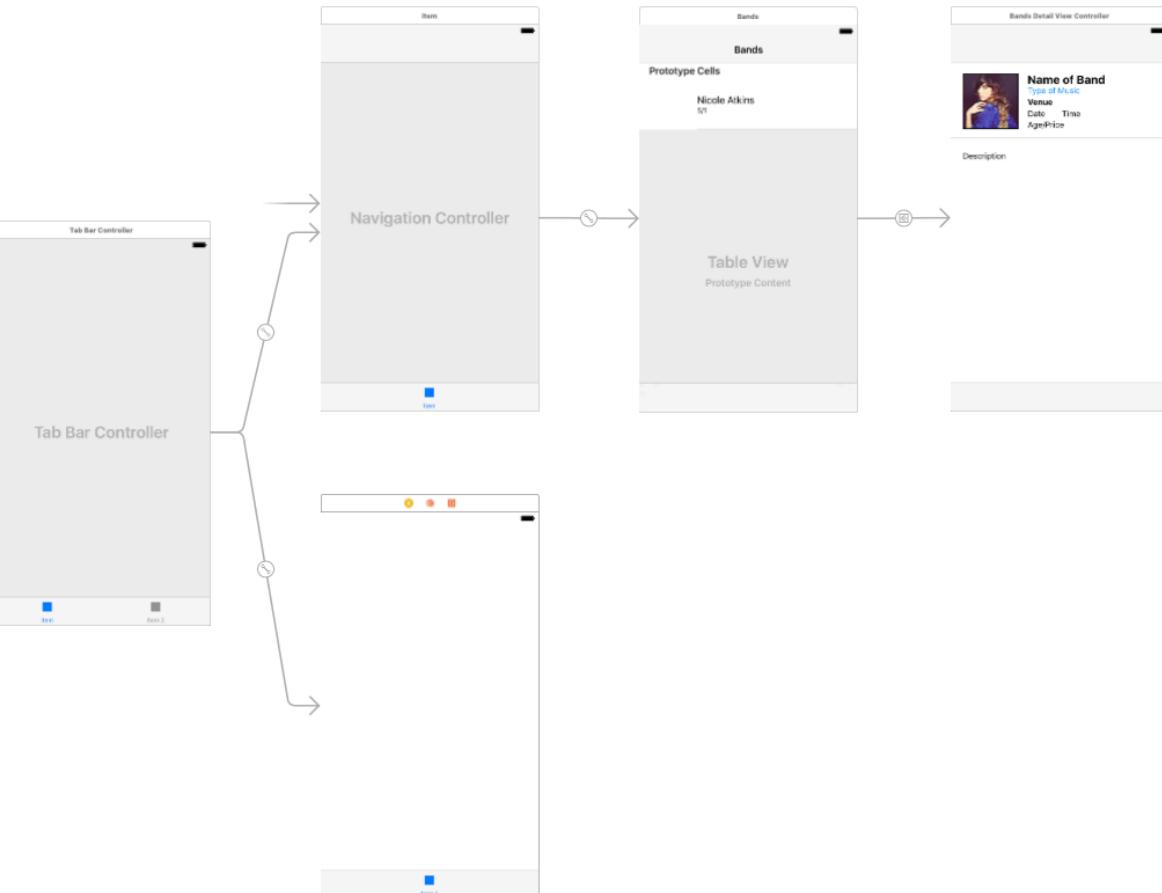


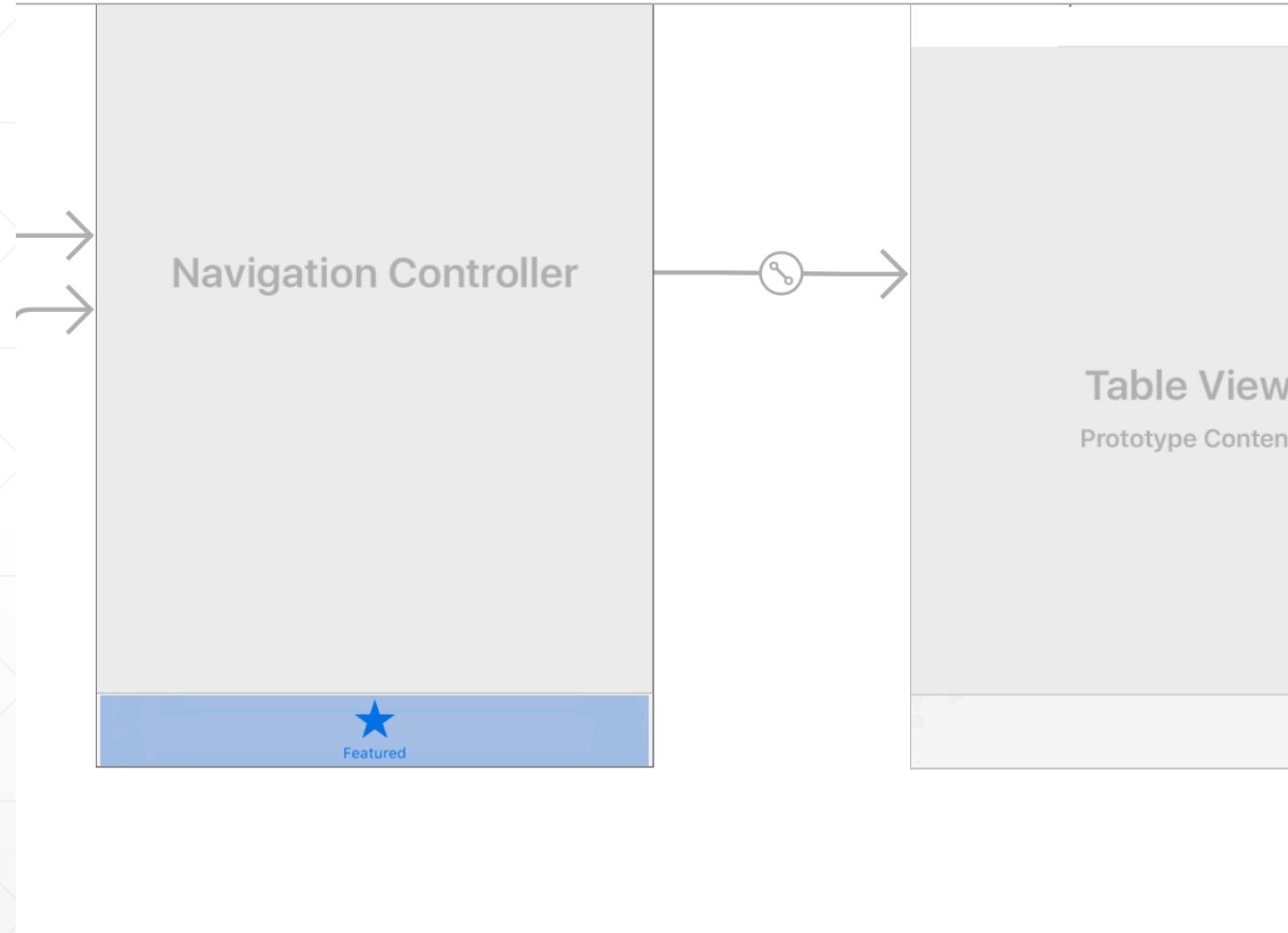
Map











Tab Bar Item

Badge

System Item **Featured**

Selected Image Selected Image

Title Position Default Position

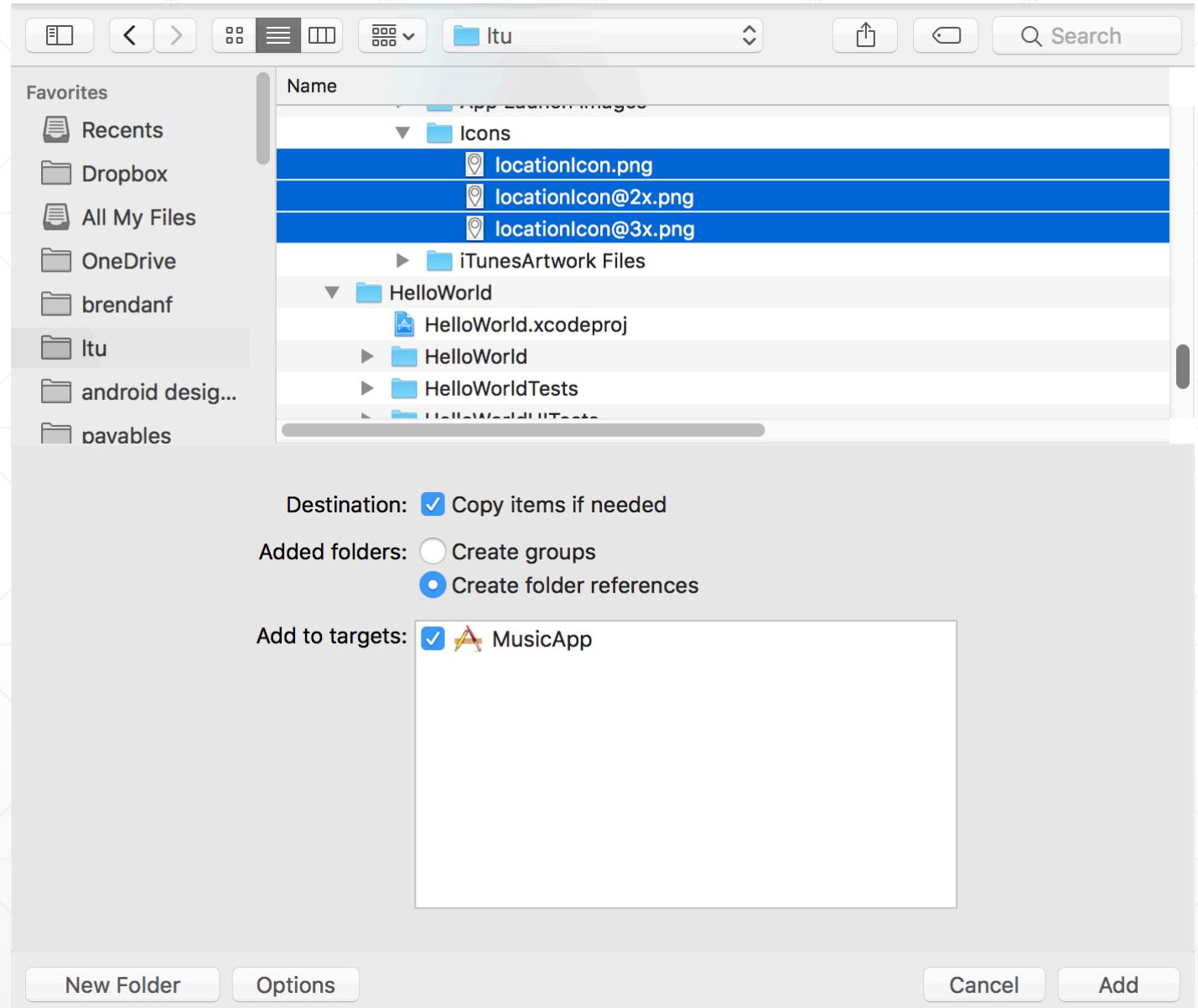
Bar Item

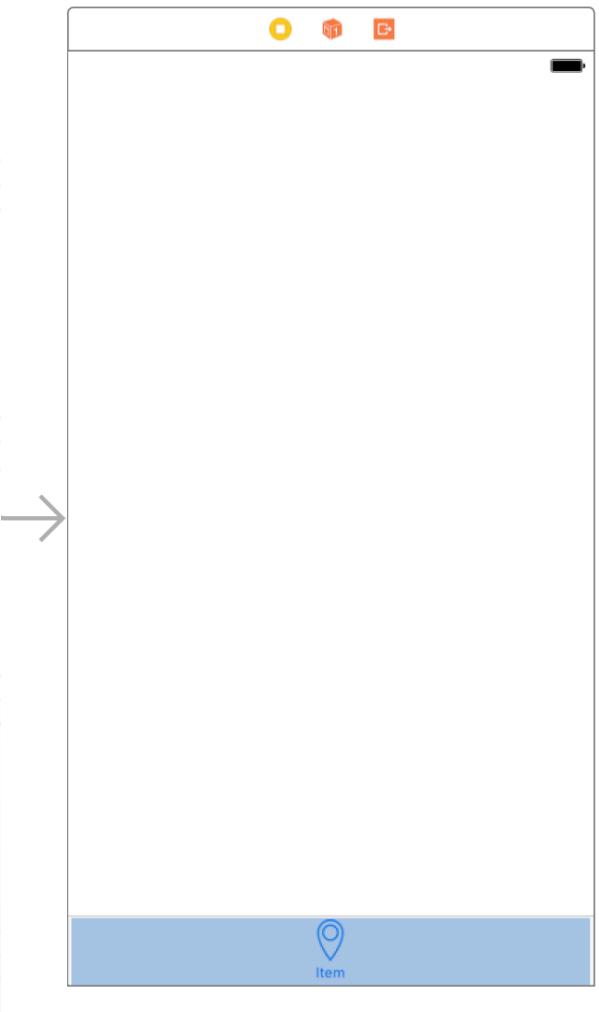
Title

Image Image

Tag 0

Enabled





Tab Bar Item

Badge:

System Item: Custom

Selected Image: Selected Image

Title Position: Default Position

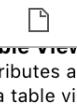
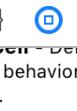
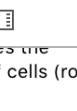
Bar Item

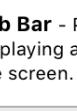
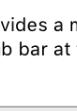
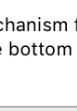
Title: Item

