

Lab 8.2 – Preferences

Overview:

In this lab you create an activity for allowing the user to enter application Preferences.

Step	Description
1.	Create a new preference layout. The layout will allow the user to enter their user name. For now, you don't need to validate the name.
a.	<p>Create a new folder called “xml” in the “res” directory. Create a new xml file called “preferences.xml” in “res/xml”. It should look like the following:</p> <pre><?xml version="1.0" encoding="utf-8"?> <PreferenceScreen xmlns:android="http://schemas.android.com/apk/res/android" > <EditTextPreference android:key="PREF_USERNAME" android:summary="Enter your user name" android:title="Username" /> </PreferenceScreen></pre> <p>Note: Are there any strings in the above code that you could externalize in “strings.xml”?</p> <p>Optional: Add some additional preference fields. There are many different kinds of preference fields. See the direct and indirect subclass of “Preference” to see them all. You may want to research the following links:</p> <p>developer.android.com/reference/android/preference/Preference.html</p> <p>developer.android.com/resources/samples/ApiDemos/res/xml/preferences.html</p>
2.	Create new preference activity. This activity will display the preferences and allow the user to change them.
a.	<p>Create a new class in the package “com.garagze” called “Preferences.java” and make it a subclass of “PreferenceActivity”. Register the preference layout by calling the “addPreferenceFromResource” method with the id for your preference layout.</p> <pre>public class Preferences extends PreferenceActivity { @Override public void onCreate(Bundle bundle) { super.onCreate(bundle); addPreferencesFromResource(R.xml.preferences); } }</pre>
3.	Add the preference activity to the manifest.
a.	<p>Open the file “AndroidManifest.xml”</p> <p>Add the following element to the application tag.</p>

	<pre> <activity android:name=".Preferences"> </activity> </pre>
4.	<p>Change the menu in the MainActivity so that the preference activity is started when the user clicks the “Prefs” menu. Item.</p>
a.	<p>Add the following code to the “showPrefs” method in the “MainActivity.java” file.</p> <pre> Intent intent = new Intent(this, Preferences.class); startActivity(intent); </pre> <p>Run the application. Press the Menu button and select “Prefs”. The preferences activity should appear.</p>
5.	<p>Now that you have allowed the user to save a preference value, you should use it in the application. One way of using it would be to display the user name in the MainActivity.</p>
a.	<p>Add a new TextView element to the layout for the MainActivity in “res/layout/main.xml”.</p> <pre> <TextView android:id="@+id/userName" android:layout_width="fill_parent" android:layout_height="wrap_content" /> </pre>
b.	<p>In “MainActivity.java” find the value for the user name and display it. Add the following code to the top of the “displayListView” method.</p> <pre> SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(this); String defaultValue=""; String userName = prefs.getString("PREF_USERNAME", defaultValue).trim(); Log.v(TAG, "Username: " + userName); TextView userNameView = (TextView) findViewById(R.id.userName); if (userName.equals("")) { userNameView.setVisibility(View.INVISIBLE); } else { userNameView.setVisibility(View.VISIBLE); userNameView.setText(userName); } </pre>