

Assignment-1

Name: Chetan Umale

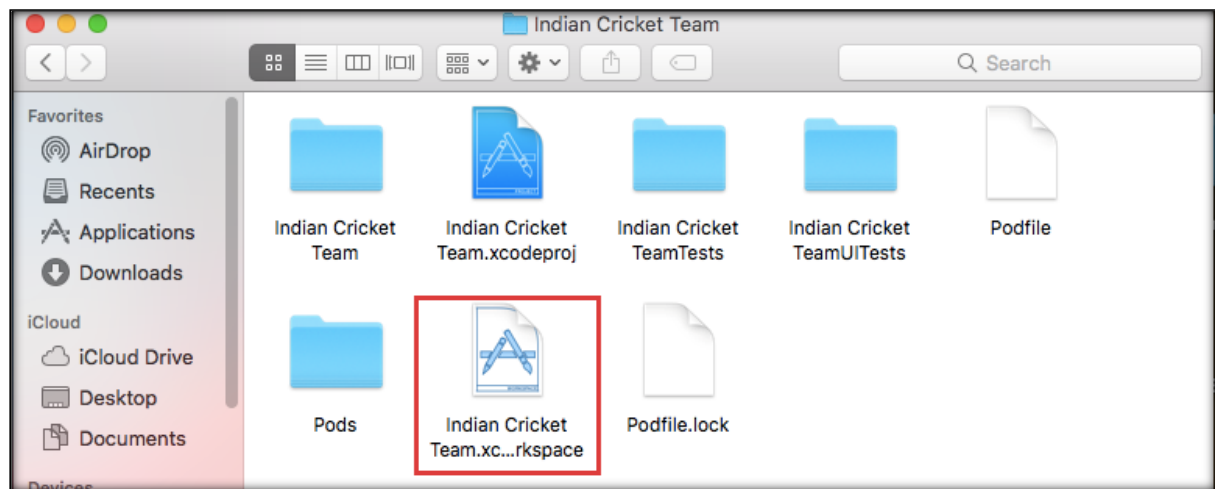
Student No: 118221161

Introduction:

This application gives information about the members of the Indian cricket team.

Instructions:

As this application uses external libraries installed using CocoaPods (<https://cocoapods.org/>), use the **IndianCricketTeam.xcworkspace** file to launch the application.

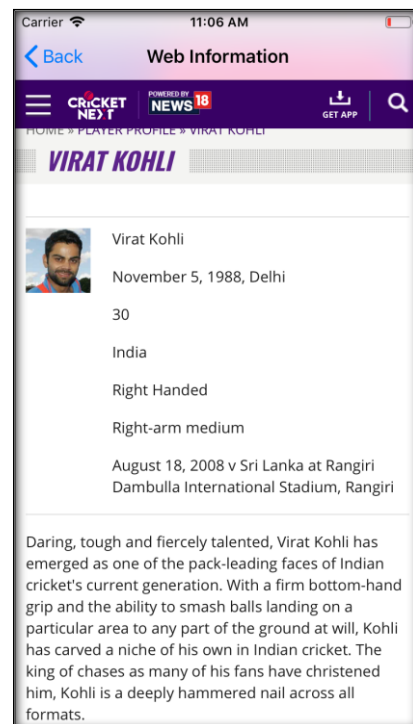
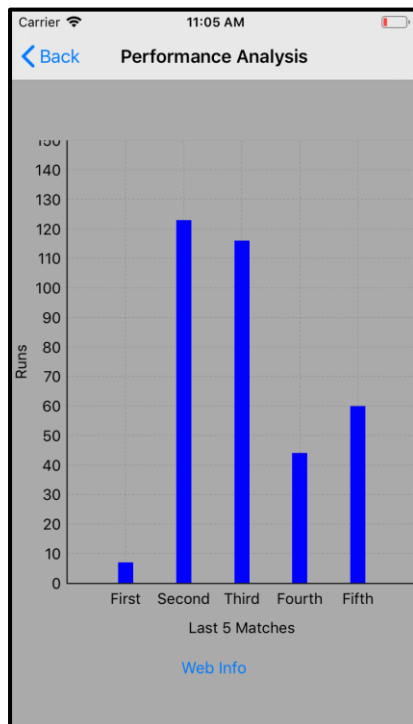
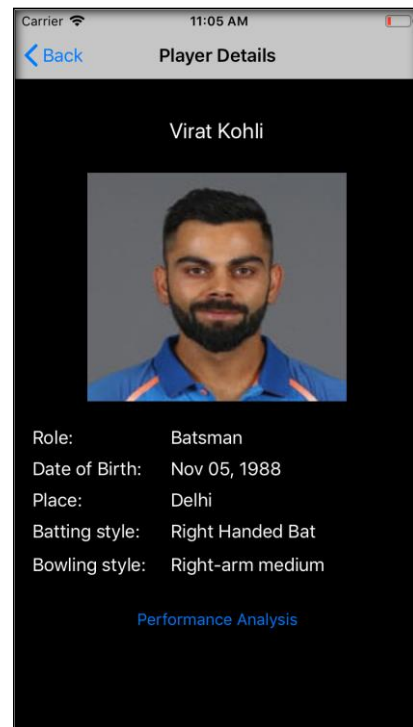
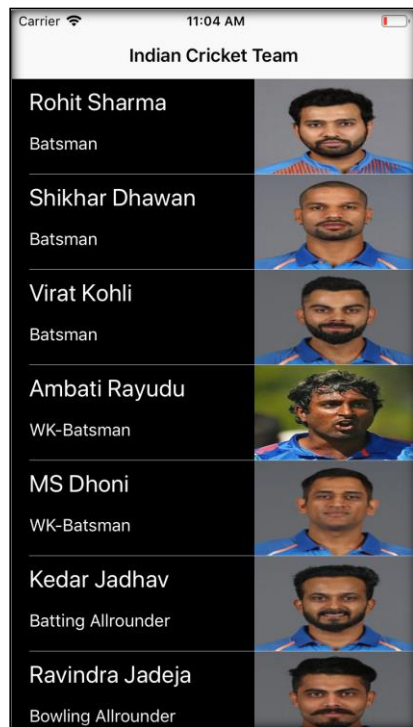


