

## Week 5 Workshop Activity

### Preferences

**Objectives** of Workshop 5:

1. Shared preferences
2. Build a UI containing a recycler view

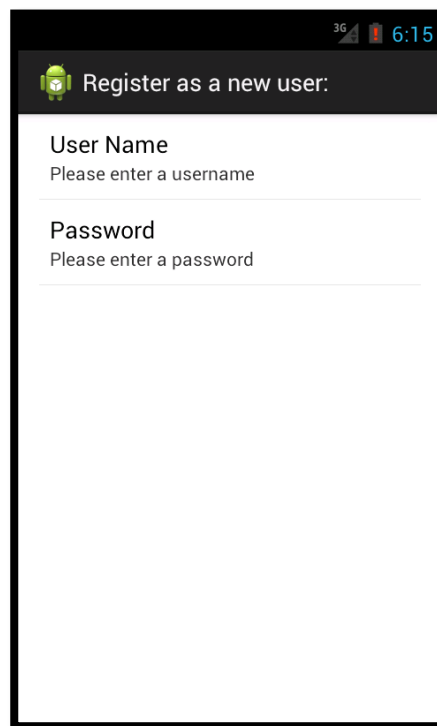
#### 1. Adding User Preferences

Resources for this exercise are this week's lecture (Lecture 5), the posted web links at the end of lecture slides and the sample codes posted on Canvas.

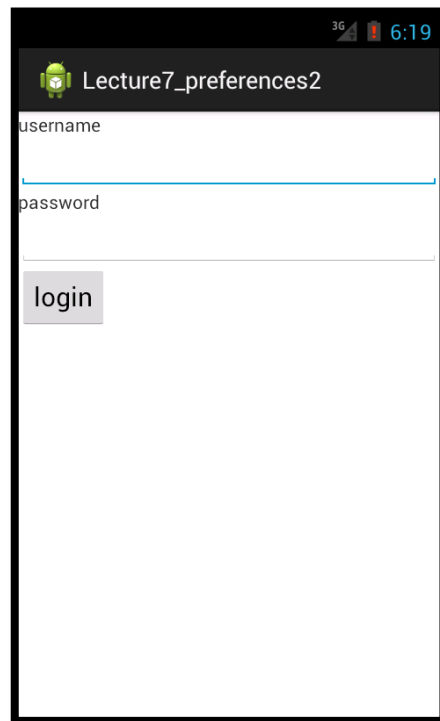
The goal is to add a login page (with username and password) and settings activity into an application.

If the user accesses the application for the first time, they should be presented with a screen asking them to enter a username and password.

Figure 1



If there is login information already existing in the preference xml resource file, then the user should be presented with a login page:



The username and password entered by the user will be compared with the data in the preferences file, and if there is a match, the login button lets the user access another activity – settings activity.

The settings activity displays a welcome message: “Welcome [username]”. This activity lets the user set the background color, text color and text size. These settings should be saved as shared preferences. When the user logs in, the “Welcome [username]” message should be displayed with text having the color and size as set in preferences. Also, the background color should be the color saved in preferences.

If data entered by user does not match the info saved info on file, the user should be asked to create a new username and password, by showing the ‘Register as a new user’ screen, same as in Figure 1 above.

## **2. Recycler View**

Build a new application that uses a RecyclerView to display a list of items as a scrollable list and associate click behaviors with the list items. The data for the RecyclerView should be a list of 30 similar items of your choice – e.g., names of people, geographical locations, universities, etc.

Each item should be displayed in a row, showing the name of the item in a TextView or EditText and an image in an ImageView.

When the user taps an item in a row, a Toast should appear with the name of the item clicked, and also a new activity should open with detailed information corresponding to the clicked item.