Homework 2

Due Date : Saturday 4th July, 23:59

Assignment Prompt

A list of tasks are found below, along with an accompanying barebones app template. This homework assignment focuses on using UITableViewController, together with some tasks that use loops and optional unwrapping.

Assignment Tasks

1. The accompanying app contains a table view in Interface Builder, along with a `StudentListTableViewController` file. However, the two are not configured to work together yet. Do the necessary setup to get the two working together. (Hint: aim to get the tableview to display the numbers from 0 - 5, for example. When it shows up, you know your setup is done. Make sure this setup is working before you go to the next task.)
2. `StudentListTableViewController` has an array of `Student` objects, called `studentList`. It already contains 3 students; the setup is contained in the `setupStudent()` function. Set up the tableview to display the full name of each student: *"Robert Swift"*. (Hint: you will need to implement the `cellForRowAtIndexPath` function, as well as make a change to the `numberOfRowsInSection` function)
3. The tableview connects to a second screen, which will display the student profile. The view controller file for this screen, `StudentProfileViewController`, has already been created for you. Create a user interface to display a student's first name, last name, and age. Set these properties in the `viewDidLoad` function. (Hint: There is already a variable called student. Use that object's properties to update the UI in `viewDidLoad`)
4. In `StudentListTableViewController`, implement prepareForSegue so that the `Student` corresponding to the selected row gets passed to the destination view controller (which is a `StudentProfileViewController`). When this task along with the previous task are complete, you should have an app that displays a list of student names which leads to the full profile of each student.
5. Each student has a property called scores, which is a list of numeric scores. Inside `StudentProfileViewController`, write a function called averageScore that takes in an array of scores and returns the average. Display that average score on the profile page. (Hint: to find an average, we need to sum all the values and then divide by the number of values. How do we go through an array and find the sum? How do we find the number of items in an array?)
6. Each student *might* have a phone number. This property is an optional. If they have a phone number, display it on the profile page. Remember to unwrap the optional safely

using `if-let`. (Hint: to test if you have this working, open Bob's profile, and then open Susan's profile. Susan doesn't have a phone number, but the app shouldn't crash)

7. *Bonus:* Each student also has a profile picture URL. Add an image view to the profile screen and set it to their profile picture. (Hint: look up online how to set the image of a UIImageView using a URL)

Submission
Deliverables
- Xcode project uploaded to Github

Evaluation
Your assignment will be evaluated regarding the extent to which you meet the above requirements using [this rubric](#).