Assignment-2 Readme

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Personal Contribution:

1. Alert message:

- When the user clicks on 'fetch info from internet' button without entering the name of the player, an alert is displayed.
- When player information is not found on the internet, an alert is displayed.

```
324
                 DispatchQueue.main.async {
                     let alert = UIAlertController(title: "Alert", message: "Please enter player name.",
325
                         preferredStyle: .alert)
326
                     alert.addAction(UIAlertAction(title: "OK", style: .default, handler: { action in
327
                         switch action.style{
328
                         case .default:
329
                             print("default")
330
                             self.clear()
331
332
                         case .cancel:
333
                             print("cancel")
334
335
                         case .destructive:
336
                             print("destructive")
337
338
                     self.present(alert, animated: true, completion: nil)
340
341
                 }
342
343
```

2. Fetch player information from internet:

- I have used a REST API called 'cric api' https://www.cricapi.com to fetch player data from the internet.
- For that purpose I have used 2 data tasks.
- The first data task will get the player id from this url: https://cricapi.com/api/playerFinder?apikey=UGoeKO11HmhT3Q5eR1SRdT5a21E2&name=Tendulkar
- The inputs for the first url are apikey and player name.
- The second data task will get the player info from the player id which was fetched by the first data task.
- The second data task will hit the following url: https://cricapi.com/api/playerStats?apikey=UGoeKO11HmhT3Q5eR1SRdT5a21E2&pid
 =35320

Code for REST API:

```
//function to get data from internet using cric api
0
        @IBAction func fetch_data(_ sender: Any) {
135
            if(name_textfield.text != "")
136
137
138
                 let api_key = "UGoeKO11HmhT3Q5eR1SRdT5a21E2"
                 var url_info_text = ""
139
                 let search_text1 = name_textfield.text
140
141
                 let search_text2 = search_text1?.replacingOccurrences(of: " ", with: "%20")
                 let url_find_text = "https://cricapi.com/api/playerFinder?
142
                     apikey="+api_key+"&name="+search_text2!
143
                 var pid_search = ""
144
145
                 let configuration = URLSessionConfiguration.default
146
                 let session = URLSession.init(configuration: configuration)
147
                 let decoder = JSONDecoder()
                 {\tt decoder.} \\ {\tt keyDecodingStrategy = JSONDecoder.} \\ {\tt KeyDecodingStrategy.} \\ {\tt convertFromSnakeCase} \\
149
150
                 let url_find = URL.init(string: url_find_text)!
151
152
153
154
155
                 //create player find datatask
                 let dataTask1 = session.dataTask(with: url_find) { (data, response, error) in
156
157
                     // check if there is any error
158
159
                     guard error == nil else {
160
                         return
161
162
163
164
165
                     // check the status code
                     guard let response = response as? HTTPURLResponse else {
167
                         return
168
169
```

```
guard (200...209).contains(response.statusCode) else {
    return
}

guard let data = data else{
    return
}

print(data)

//decode the response

let jsonResponse2 = try! JSONSerialization.jsonObject(with: data, options: []) as! [String AnyObject]

// print(jsonResponse2)

//let pid_response = self.nullToNil(value: jsonResponse2["pid"])

let pid_arr: NSArray = jsonResponse2["data"] as! NSArray

// print(pid_arr.count)
```

```
// print(pid_arr.count)
if(pid_arr.count == 0)
    print("player not found")
    DispatchQueue.main.async {
    let alert = UIAlertController(title: "Alert", message: "Player not found",
        preferredStyle: .alert)
    alert.addAction(UIAlertAction(title: "OK", style: .default, handler: { action in
        switch action.style{
        case .default:
            print("default")
            self.clear()
        case .cancel:
            print("cancel")
        case .destructive:
            print("destructive")
        }}))
```

```
print("player found")
let jsonResponse3 = try! JSONSerialization.jsonObject(with: data, options: [])  lali...

let decoder = JSONDecoder()

let model = try! decoder.decode(ResponseModel1.self, from: data)

//pid_search = pid_response as! String
pid_search = String(model.data.first!.pid)
url_info_text = "https://cricapi.com/api/playerStats?apikey="+api_key+"&pid="+pid_searc let url_info = URL.init(string: url_info_text)!

// create the task
let dataTask = session.dataTask(with: url_info) { (data, response, error) in

// check if there is any error
guard error == nil else {
    return
}
```

```
// check the status code
guard let response = response as? HTTPURLResponse else {
    return
}

guard (200...209).contains(response.statusCode) else {
    return
}

guard let data = data else{
    return
```

```
let jsonResponse1 = try! JSONSerialization.jsonObject(with: data, options: []) as!
                                  [String: AnyObject]
257
258
                             let fullName = self.nullToNil(value: jsonResponse1["fullName"]) 🛕 Initialization of i...
                              let playingRole = self.nullToNil(value: jsonResponse1["playingRole"])
259
260
                              let born = self.nullToNil(value: jsonResponse1["born"])
                             let battingStyle = self.nullToNil(value: jsonResponse1["battingStyle"])
261
                              let bowlingStyle = self.nullToNil(value: jsonResponse1["bowlingStyle"])
262
                             let imageURL = self.nullToNil(value: jsonResponse1["imageURL"])
263
264
265
                              DispatchQueue.main.async {
266
267
268
                                  if(born == nil)
269
270
                                      self.dob_textfield.text = "January 1, 1900"
                                      self.place_textfield.text = "Unknown"
271
272
273
274
                                      var born_info = born!.components(separatedBy: ",")
275
                                      self.dob_textfield.text = born_info[0]+born_info[1]
276
                                      self.place_textfield.text = born_info[2]
278
279
                                  if(imageURL == nil)
280
                                  {
                                      self.player_image.image = UIImage(named: "blank.jpg")
281
282
283
284
                                      self.player_image.downloadImage(url: URL(string: imageURL as! String)!)
286
287
                                  if(playingRole == nil)
288
                                  {
289
290
                                      self.role_textfield.text = "Unknown"
291
292
                                  else {
293
                                     self.role_textfield.text = playingRole as! String 🛕 Treating a forced downc...
294
                                  }
```

3. Download player image from internet:

The JSON fetched by the REST API also contains an url for player image. I have downloaded the image of the player using that url.

Code:

```
extension UIImageView{
453
        func downloadImage(url: URL){
454
            let session = URLSession(configuration: .default)
455
456
            let task = session.dataTask(with: url) { (data, response, error) in
457
                if let data = data {
458
                     if let image = UIImage.init(data: data){
459
                         print("we have the image")
460
                         print(image)
                         DispatchQueue.main.async {
462
                             self.image = image
463
464
                         }
465
467
468
469
470
            task.resume()
472
473 }
```

Search Functionality:

The user has to select the search category before searching.

There are 4 categories available: Name, role, batting, bowling.

Valid queries for search are:

Name: name of the player

role: batsman, bowler, wk, allrounder

batting: right, left

bowling: right, left, fast ,off, leg

Internet data:

The following player names can be used to test this functionality:

- Steyn
- Langer
- tendulkar or any name from the player list on the first page