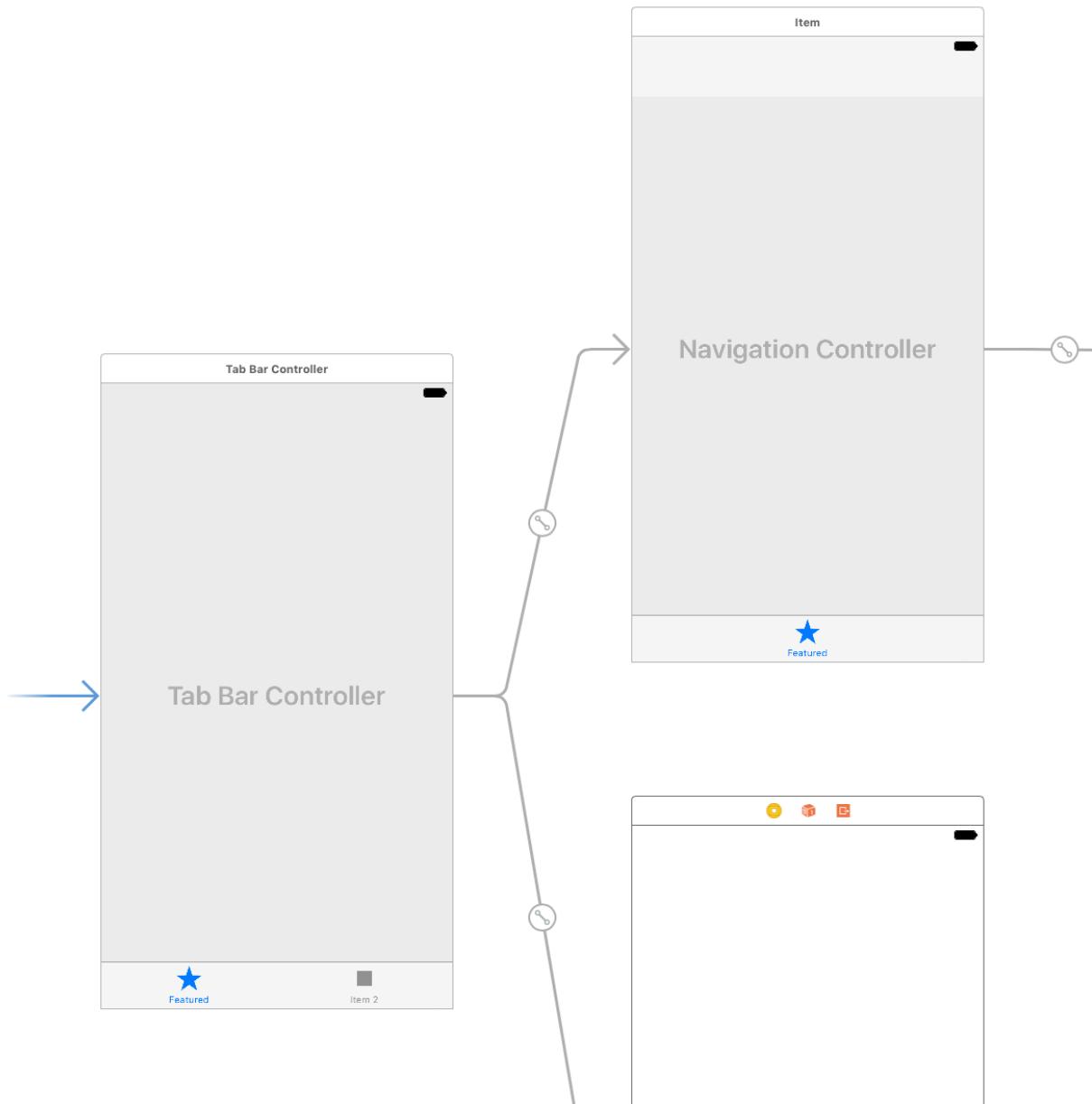
Image: locationIcon.png

Tag: 0

Enabled

   
Table View Cell - Defines the attributes and behavior of cells (rows) in a table view.

   
Tab Bar - Provides a mechanism for displaying a tab bar at the bottom of the screen.



iPhone 7 Plus – iOS 10.2 (14C89)

