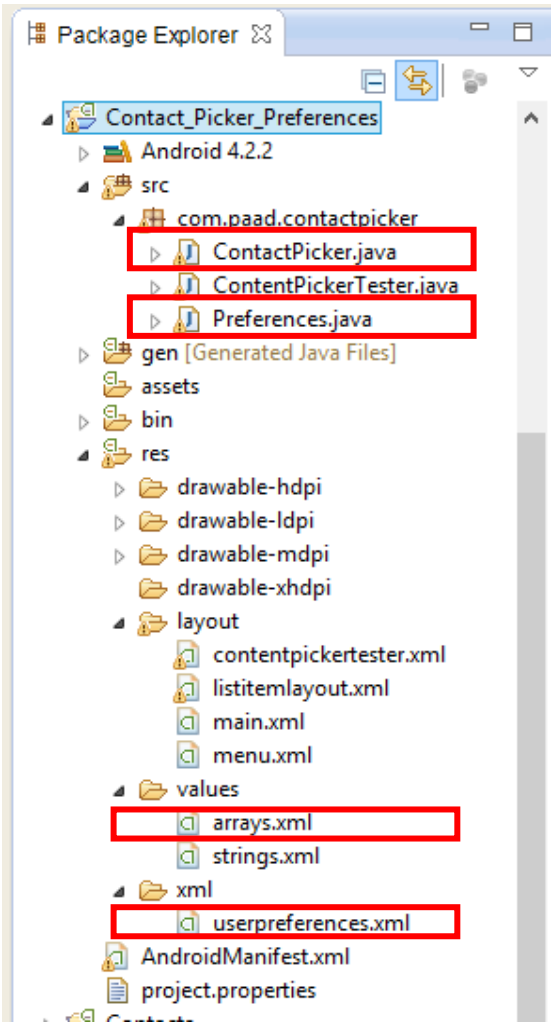
Manisha Vyas

Question :

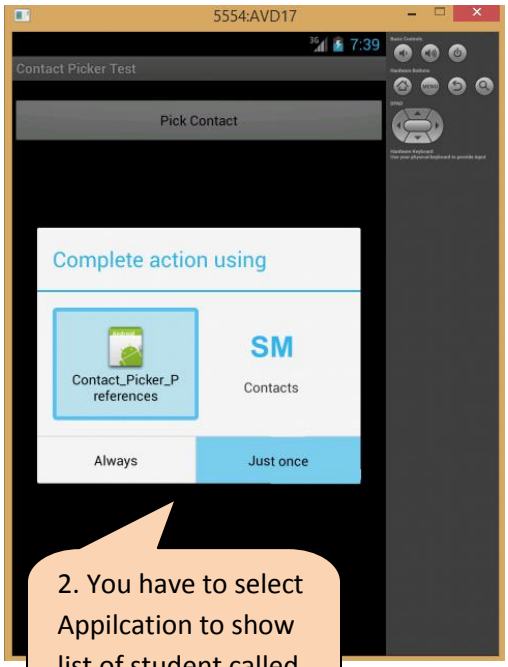
Please modify Select a Contact example discussed in the Intent chapter to provide a shared preference based on Standard Application Settings Framework .

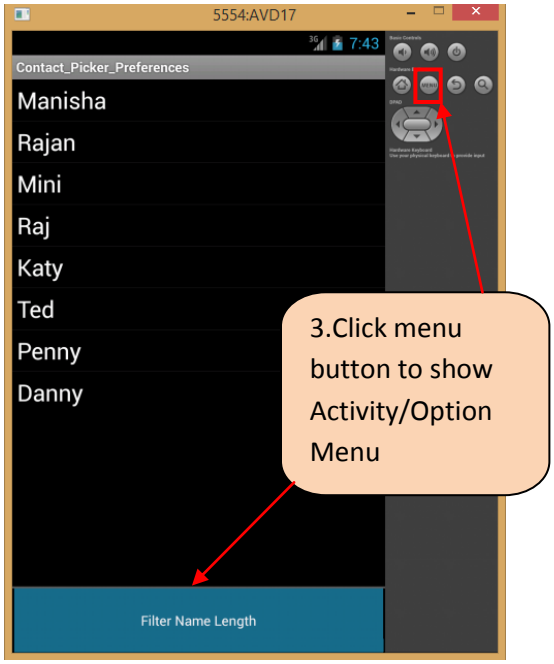
The preference lets the users to display the contact names based on the length of the names. For example, only names longer than 5 characters are displayed.

