

# RSSReader

## Lesson 7

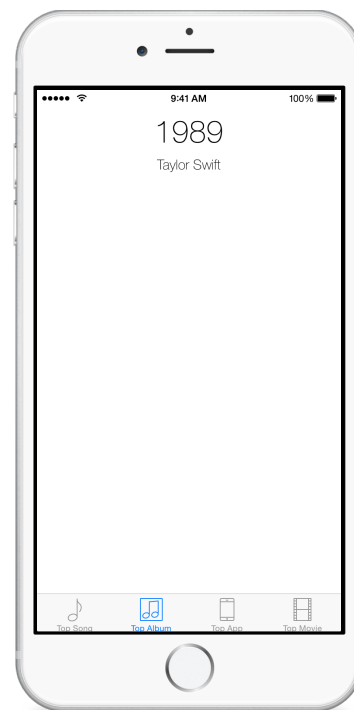


### Description

Add the individual RSS feed URLs as user defined runtime attributes for each view controller, and use the attribute to retrieve different data within each view controller.

### Learning Outcomes

- Distinguish differences between class definitions and instances.
- Practice creating user defined runtime attributes using Interface Builder `IBInspectable` properties.
- Describe how storyboards assign user defined runtime attributes to `IBInspectable` controller properties.



### Vocabulary

| RSS feed                       | URL                   | property       |
|--------------------------------|-----------------------|----------------|
| user defined runtime attribute | inspectable attribute | @IBInspectable |

### Materials

- **RSSReader Lesson 7** Xcode project
- RSS feed URLs text file (**feedurls.txt**)
- Internet connectivity to the **ax.itunes.apple.com** domain

## Opening

If each controller will perform an identical operation, but each will use a different RSS feed url, how can we use different RSS feeds with each controller?

## Agenda

- Discuss how the songs, albums, apps and movies RSS feeds all have a similar data structure, but that each controller instance will need to use a different RSS feed URL.
- Within the `TopMediaController` interface, change the `titleText` property to `feedURL`.

```
@IBInspectable var feedURL: String!
```

- Using Interface Builder, select a view controller, open the Identity Inspector (⌘3), and delete the old `titleText` user defined runtime attribute. Repeat the attribute removal for each view controller.
- Using Interface Builder, select the Top Song view controller, open the Attributes Inspector (⌘4), and change the Feed URL attribute value to **`http://ax.itunes.apple.com/WebObjects/MZStoreServices.woa/ws/RSS/topsongs/limit=1/json`**.
- Update the inspectable Feed URL attribute for the remaining view controllers, using the appropriate url provided in the **`feedurls.txt`** file.
- Update the implementation of `viewDidLoad` to use the `feedURL` property.

```
func viewDidLoad() {  
    super.viewDidLoad()  
    let request = URLRequest(URL: NSURL(string: feedURL!))  
    ...  
}
```

- Discuss how each controller instance will rely on the particular value of its `feedURL` property to retrieve the RSS data.
- Run the app (⌘R), interact with each tab, and observe how each tab displays the respective top song, album, app and movie data.

## Closing

Use a web browser to examine the actual RSS feed data. Do you see a way we might retrieve an image for the song, album, app and movie?

## Modifications and Extensions

- Increase the robustness of the controller by using optional binding to check that the `feedURL` exists before using it to instantiate an `NSURLRequest` object. Display an appropriate alert view if a problem occurs.

## Resources

Apple RSS Feeds <http://www.apple.com/rss/>

The Swift Programming Language: Properties [https://developer.apple.com/library/ios/documentation/Swift/Conceptual/Swift\\_Programming\\_Language/Properties.html](https://developer.apple.com/library/ios/documentation/Swift/Conceptual/Swift_Programming_Language/Properties.html)

Interface Builder Help: Adding User Defined Runtime Attributes [https://developer.apple.com/library/ios/recipes/xcode\\_help-interface\\_builder/Chapters/AddUserDefinedRuntimeAttributes.html](https://developer.apple.com/library/ios/recipes/xcode_help-interface_builder/Chapters/AddUserDefinedRuntimeAttributes.html)

Creating a Custom View that Renders in Interface Builder [https://developer.apple.com/library/ios/recipes/xcode\\_help-IB\\_objects\\_media/Chapters/CreatingaLiveViewofaCustomObject.html](https://developer.apple.com/library/ios/recipes/xcode_help-IB_objects_media/Chapters/CreatingaLiveViewofaCustomObject.html)

The Swift Programming Language: Attributes [https://developer.apple.com/library/ios/documentation/Swift/Conceptual/Swift\\_Programming\\_Language/Attributes.html](https://developer.apple.com/library/ios/documentation/Swift/Conceptual/Swift_Programming_Language/Attributes.html)

NSURL Class Reference [https://developer.apple.com/library/ios/documentation/Cocoa/Reference/Foundation/Classes/NSURL\\_Class/](https://developer.apple.com/library/ios/documentation/Cocoa/Reference/Foundation/Classes/NSURL_Class/)

NSURLRequest Class Reference [https://developer.apple.com/library/ios/documentation/Cocoa/Reference/Foundation/Classes/NSURLRequest\\_Class/](https://developer.apple.com/library/ios/documentation/Cocoa/Reference/Foundation/Classes/NSURLRequest_Class/)