Carrier 4:26 PM

Bands

Nicole Atkins
Tue 5/1

Ambulance LTD
Fri 5/4

Sleepies
Sat 5/5

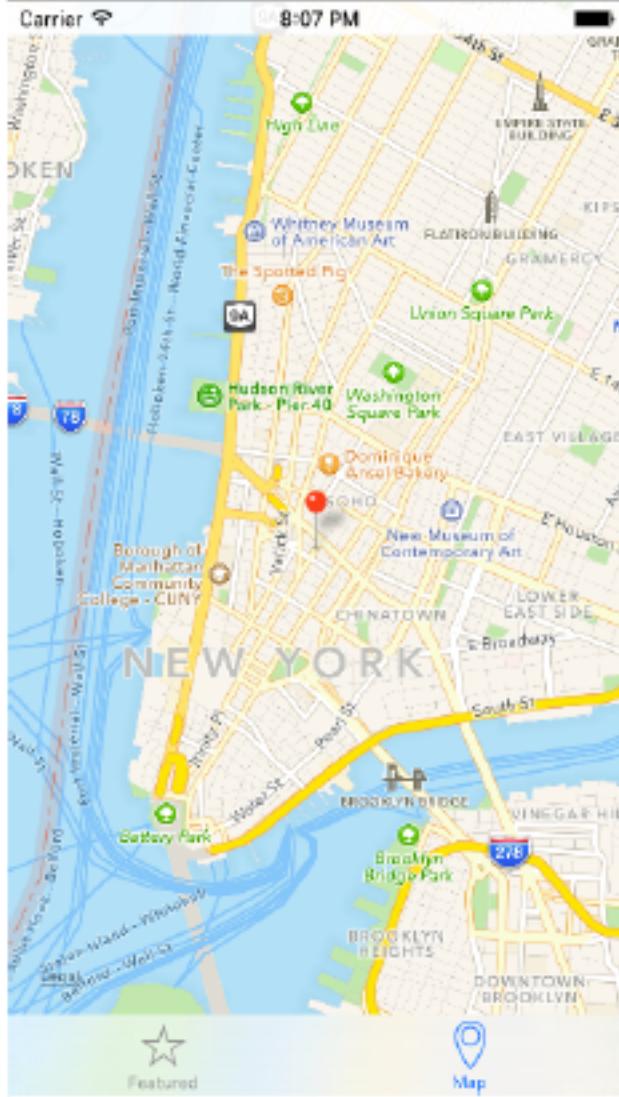
Black Angels
Sun 5/6

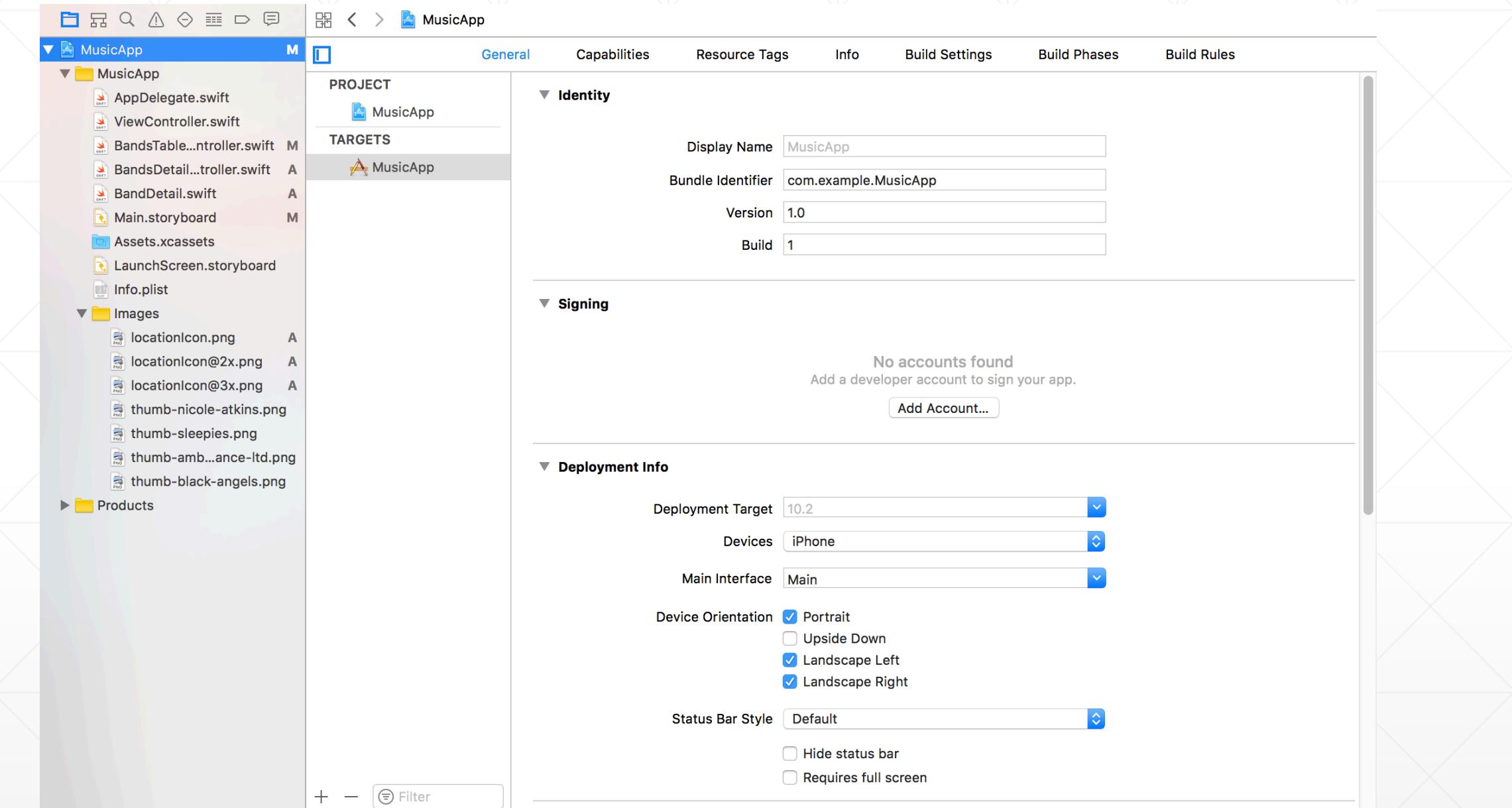


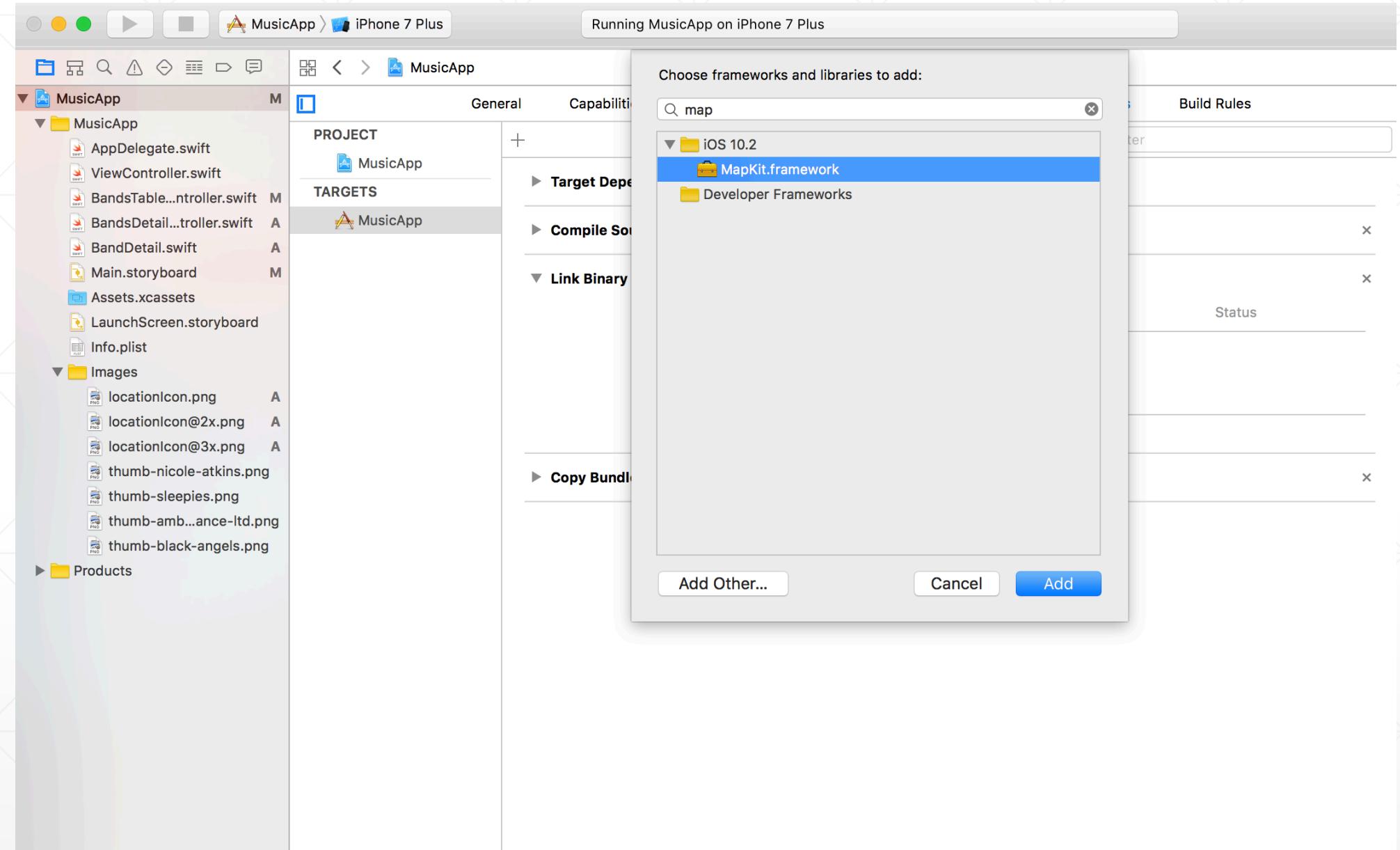
Featured



Item







MusicApp

MusicApp

AppDelegate.swift