Project files

Application screens:

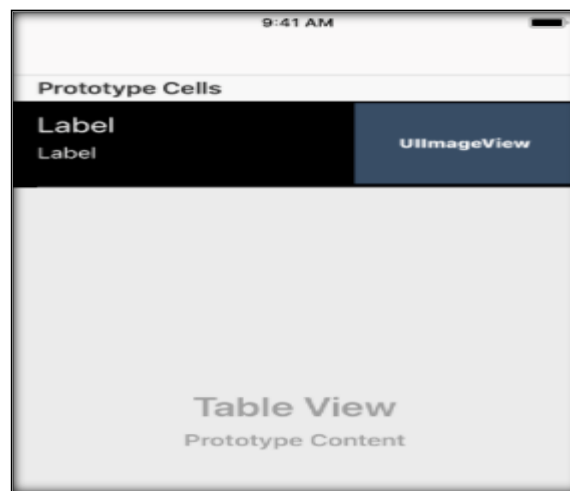
1. First screen displays a list of players with the image, name and role.
2. When the user selects a player from the list, the second screen appears. It contains additional information about the player.
3. When the user clicks on Performance Analysis button, the third screen appears. It displays a bar graph of the runs scored by that player in the last 5 matches.
4. When the user clicks on the Web Info button, the fourth screen appears. It displays a web page containing detailed information of the player.

Application screenshots:



Design contribution:

The application uses a customised cell in the table view.



Custom cell

Technical Contribution:

The application uses following external libraries:

1. SwiftSoup for parsing HTML. <http://cocoadocs.org/docsets/SwiftSoup/1.0.1/>
2. SwiftChart for plotting bar graph. <https://cocoapods.org/pods/SwiftChart>

In order to use these libraries, following steps were used:

Step-1:

Install CocoaPods using the following command:

```
$ sudo gem install cocoapods
```

Step-2:

Navigate to the project directory and create pod file for the project:

```
$ pod init
```



Step-3:

Open pod file and add following code:

```
1 # Uncomment the next line to define a global platform for your project
2 # platform :ios, '9.0'
3
4 target 'Indian Cricket Team' do
5   # Comment the next line if you're not using Swift and don't want to use dynamic frameworks
6   use_frameworks!
7
8   # Pods for Indian Cricket Team
9   pod 'SwiftSoup'
10
11   pod 'SwiftCharts', '~> 0.6.3'
12   target 'Indian Cricket TeamTests' do
13     inherit! :search_paths
14     # Pods for testing
15   end
16
17   target 'Indian Cricket TeamUITests' do
18     inherit! :search_paths
19     # Pods for testing
20   end
21
22 end
23
```

Step-4:

Install the libraries by using the following command:

```
$ pod install
```

Step-5:

Import the libraries in the swift file.

```
import UIKit
import SwiftSoup
import SwiftCharts
```

Step-6:

Link the libraries to the project.



Code for html parsing:

```
let url = URL(string: playerData.getUrl())

do {

    let html = try! String(contentsOf: url!, encoding: .utf8)
    let doc: Document = try SwiftSoup.parse(html)
    let ul: [Element] = try doc.select("ul").array()
    //print(ul[9])
    let li: [Element] = try ul[9].select("li").array()

    for item in li {
        var str = try item.text()

        if str.contains("("){
            if str.contains("*"){
                let star_index = str.firstIndex(of: "*")
                str.remove(at: star_index!)
            }

            if let bracket_index = str.firstIndex(of: "{"){
                // let distance = str.distance(from: str.startIndex, to: bracket_index)

                scores.append(Int(str[str.startIndex..
```

Code for Bar Graph:

```
let chartConfig = BarsChartConfig(valsAxisConfig: ChartAxisConfig(from: 0, to: 150, by: 10))

let frame = CGRect(x: 0, y: 120, width: self.view.frame.width, height: 460)

let chart = BarsChart(frame: frame,
                      chartConfig: chartConfig,
                      xTitle: "Last 5 Matches",
                      yTitle: "Runs",
                      bars: [
                          ("First", Double(scores[0])),
                          ("Second", Double(scores[1])),
                          ("Third", Double(scores[2])),
                          ("Fourth", Double(scores[3])),
                          ("Fifth", Double(scores[4]))
                      ],
                      color: UIColor.blue,
                      barWidth: 15)

self.view.addSubview(chart.view)
self.chartView = chart
```