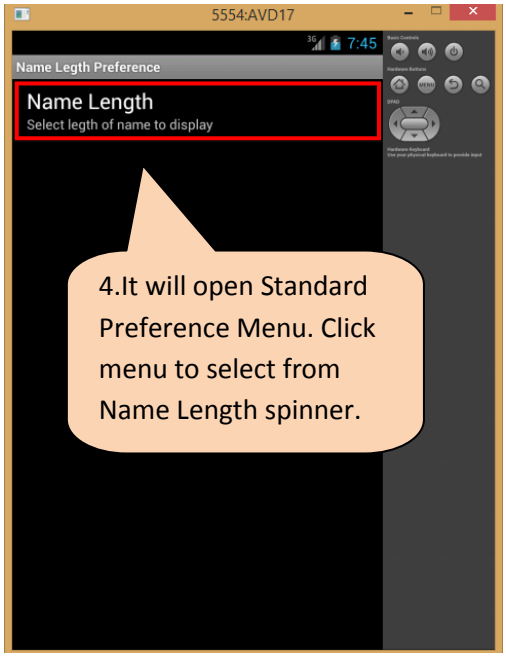


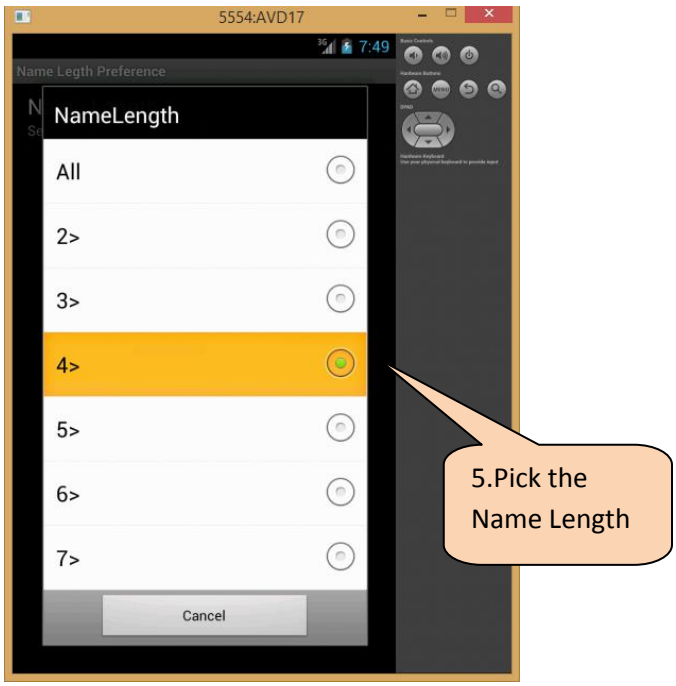
We will be mainly working and modifying these Files

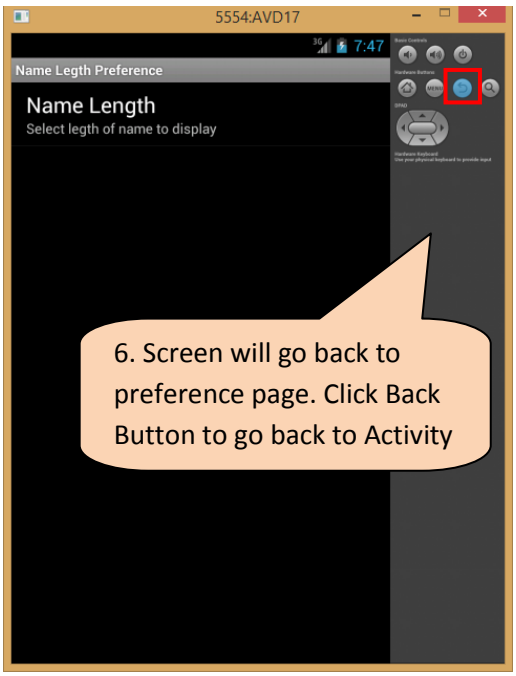
5554:AVD17
7:38
Contact Picker Test
Pick Contact
1. Click Pick Contact


5554:AVD17
7:39
Contact Picker Test
Pick Contact
Complete action using
Contact_Picker_P
references
SM
Contacts
Always
Just once
2. You have to select Appilcation to show list of student called by Implicit Intent.