ViewController.swift

BandsTableController.swift

BandsDetailController.swift

BandDetail.swift

Main.storyboard

Assets.xcassets

LaunchScreen.storyboard

Info.plist

Images

locationIcon.png

locationIcon@2x.png

locationIcon@3x.png

thumb-nicole-atkins.png

thumb-sleepies.png

thumb-ambulance-ltd.png

thumb-black-angels.png

Products

Frameworks

General Capabilities Resource Tags Info Build Settings Build Phases Build Rules

PROJECT Targets

+ Target Dependencies (0 items)

+ Compile Sources (5 items)

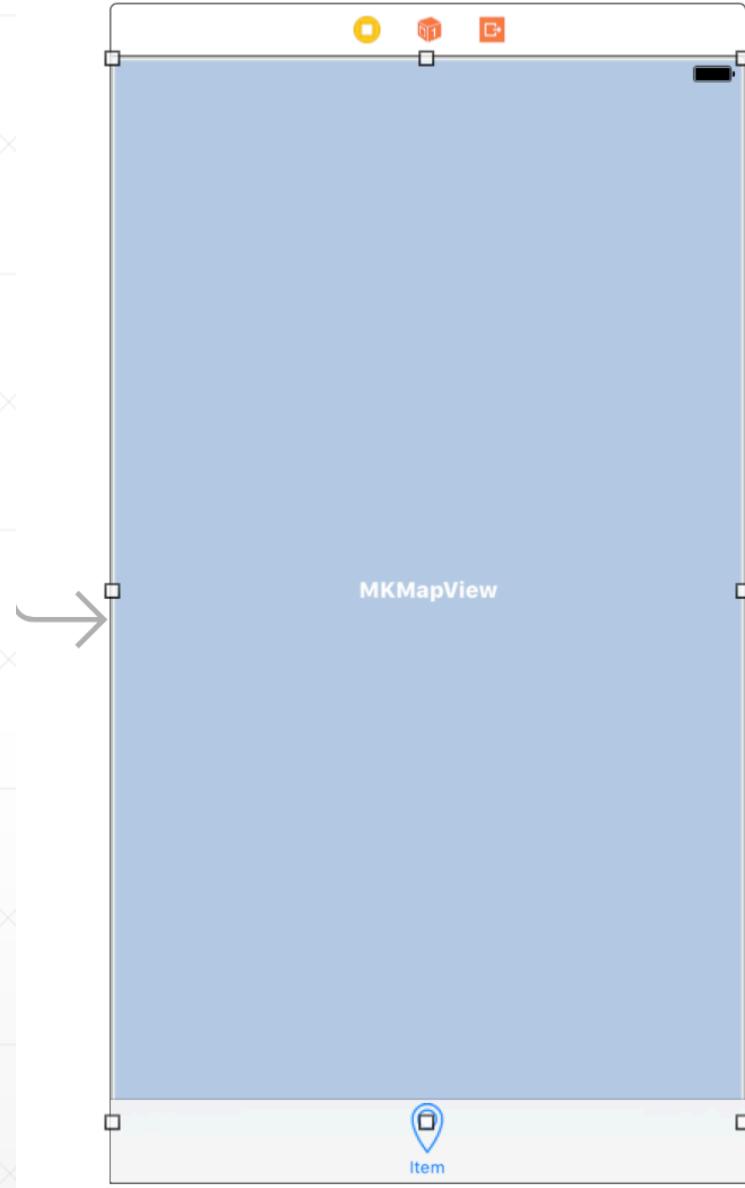
- Link Binary With Libraries (1 item)

