BCA – 605 Course   Title: Android Programming Lab Course I

Total Contact Hours: 48 hrs.   Total Credits: 04

Total Marks: 100

Note that these are only sample assignments. Teachers may conduct practicals by preparing similar types of examples
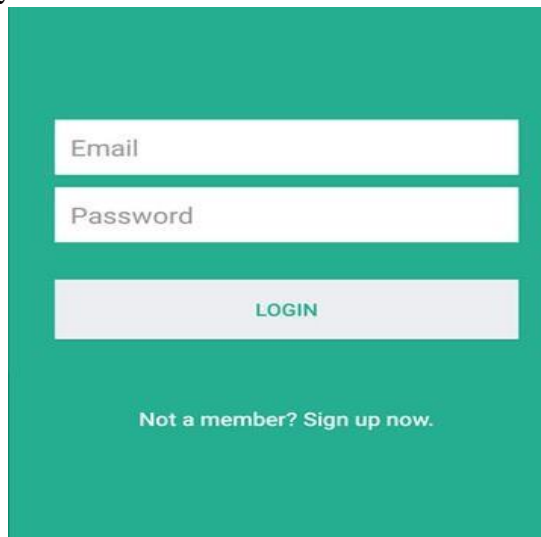
Sample Assignments on Android Programming

Assignment 1: Introduction to Android

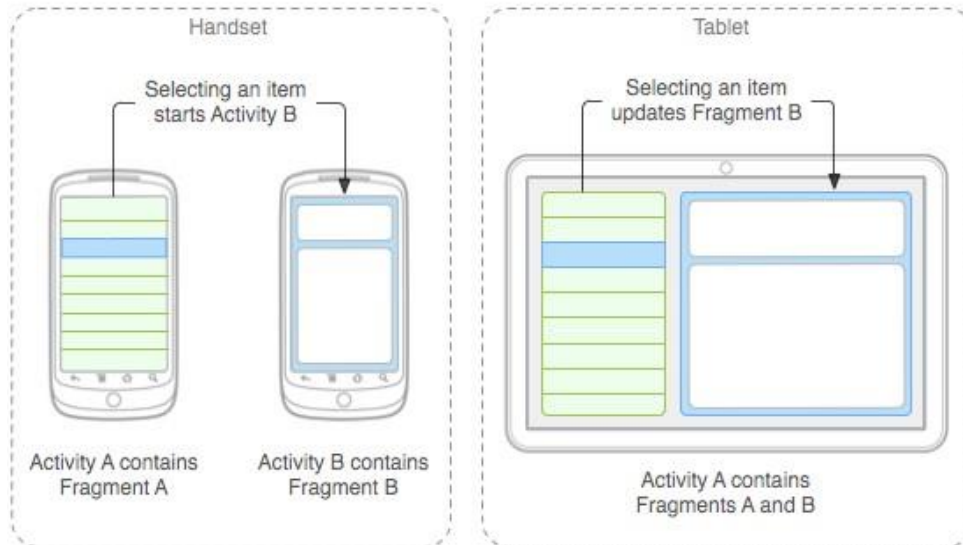1. Install Android Studio and build simple Hello World application.

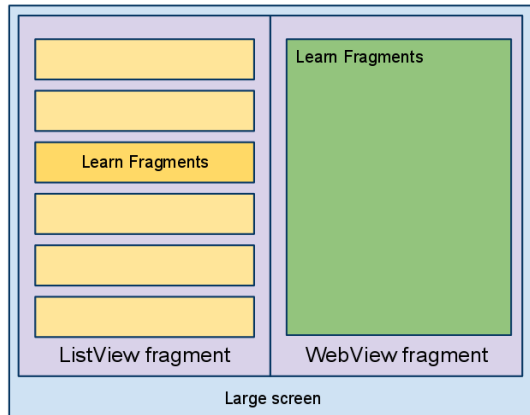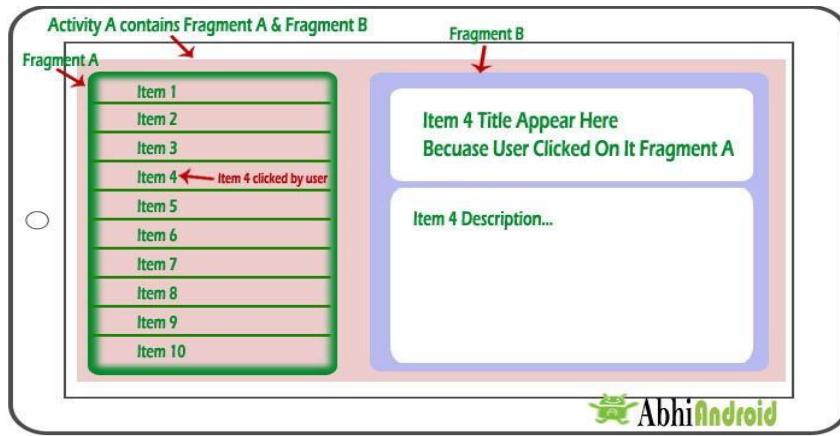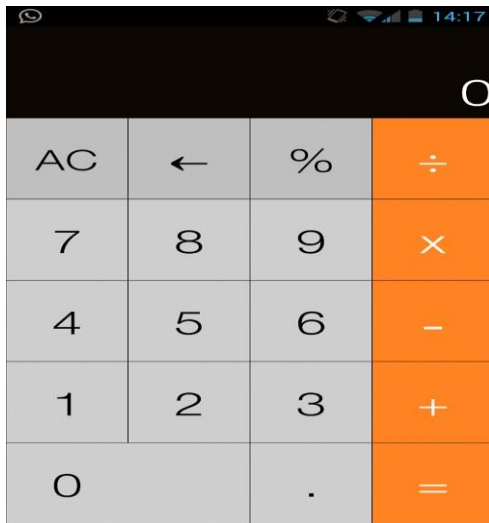### Assignment 2: Activities, Fragments and Intents