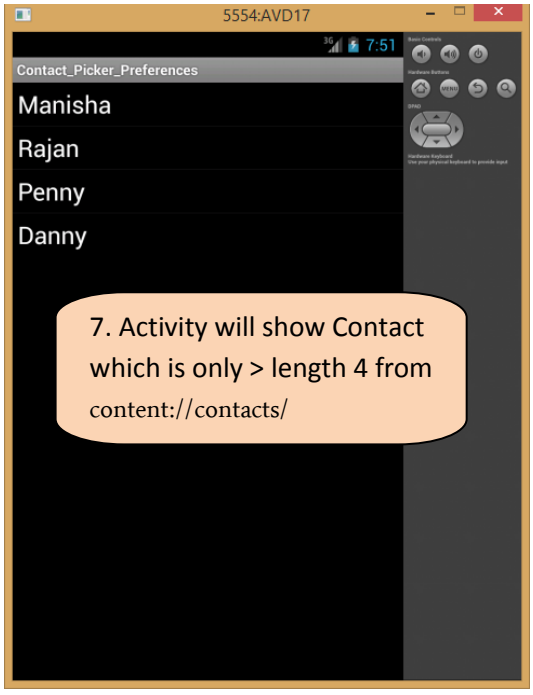

5554:AVD17
7:43
Contact_Picker_Preferences
Manisha
Rajan
Mini
Raj
Katy
Ted
Penny
Danny
3.Click menu button to show Activity/Option Menu
Filter Name Length


5554:AVD17
7:45
Name Legth Preference
Name Length
Select legth of name to display
4.It will open Standard Preference Menu. Click menu to select from Name Length spinner.


5554:AVD17
7:49
Name Legth Preference
NameLength
All
2>
3>
4>
5>
6>
7>
Cancel
5.Pick the Name Length


5554:AVD17
7:47
Name Legth Preference
Name Length
Select legth of name to display
6. Screen will go back to preference page. Click Back Button to go back to Activity

.


5554:AVD17
7:51
Contact_Picker_Preferences
Manisha
Rajan
Penny
Danny
7. Activity will show Contact which is only > length 4 from content://contacts/

Step:1 Create res>xml> userpreference.xml

```
<?xml version="1.0" encoding="utf-8"?>
<PreferenceScreen
  xmlns:android="http://schemas.android.com/apk/res/android">

  <ListPreference
    android:key="PREF_NAME_LEN"
    android:title="Name Length"
    android:summary="Select legth of name to display"
    android:entries="@array/name_length"
    android:entryValues="@array/name_length_val"
    android:dialogTitle="NameLength"
    android:defaultValue="5"
  />
</PreferenceScreen>
```

Step:2 Create array in res>values>arrays.xml

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
  <string-array name="name_length">
    <item>All</item>
    <item>2></item>
    <item>3></item>
    <item>4></item>
    <item>5></item>
    <item>6></item>
    <item>7></item>
  </string-array>

    <string-array name="name_length_val">
    <item>1</item>
    <item>2</item>
    <item>3</item>
    <item>4</item>
    <item>5</item>
    <item>6</item>
    <item>7</item>
  </string-array>
</resources>
```

Step:3 Create array in res>layout>menu.xml

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">

    <item android:id="@+id/filter_name"
        android:title="Filter Name Length" />

</menu>
```

Step:4 Create Preferences.java

```
//////////This load the userpreference.xml
package com.paad.contactpicker;

import android.content.SharedPreferences;
import android.os.Bundle;
import android.preference.PreferenceActivity;

public class Preferences extends PreferenceActivity {

  public static final String PREF_NAME_LEN = "PREF_NAME_LEN";

  SharedPreferences prefs;

  @Override
  public void onCreate(Bundle icicle) {
    super.onCreate(icicle);
    addPreferencesFromResource(R.xml.userpreferences);
  }
}
```

Dont forget to register this PreferenceActivity in AndroidMenifest.xml

Step:5 Modify ContactPicker.java

```
package com.paad.contactpicker;

import java.util.ArrayList;

import android.app.Activity;
import android.content.Context;
import android.content.Intent;
import android.content.SharedPreferences;
import android.database.Cursor;
import android.net.Uri;
import android.os.Bundle;
import android.preference.PreferenceManager;
import android.provider.Contacts.People;
import android.provider.ContactsContract;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.AdapterView.OnItemClickListener;

public class ContactPicker extends Activity {

        int nameLength = 0;
        private static final int SHOW_PREFERENCES = 1;
```

```
        private static final int PICK_CONTACT = 2;
        final Context context = this;
        Cursor c;
        Uri data ;
        String dataPath ;

       @Override
       public void onCreate(Bundle icicle) {
     super.onCreate(icicle);
     setContentView(R.layout.main);

     Intent intent = getIntent();
     dataPath = intent.getData().toString();


updateFromPreferences();
   }
   @Override
   public boolean onCreateOptionsMenu(Menu menu)
   {
       MenuInflater menuInflater = getMenuInflater();
       menuInflater.inflate(R.layout.menu, menu);
       return true;
   }

public boolean onOptionsItemSelected(MenuItem item) {
     super.onOptionsItemSelected(item);

     switch (item.getItemId())
     {
     case R.id.filter_name:
         Intent i = new Intent(this, Preferences.class);
         startActivityForResult(i, SHOW_PREFERENCES);
         return true;

     default:
         return super.onOptionsItemSelected(item);
     }
   }
   private void updateFromPreferences()
   {
     Context context = getApplicationContext();
     SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(context);

     nameLength = Integer.parseInt(prefs.getString(Preferences.PREF_NAME_LEN, "0"));

         data = Uri.parse(dataPath + "people/");

         c = managedQuery(data, null, null,null, null);

//////////////////////////ONLY This much change in ContactPick.java Class//////////////
//////////////////////////////Which filters all name using Length ////////////////////
           ArrayList<String> newFrom = new ArrayList<String>() ;
         for( c.moveToFirst(); !c.isAfterLast(); c.moveToNext() )
         {
```