Name Status

MapKit.framework Required

+ - Drag to reorder frameworks

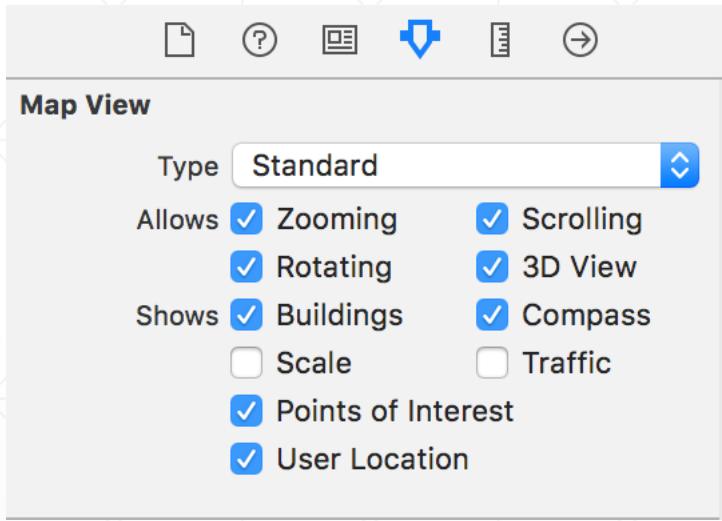
+ Copy Bundle Resources (10 items)

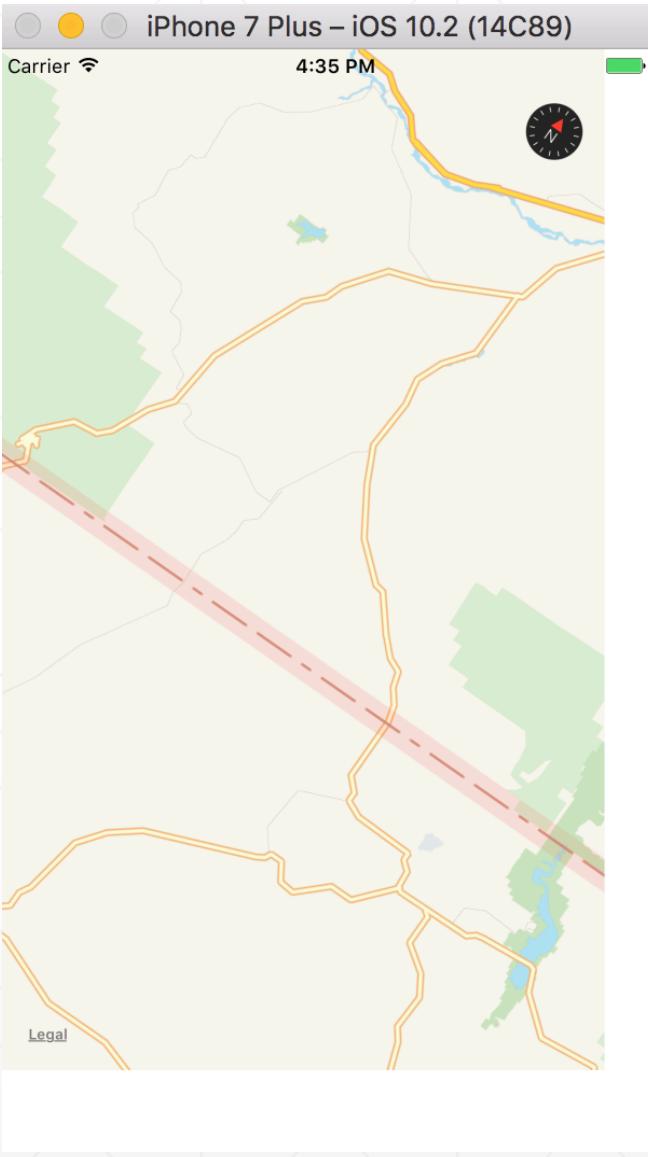


MKMapView



Item





Choose options for your new file:

