ITIS/ITCS 4180/5180 Mobile Application Development
In Class Assignment 3

Basic Instructions:

1. In every file submitted you MUST place the following comments:
    a. Assignment #.
    b. File Name.
    c. Full name
2. Each team is required to submit the assignment on Canvas.
3. Please download the support files provided with this assignment and use them when implementing your project.
4. Submission details:
    a. Compress the contents of your project folder. The file name is very important and should follow the following format: **Group#_InClass03.zip**
    b. Only one group member is required to submit on behalf of the whole group.
    c. You should submit the assignment through Canvas: Submit the zip file.
5. **Failure to follow the above instructions will result in point deductions.**

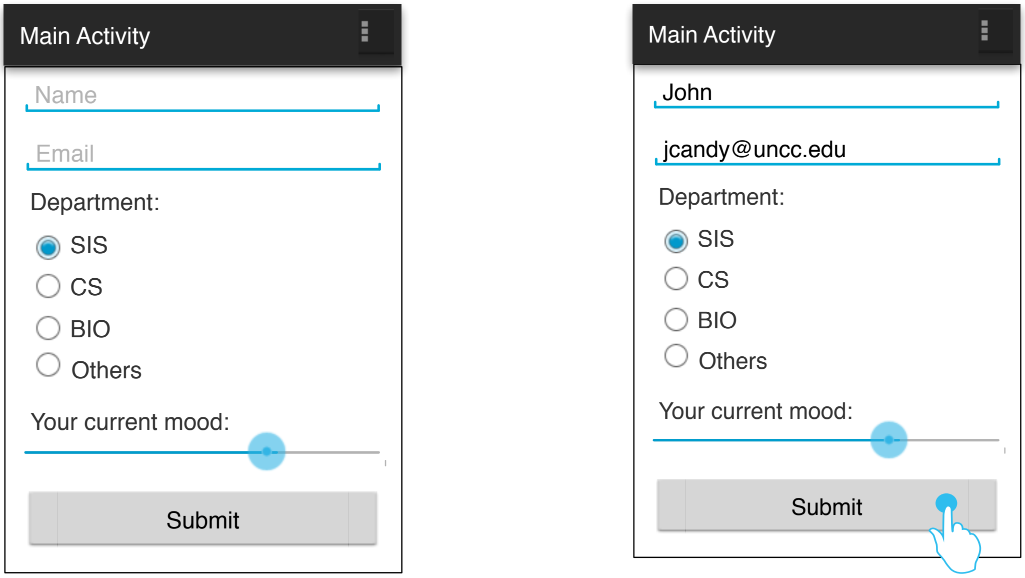
In Class Assignment 3 (100 Points)

In this assignment you will get familiar with intents and how to pass data between multiple activities. You are required to develop an “Student registration form” application that enables a new student to enter and edit their information.

Important App Requirements:

1. The required Android Virtual Device (AVD) should have **minimum SDK version set to 15 and target SDK at 25**.
2. You will be using layout files, and strings.xml to create the required user interfaces. The layout XML file can be modified through the raw xml, or through the GUI tools provided within eclipse.

This assignment is composed of three activities namely: Main Activity, Display Activity and Edit Activity.



Name

Email

Department:

● SIS
○ CS
○ BIO
○ Others

Your current mood:

John

jcandy@uncc.edu

Department:

● SIS
○ CS
○ BIO
○ Others

Your current mood:

(a) Main Activity

(b) Clicking Submit button

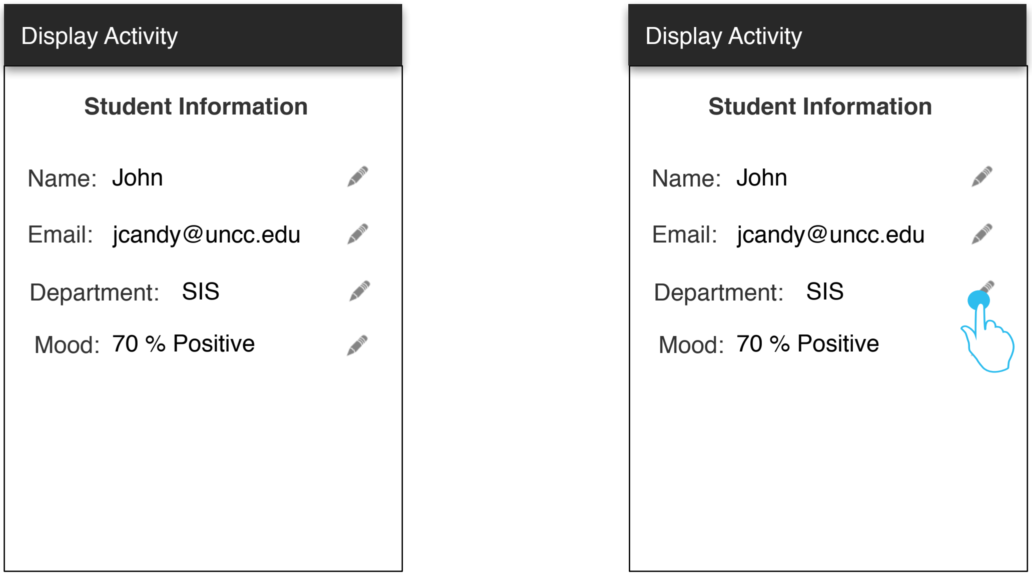
Figure 2, Main Activity

Part 1 (30 Points): Main Activity

This is the main launching activity where the user enters their information. The interface should be created to match the user interface (UI) presented in Figure 2. To build the UI, please follow the following tasks:

1. Use the following components
   - EditText for name and email address
   - Radio buttons for your department (SIS, CS, BIO, Others)
   - Seek Bar for current mood
   - Button for the submitting information

2. Create a **Student** class consisting of five variables: name, email address, department, account state, and mood. The Student class should implement the Serializable or Parcelable interface.
3. Upon clicking the submit button, the information should be retrieved from the form and populated in a Student object. If there are any missing entries, the user should be alerted by displaying a Toast message. If all the entered information is complete, create an ***explicit intent***, start the Display Activity and pass the **Student object** as part of the ***extras***.



Display Activity

Student Information

Name: John

Email: jcandy@uncc.edu

Department: SIS

Mood: 70 % Positive

(a) Display Activity

Display Activity

Student Information

Name: John

Email: jcandy@uncc.edu

Department: SIS

Mood: 70 % Positive

(b) Clickable edit icon

Figure 3, Display Activity

Part 2 (40 Points): Display Activity

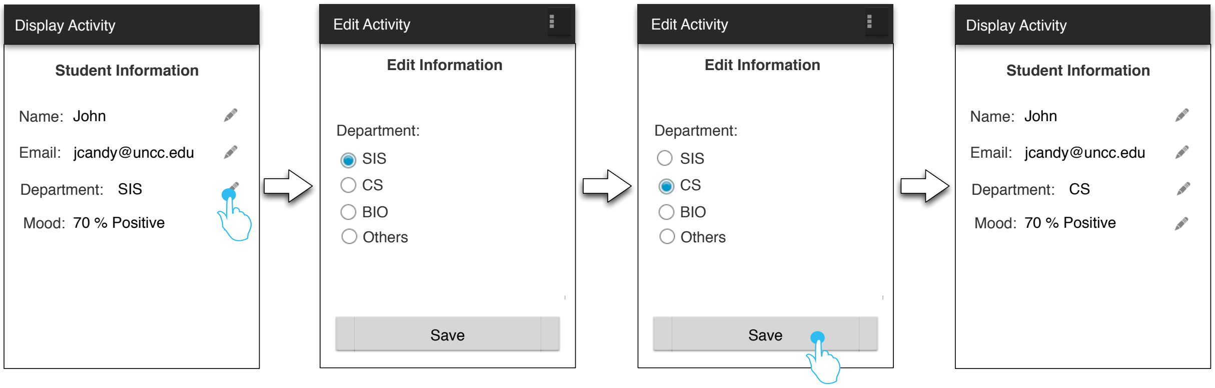
This activity displays the student information entered in the Main Activity and allows the user to select which information item to edit. The interface should be created to match the user interface (UI) presented in Figure 3. To build the UI, please follow the following tasks:

1. This activity is started by the Main Activity. When the Display Activity is created it should retrieve the Student object sent from the Main Activity in the intent's extras.
2. Display the student information as shown in Figure 3(a). Note that beside each displayed item there is an edit icon (ImageView). Clicking the edit icon beside an information item should start the Edit Activity (See Figure 3(b)). You are provided with the edit icon image. Perform the following requirements:
   a. The Edit Activity should be started using an ***implicit intent***. Send all the required information to the Edit Activity using ***extras***.
   b. The Edit Activity should be ***started for result***, as it is expected to send back the edited information to the Display Activity. Upon receiving a result from the Edit Activity, the Display Activity should update the displayed student information to reflect the edited information.

Part 3 (30 Points): Edit Activity

This activity enables the user to edit the information item selected in the Display Activity and should send back the updated information to the Display Activity. The interface should be created to match the user interface (UI) presented in Figure 4. To build the UI, please follow the following tasks:

1. This activity is started by the Display Activity. When the Edit Activity is created, it should retrieve the information sent from the Display Activity and display the required interface based on the sent information.
2. The Edit Activity should be designed to look similar to the Main Activity. However, only the component related to the information to be edited should be visible and all the other components should be invisible. Figure 4, shows the application expected flow, as the user clicks the Department edit icon in the Display Activity, it starts the Edit Activity which displays Department label and and radio buttons showing the current selection (Java). The rest of the components are invisible. The user is able to edit the information, and then presses the save button, which sends the result to the Display activity and finishes the Edit Activity. The Display activity updates the displayed information to reflect the change in department.
3. Similarly if the current mood is the selected information to be edited, then the Edit Activity should make the seek bar and its label visible and everything else invisible.



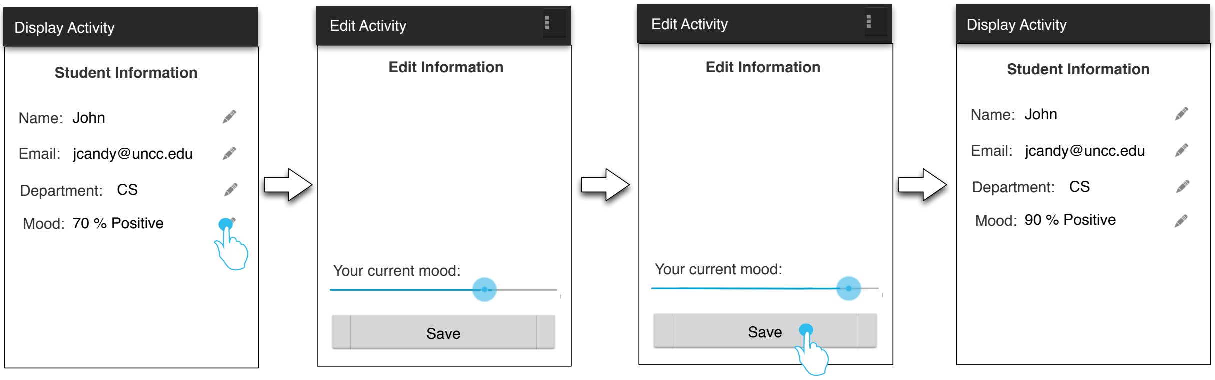
Display Activity
Student Information
Name: John
Email: jcandy@uncc.edu
Department: SIS
Mood: 70 % Positive

Edit Activity
Edit Information
Department:
● SIS
○ CS
○ BIO
○ Others
Save

Edit Activity
Edit Information
Department:
○ SIS
● CS
○ BIO
○ Others
Save

Display Activity
Student Information
Name: John
Email: jcandy@uncc.edu
Department: CS
Mood: 70 % Positive

Figure 4, Editing the department



Display Activity
Student Information
Name: John
Email: jcandy@uncc.edu
Department: CS
Mood: 70 % Positive

Edit Activity
Edit Information
Your current mood:
Save

Edit Activity
Edit Information
Your current mood:
Save

Display Activity
Student Information
Name: John
Email: jcandy@uncc.edu
Department: CS
Mood: 90 % Positive

Figure 5, Editing the current mood