

CIS472/594: Android Programming

Homework 1 - Your First Activity

Due Date: February 2, 11:59pm

Your first activity! You are going to become comfortable with LinearLayout and RelativeLayout discussed in class.

SUBMISSION INSTRUCTIONS

1. Please submit your whole project as a .zip file on BlackBoard.
2. Demo to me after class or in office hours.

REQUIREMENTS

Version - your app should work for Android 4.0.3 or above (Minimum API 15)

Layout

- Create a form that mimics the one designed at the bottom of this document.
 - You must create the form in all of the following 2 Layouts
 - LinearLayout
 - RelativeLayout
 - Create a separate XML Layout file for each one. For example
 - res/layout/linear.xml
 - res/layout/relative.xml
 - **Don't make 2 different projects!**
 - Remember, setContentView allows you to set the layout. You will submit your assignment with **setContentView(R.layout.linear)**, which will load your UI designed using LinearLayout. I should be able to change that line to **setContentView(R.layout.relative)** so that it will load your UI designed using RelativeLayout.
 - **You can have any other layout in all 2 Layout files, as long as you use**
 - LinearLayout as the main/root layout for linear.xml
 - RelativeLayout as the main/root layout for relative.xml

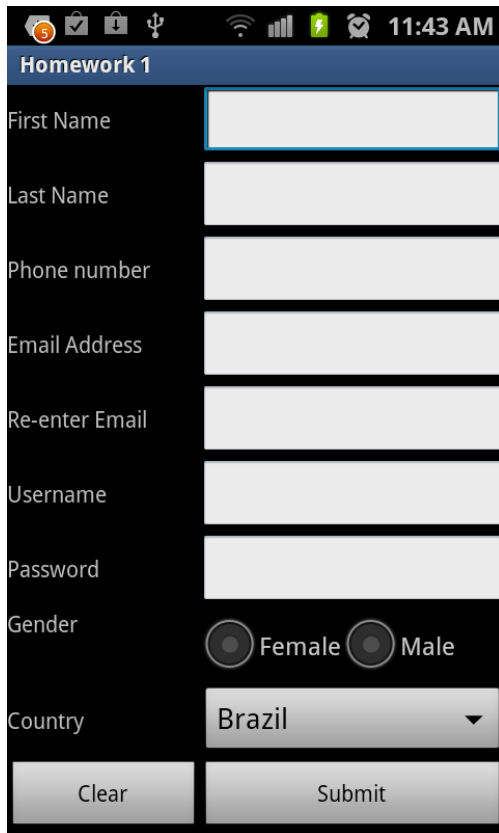
- There will be 2 buttons at the bottom of the form
 - Clear
 - Display a Toast saying “Fields are cleared”
 - The Spinner doesn’t need to do anything when this button is pressed, but if you want to do something with it that’s fine.
 - Submit
 - Display a Toast saying “Input submitted”
- The input type of the edit text boxes for each entry of the form must go as follows.

First/Last name	Capitalize first Character of each word
Phone number	Restrict soft keyboard to numbers
Email Address	Input type for email addresses
User name	No need to change anything
Password	When typing shows ***
Confirm Password	When typing shows ***
Gender	Should only be able to select either one
Country	Should be able to select from a list

- All fields are required.
- The view should scroll if it can’t fit on the screen entirely

EXAMPLE

You don't have to make it look exactly like this one. This is just the general idea. Many of you will have slightly different layouts and that's OK.



The screenshot shows a mobile application interface with a dark blue header bar containing the title "Homework 1". Below the header, there is a form with the following fields: "First Name", "Last Name", "Phone number", "Email Address", "Re-enter Email", "Username", "Password", "Gender" (with radio buttons for "Female" and "Male"), and "Country" (a spinner showing "Brazil"). At the bottom of the form are two buttons: "Clear" and "Submit". The status bar at the top of the screen shows the time as 11:43 AM and various system icons.

Extra Credit (20 points)

- For the 2 buttons at the bottom of the form if a user clicks:
 - Clear (5 points)
 - Clears all the edit text boxes and removes selection of radio group.
 - The Spinner doesn't need to do anything when this button is pressed, but if you want to do something with it that's fine.
 - Submit (5 points)
 - Checks if emails match.
 - Checks if passwords match.
 - Checks if username already exists. You can do this by Add this to your strings.xml folder

```
<string-array name="usernames">
  <item>Bryan</item>
  <item>John</item>
  <item>Matt</item>
  <item>Mike</item>
</string-array>
```

- Have a toggle button that switches between your Layouts, in a certain order (e.g. From Linear to Relative, then back to Linear) (5 points)
- Have a default value for Country (e.g. America or “None”), and have it reset to the default value when Clear is pressed (5 points)

GRADING

1. Each label is worth 1 point.
2. Each EditText is worth 2 point.
3. The Spinner is worth 7 points.
4. Each button is worth 5 points including android:onClick() attribute and the responding method.
5. The RadioGroup and RadioButton is worth 10 points
6. ScrollView is worth 10 points
7. LinearLayout is worth 20 points
8. RelativeLayout is worth 20 points