Class: MapViewController

Subclass of: UIViewController

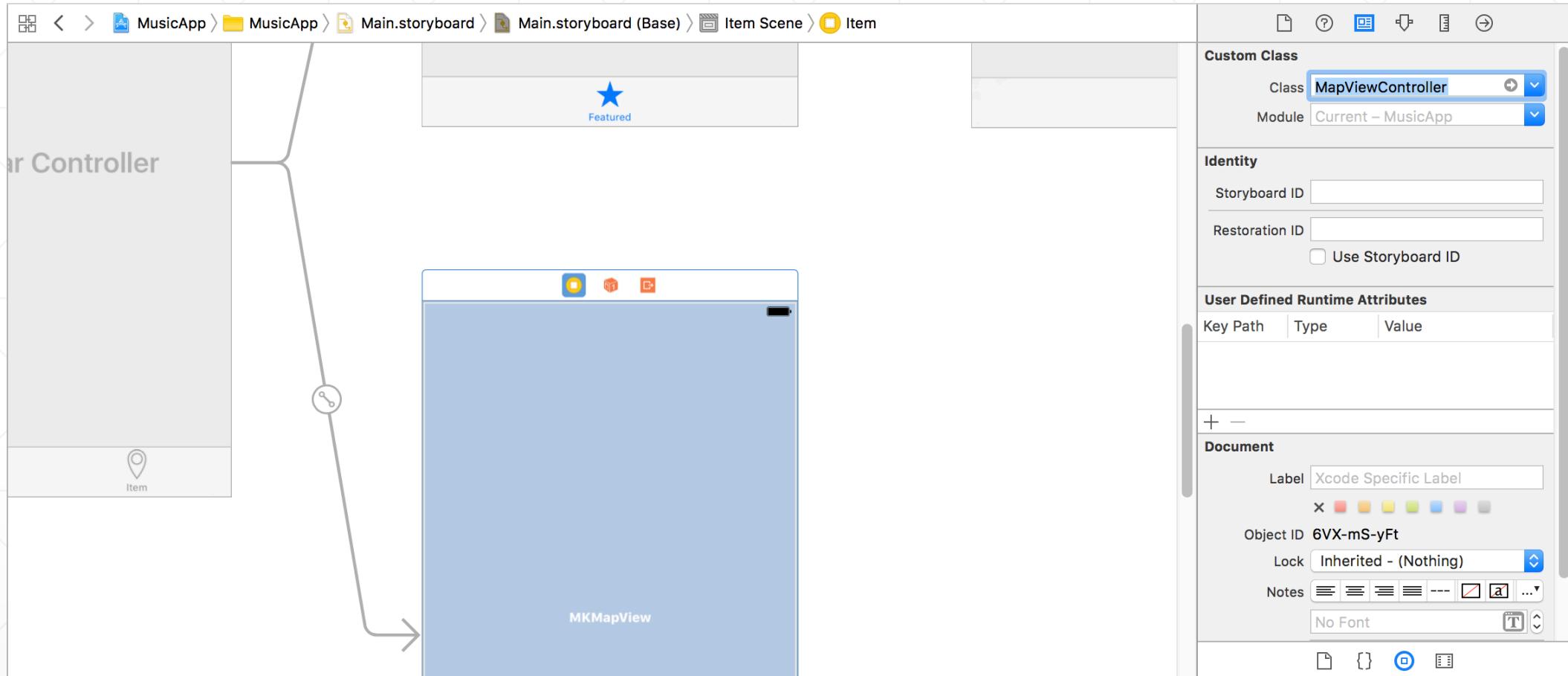
Also create XIB file

Language: Swift

Cancel

Previous

Next



The screenshot shows the Xcode interface with two main panes: a storyboard editor on the left and a code editor on the right.

Storyboard Editor: The storyboard contains a single view controller scene. A blue MKMapView is placed on the screen. A connection line originates from the top edge of the map view and points to a keyhole icon in the document outline, indicating an outlet connection.

Code Editor: The code editor displays the `MapViewController.swift` file for the `MapViewController`.

```
// MapViewController.swift
// MusicApp
//
// Created by User on 2/9/17.
// Copyright © 2017 example. All rights reserved.

import UIKit

class MapViewController: UIViewController {

    override func viewDidLoad() {
        super.viewDidLoad()

        // Do any additional setup after loading the
        // view.
    }

    override func didReceiveMemoryWarning() {
        super.didReceiveMemoryWarning()
        // Dispose of any resources that can be
        // recreated.
    }
}
```

The screenshot shows the Xcode interface with two main panes: a storyboard editor on the left and a code editor on the right.

Storyboard Editor: The storyboard contains a single view controller scene. A blue MKMapView is placed on the screen. A connection line originates from the top edge of the map view and points to a keyhole icon in the document outline, indicating an outlet connection.

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```
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// MusicApp
//
// Created by User on 2/9/17.
// Copyright © 2017 example. All rights reserved.

import UIKit

class MapViewController: UIViewController {

    override func viewDidLoad() {
        super.viewDidLoad()

        // Do any additional setup after loading the
        // view.
    }

    override func didReceiveMemoryWarning() {
        super.didReceiveMemoryWarning()
        // Dispose of any resources that can be
        // recreated.
    }
}
```

```
import UIKit
```

```
import MapKit
```

```
class MapViewController: UIViewController {
```

```
    @IBOutlet weak var jiveMapView: MKMapView!
```



```
class MapViewController: UIViewController {  
  
    let jiveLatitude = 40.72004  
    let jiveLongitude = -74.003912  
    let jiveSpan = 0.05  
  
    @IBOutlet weak var jiveMapView: MKMapView!
```

```
override func viewDidLoad() {  
    super.viewDidLoad()  
    var jiveRegion = MKCoordinateRegion()  
}
```

```
override func viewDidLoad() {  
    super.viewDidLoad()  
  
    // Do any additional setup after loading the view.  
  
    var jiveRegion = MKCoordinateRegion()  
  
    var center = CLLocationCoordinate2D()  
  
    center.latitude = jiveLatitude  
  
    center.longitude = jiveLongitude  
  
    var span = MKCoordinateSpan()  
  
    span.latitudeDelta = jiveSpan  
  
    span.longitudeDelta = jiveSpan  
  
    jiveRegion.center = center  
  
    jiveRegion.span = span  
  
    jiveMapView.setRegion(jiveRegion, animated: true)  
}
```

```
override func viewDidLoad() {  
    super.viewDidLoad()  
    // Do any additional setup after loading the view.  
    .....  
    let jivePoint = MKPointAnnotation()  
    jivePoint.coordinate = center  
    jivePoint.title = "The Jive Factory"  
    jivePoint.subtitle = "580 Lispenard, NY, NY 10013"  
    jiveMapView.addAnnotation(jivePoint)  
}
```
