CS 4985 – Fall 2013
Assignment 1, 20 pts.
Due: Friday, Sept. 6th at 9a.

Objectives

- Create a multi-activity application in Android by extending Lab 1.
- Be able to create and invoke separate Activities.
- Be able to display and use simple UI widgets.
- Be able to display a simple image on the interface.
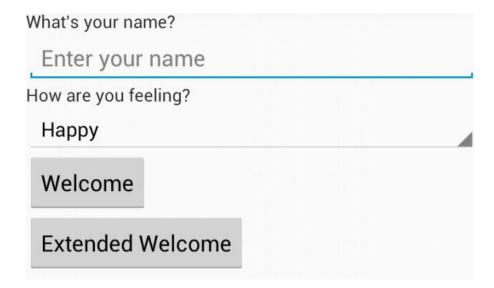
Specifications

A. Getting Started

1. Your Lab1 will be used as the starting point for this homework. If you did not successfully complete the Lab 1 exercise, you need to fix the issues in that exercise before beginning this assignment.

2. Modify Lab 1 as follows:

   a. Refactor the Eclipse project name to be: YourNameAssignment1

   b. Refactor the package name to be:
      edu.uwg.*firstInitiallastName*.android.**assignment1**

   c. In the strings.xml file change the app_name to be:

      A1: Welcome by *Firstname Lastname*

B. Add the following functionality to the project

1. Modify the UI of the GetUserNameActivity as follows:

   a. Add a text view and a Spinner widget that allows the user to select one of five states for how the user is feeling.

      1. The states to choose from are: Happy, Sad, Angry, Frustrated, Excited.

   b. Modify the OK button to display: Welcome.

   c. Add another button that displays: Extended welcome.

Two screen captures of the new GetUserNameActivity are below.

UI with the spinner selection active.

2. Add a new Activity class that will be invoked when the user invokes the Extended welcome button. You can name this activity whatever you wish. I will refer to this class as the "ExtendedWelcomeActivity" throughout the rest of these specifications.

    a. The UI for this activity class should display a TextView and an ImageView.

    b. The text to display in the TextView is specified in Step 3. below.

    c. The ImageView should display a smiley face, something like the following:

       i. You will need to create this image or download an image to use. It doesn't necessarily have to be a smiley face.

3. On the GetUserNameActivity UI when the user invokes the Extended welcome button it should invoke the "ExtendedWelcomeActivity" defined in step B.2 and display the following:

    a. If the user selected Happy or Excited in the spinner, then it should display the following message:

    I'm glad to hear that you are having a good day. I hope the picture below will further brighten your day.

    b. If the user selected Sad, Angry, or Frustrated in the spinner then is should display the following message:

    I'm sorry you are not having a good day. Maybe the following picture will cheer you up.

4. On the GetUserNameActivity UI when the user invokes the Welcome button it should invoke the activity that displays Hello, user. (The same activity that was invoked with the OK button in Lab 1.) For this activity, add the following functionality:

   a. Add to the output so that is will display the users feeling status. Example output:

   Hello, Droid
   Feeling: Excited

Hints/suggestions

- To create the smiley face as a drawable resource do the following:

  o In the resource folder create a new: drawable folder.
    - This drawable folder will be used regardless of the screen size and dpi. This way you do not have to create different sizes of the smiley face for the various screen sizes and dpi.
  o In Windows, make a new image file of type PNG of size 128x128. Draw your smiley face and save this file in the res/drawable folder you just created.
    - Refresh the project so the image will display in the res/drawable.
  o When you add the ImageView widget you will be able to select the smiley image resource you created.

- Use a Spinner for the *How are you feeling selection?*

  o Do not use literal values for populating this. Create a string array resource and load the values from it to your spinner control.

- Remember you can add more than one item (another *<key>*, *<value>* pair) to the Bundle to send additional information to an Activity.

Grading breakdown

- 3 pts. – The GetUserNameActivity interface is invoked first and correctly displays the specified controls and they are populated correctly.
- 3 pts. – The "ExtendedWelcomeActivity" displays the specified UI widgets.
- 3 pts. – The Extended welcome button invokes the "ExtendedWelcomeActivity".
- 4 pts. – In the "ExtendedWelcomeActivity" the welcome message correctly changes based on what feeling was selected in the GetUserNameActivity interface.
- 2 pts. – All the UI text is defined as a String resource in strings.xml.
- 2 pts. – Simple welcome button invokes the activity that just displays Welcome, user message and displays the correct feeling status.
- 2 pts. – Clean coding practices used, including meaningful class, method, and variable names; use of private helper methods; complete javadoc class and method headers for all public methods.
- 1 pt. – Correct filename for submission.

Submission

Export your project in Eclipse, naming the archive file *FirstnameLastName*Assignment1.zip, e.g., JohnDoeAssignment1.zip and submit the file in Moodle by the due date.