Create Option Menu to inflate Preference Menu menu.xml

OnOption Menu item selected Show the preference screen

This method Reloads Contacts from content://contacts/

Result of Preference Screen is modifying selection of NameLength Variable

```
            String name = c.getString(c.getColumnIndex
                                    (ContactsContract.Contacts.DISPLAY_NAME));

            if(name.length()>nameLength)
            {
                  newFrom.add(name);
            }
       }

          ArrayAdapter<String> adapter = new ArrayAdapter<String>
                  (this,R.layout.listitemlayout,R.id.itemTextView, newFrom);

////////////////////////////////////////////////////////////////////////////////
          ListView lv = (ListView)findViewById(R.id.contactListView);
          lv.setAdapter(adapter);

          lv.setOnItemClickListener(new OnItemClickListener() {
            public void onItemClick(AdapterView<?> parent, View view, int pos, long id)
            {
              // Move the cursor to the selected item
              c.moveToPosition(pos);
              // Extract the row id.
              int rowId = c.getInt(c.getColumnIndexOrThrow("_id"));
              // Construct the result URI.
              Uri outURI = Uri.parse(data.toString() + rowId);
              Intent outData = new Intent();
              outData.setData(outURI);
              setResult(Activity.RESULT_OK, outData);
              finish();
            }
          });
  }
  @Override
  public void onActivityResult(int requestCode, int resultCode, Intent data) {
    super.onActivityResult(requestCode, resultCode, data);

      switch (requestCode)
      {
            case(SHOW_PREFERENCES) :
            {
                updateFromPreferences();
                break;
            }
      }
     }

}
```

After returning back from prerence screen update the Contact List.

No Chang in ContentPickerTester.java

```
package com.paad.contactpicker;

import android.app.Activity;
import android.content.Intent;
import android.database.Cursor;
import android.net.Uri;
import android.os.Bundle;
import android.provider.Contacts.People;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.TextView;

public class ContentPickerTester extends Activity {

  public static final int PICK_CONTACT = 1;

  @Override
  public void onCreate(Bundle icicle) {
    super.onCreate(icicle);
    setContentView(R.layout.contentpickertester);

    Button button = (Button)findViewById(R.id.pick_contact_button);

    button.setOnClickListener(new OnClickListener() {
     public void onClick(View _view) {
        Intent intent = new Intent(Intent.ACTION_PICK,
                                   Uri.parse("content://contacts/"));
        startActivityForResult(intent, PICK_CONTACT);
      }
    });
  }

  @Override
  public void onActivityResult(int reqCode, int resCode, Intent data) {
    super.onActivityResult(reqCode, resCode, data);

    switch(reqCode) {
      case (PICK_CONTACT) : {
        if (resCode == Activity.RESULT_OK) {
          Uri contactData = data.getData();
          Cursor c = managedQuery(contactData, null, null, null, null);
          c.moveToFirst();
          String name = c.getString(c.getColumnIndexOrThrow(People.NAME));
          TextView tv = (TextView)findViewById(R.id.selected_contact_textview);
          tv.setText(name);
        }
        break;
      }
    }
  }
}
```

Step6: Register Preference Activity in Androidmenifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
      package="com.paad.contactpicker"
      android:versionCode="1"
      android:versionName="1.0">
    <application android:icon="@drawable/icon" android:label="@string/app_name">
        <activity android:name=".ContactPicker"
                  android:label="@string/app_name">
            <intent-filter>
              <action android:name="android.intent.action.PICK"></action>
              <category android:name="android.intent.category.DEFAULT"></category>
              <data android:path="contacts" android:scheme="content"></data>
            </intent-filter>
        </activity>
        <activity android:name=".ContentPickerTester"
                  android:label="Contact Picker Test">
          <intent-filter>
            <action android:name="android.intent.action.MAIN" />
            <category android:name="android.intent.category.LAUNCHER" />
          </intent-filter>
        </activity>
        <activity android:name=".Preferences"
             android:label="Name Legth Preference">
             </activity>
    </application>
    <uses-sdk android:minSdkVersion="7" />
    <uses-permission android:name="android.permission.READ_CONTACTS"/>
</manifest>
```

Register Preference screen Activity