

**Due:** Feb 15 at 23:59

**Points:** 130

**Objectives**

Use some basic UI widgets  
Use Intents to call other Activities  
Handling the Keyboard  
Using Fragments

**UI Sampler**

You will be trying out a number of different UI elements. The combination of elements does not make much sense as an app, but does give you experience with more UI elements. You do not need different layouts for landscape and portrait views.

This assignment will have a number of different activities. The first (main) activity contains a spinner, a button, a list fragment (the same list fragment defined in the List Activity) and an EditText field. The spinner contains a list of activities one can select. When the user selects the option and then clicks on the button the selected activity becomes the active activity. The contents of the text field are sent to the next activity. Use descriptive names in the spinner for your activities. Class names are not meaningful to app users. Each section below describes an activity that the user can go to.

**Date Activity**

The date activity shows a date picker. When the user selects a date, display a dialog confirming the choice. If user confirms the choice then save the date in permanent storage. When the user restarts the app the date picker should display the last selected date. When the user goes back to the first (main) activity the date should show it the EditText field.

**Keyboard Activity**

This activity's view has three EditText fields. One at the top of the screen, one in the middle of the screen and one at the bottom of the screen. The top EditText field should contain the text sent from the first (main) activity. There is also two buttons. One labeled "Hide" and the other labeled "Back". The "Back" button when tapped goes back to the first (main) activity. Note creating a new version of the first activity and going to it is not the same as going back to the existing activity. When the user taps on one of the EditText fields the soft keyboard appears. When the user taps on the "Hide" button the soft keyboard disappears. One problem with the soft keyboard is that it can cover up part of the screen. In this case it will hide the field on the bottom of the screen. Your activity should have the view pan up when the soft keyboard is shown and the focus is in the bottom EditText field.

**List Activity**

This activity has a list fragment and a back button. The list contains the of deserts given below. The same list fragment appears in the first (main) activity. The user can select one item in the list. When the user taps on the back button the app goes back to the first (main) activity. The desert selected in the List Activity should be selected in the first activity. If the user selects a desert on the first (main) activity then it should be selected when the user goes to the List Activity.

Cupcake  
Donut  
Gingerbread  
Ice Cream  
Jelly Bean

### Extra Credit

1. Enable the application icon in the action bar to take the user back to the first (main) activity. Make sure that the app goes back to the first activity and not create a new instance of the first activity. If the app is displaying a one of the other activities, that activity needs to be destroyed when you go back to the first activity.
2. Add items to the Action Bar to allow the user to select which activity to go to.
3. Enable the split action bar.
4. Add a context menus for deserts.

### Grading

The assignment will be graded as follows:

Points	Item
30	Main View (Spinner, Can go to next activity, Pass Data to next activity)
30	Keyboard Activity works correctly (Panning, back, hide, field contains data from first activity)
30	Date Activity
10	Saving date data permanently and retrieving the data
30	List Activity works correctly (List items correctly and send selected item back to main activity, uses Fragments)
5	Back in Action Bar (Extra Credit)
5	Select Activities in Action Bar (Extra Credit)
5	Split Action Bar (Extra Credit)
5	Context menus (Extra Credit)

### **What to turn in**

Zip your Eclipse project and upload it to the course portal. Turn in your assignment at: <http://bismarck.sdsu.edu/CoursePortal>. There is a link to that site in the assignment section of the course Blackboard site. You will need to create a password for the assignment site the first time you use it. Once you have logged on to the site select the assignments tab.