

ITIS/ITCS 6010 – Advanced Topics for Mobile App Development
In Class Assignment 7

Basic Instructions:

1. In every file submitted you **MUST** place the following comments:
 - a. Assignment #.
 - b. File Name.
 - c. Student Full Name.
2. This is an individual assignment, each student is expected to work alone and submit their own work.
3. Your assignment will be graded for functional requirements and efficiency of your submitted solution. You will lose points if your code is not efficient, does unnecessary processing or blocks the UI thread.
4. Please download the support files provided with this assignment and use them when implementing your project.
5. Create a zip file which includes all the project folder, any required libraries, and your presentation material.
6. Submission details:
 - a. You should submit the assignment through canvas: Submit the zip file.
- 7. Failure to follow the above instructions will result in point deductions.**

In Class Assignment 7 (100 Points)

In this assignment you will implement an app to manage, import and view photos. You will use Firebase to manage the photo storage.

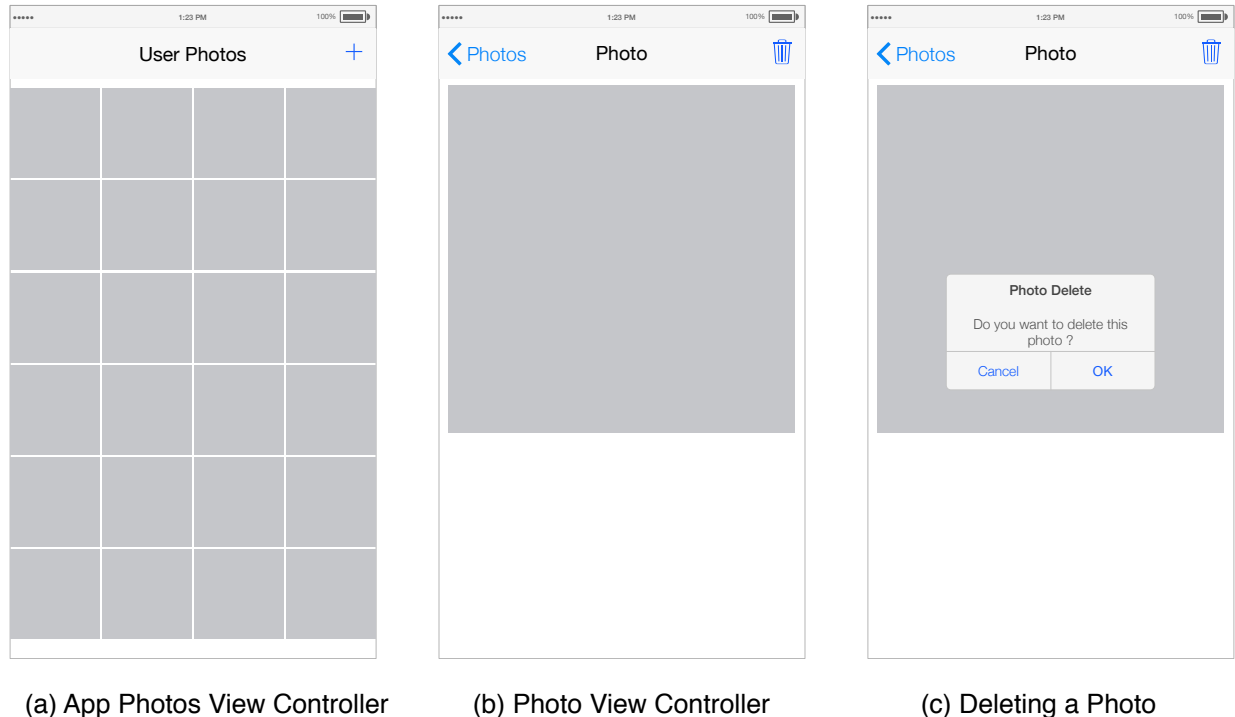


Figure 1, App Wireframe

Part 1: User Signup and Login

Your app should implement both login and signup functionalities. You should use Firebase to Store the user's display name, email and password. The requirements are similar to the authentication requirements used in the previous in-class assignment.

Part A: User Photos View Controller (75 Points)

The User Photos view controller should retrieve the list of photos for the currently logged in user from Firebase and display them using a UICollectionView as shown in Figure 1(a). The requirements are as follows:

1. Each user should only view their photos and should not be able to view other users' photos.
2. Clicking the "+" navigation bar button, should enable the user to pick a photo from the Photo Library on the device. You should implement the required delegates to enable the use of a UIImagePickerController. You should restrict the UIImagePickerController to only photos. Upon selecting a photo from the Photo Library, this photo should be sent to Firebase and the UICollectionView should be refreshed to display the new photo.

3. Clicking a event in the UICollectionView item should navigate to the Photo view controller. As shown in Figure 1(b).
4. All photo access should be performed in a child thread (not the main queue).

Part B: Photo View Controller (25 Points)

The Photo view controller enables the user to view the photo selected from the User Photos view controller. In addition, it allows the user to delete the this photo from Firebase. The requirements are as follows:

1. The photo meta data should be sent by the User Photos view controller to the Photo view controller and the photo should be displayed, Figure 1(b).
2. Clicking the trash can navigation icon should delete the currently displayed photo from Firebase, see Figure 1(c)
 - a) Display an alert dialog to ask if the user is sure about deleting the current photo, if the user clicks OK then the photo file should be deleted from Firebase.
 - b) If the photo is successfully deleted then automatically navigate back to the User Photos view controller and refresh the collection view of photos to reflect this change.