1. Design Login Activity shown below.

2. Create application to display details of selected list item on second activity (Use Fragmentation).

Activity A contains Fragment A & Fragment B

Fragment A

Fragment B

| Item 1 |
| Item 2 |
| Item 3 |
| Item 4 ← Item 4 clicked by user |
| Item 5 |
| Item 6 |
| Item 7 |
| Item 8 |
| Item 9 |
| Item 10 |

Item 4 Title Appear Here
Becuase User Clicked On It Fragment A

Item 4 Description...

AbhiAndroid

Learn Fragments

Learn Fragments

ListView fragment   WebView fragment

Large screen

Handset

Selecting an item
starts Activity B

Activity A contains
Fragment A

Activity B contains
Fragment B

Tablet

Selecting an item
updates Fragment B

Activity A contains
Fragments A and B

3. Create first activity to accept information like first name, last name, date of birth, email-id and display all information on second activity when user click on submit button.

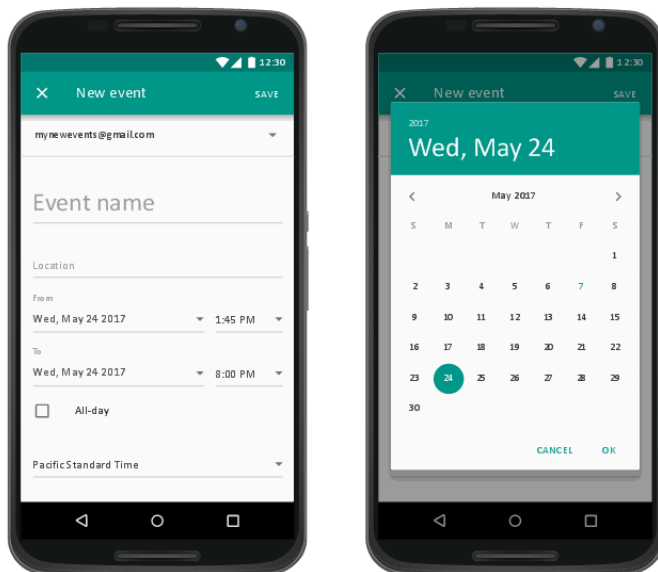## Assignment 3: Android User Interface and Event Handling

1. Create the simple calculator shown below. Also, perform appropriate operations.

2. Create application to calculate GPA.
3. Create chat application.

Assignment 4: Designing Your User Interface with Views

1. Create a custom "Contact" layout to hold multiple pieces of information, including:
   Photo, Name, Contact Number, E-mail id.
2. Create application to demonstrate date and time picker.

Assignment 5: Displaying Pictures and Menus

1. Construct an app that toggles a light bulb on and off when the user clicks on toggle button.
2. Create application as shown below.

3. Create gallery application to display all images date wise (Use Grid View).

Assignment 6: Databases – SQLite

1. Create login activity (referAssignment 2 Example 1). If Email and password matches with database display "login successful" message else display error message.
2. Construct a simple notes list that lets the user add new notes but not edit them. Demonstrates the basics of ListActivity.Use a SQLite database to store the notes.
3. Create tables: Course (id, name, instructor) and Student (id, name).
   Course and Student have a many to many relationship. Create a GUI based system for performing the following operations on the tables:
   1. Course: Add Course, View All students of a specific course
   2. Student: Add Student, Delete Student, View All students, Search student

Assignment 7: Messaging and E-mail

1. Create application to send and receive messages.
2. Create application to send email with validation.
3. Create application to send email with attachment.

Assignment 8: Location-Based Services and Google Map

1. Write a program to find the current location of an Android device and display details of the place like Street name, city with Geocoding.
2. Write a program to track android device usingGoogle Maps.
3. Write a program todraw path along a route in Google map.