Populating ListView With DataBase

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**ListView with SQLiteDatabse**

ListView can be populated by ArrayAdapter, Custom Adapter, ArrayList etc  
In this post I will describe how to populate ListView with database.  
  
**Have a look at my previous post**  
[Populating ListView with Custom Adapter](http://learnandroideasily.blogspot.in/2013/06/listview-with-custom-adapter.html)  
[Populating ListView with ArrayList](http://learnandroideasily.blogspot.in/2013/05/populating-listview-with-arraylist.html)  
[ExpandableListView In Android](http://www.learnandroideasily.blogspot.in/2013/07/android-expandablelistview-example.html)  
  
**To learn Basic of Android Animation  go to**  [Android Animation Basics](http://learnandroideasily.blogspot.in/2013/07/how-to-create-animation.html)  
  
If you want to show Items in ListView with Header you should use **[ExpandableListView](http://www.learnandroideasily.blogspot.in/2013/07/android-expandablelistview-example.html)**.  To Learn how to use**[ExpandableListView](http://www.learnandroideasily.blogspot.in/2013/07/android-expandablelistview-example.html)**read my post  **[ExpandableListView In Android](http://www.learnandroideasily.blogspot.in/2013/07/android-expandablelistview-example.html)**

**ListView with DataBase Example**

**In this example I have created a listView  and populated it with DataBAse.**  
Each of the ListView item contain two views  
**TextView SMS Sender** : to show SMS Sender Number  
**TextView SMSBody** : to show the SMS Body/content  
  
Here the ListView shows the all the SMSes with Sender Number and SMSBody.  
  
  
Add the following permission in your manifest file to read the SMS..  
   <uses-permission android:name="android.permission.READ\_SMS"/>  
   <uses-permission android:name="android.permission.WRITE\_SMS"/>

**listview\_activity\_main.xml**

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    android:layout\_width="match\_parent"  
    android:layout\_height="match\_parent"  
    android:background="#D1FFFF"  
    android:orientation="vertical">  
      
      
    <ListView  
        android:id="@+id/listViewSMS"  
        android:layout\_width="fill\_parent"  
        android:layout\_height="fill\_parent"   
        android:dividerHeight="0.1dp"  
        android:divider="#0000CC"  
        >  
    </ListView>  
      
  </LinearLayout>

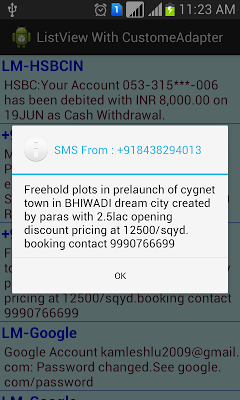
**listview\_each\_item.xml**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    android:layout\_width="match\_parent"  
    android:layout\_height="match\_parent"  
    android:orientation="vertical" >  
  
    <TextView  
        android:id="@+id/textViewSMSSender"  
        android:paddingLeft="2dp"  
        android:textSize="20dp"  
        android:textStyle="bold"  
        android:textColor="#0000FF"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="TextView" />  
  
    <TextView  
        android:id="@+id/textViewMessageBody"  
        android:paddingLeft="5dp"  
        android:textColor="#5C002E"  
        android:textSize="17dp"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="TextView" />  
  
</LinearLayout>  
      
  </LinearLayout>

[[](http://1.bp.blogspot.com/-9WTcq07LSXU/UcvX0kzFoHI/AAAAAAAAAgU/DPIexar8xZQ/s1600/1.png)](http://1.bp.blogspot.com/-9WTcq07LSXU/UcvX0kzFoHI/AAAAAAAAAgU/DPIexar8xZQ/s1600/1.png)

**ListViewWithDatabaseActivity**

public class ListViewWithDatabaseActivity extends Activity   
{  
  
      
        ListView listViewPhoneBook;   
        Context context;  
         @Override  
        protected void onCreate(Bundle savedInstanceState)   
         {  
                 super.onCreate(savedInstanceState);  
                 setContentView(R.layout.listview\_activity\_main);  
                 context=this;  
             **//get the ListView Reference**  
                 listViewSMS=(ListView)findViewById(R.id.listViewSMS);  
                   
  
                  //arrayColumns is the column name in your cursor where you're getting the data    
                  // here we are displaying  SMSsender Number i.e. address and SMSBody i.e. body  
                  String[] arrayColumns = new String[]{"address","body"};  
                  //arrayViewID contains the id of textViews  
                  // you can add more Views as per Requirement  
                  // textViewSMSSender is connected to "address" of arrayColumns  
                  // textViewMessageBody is connected to "body"of arrayColumns  
                  int[] arrayViewIDs = new int[]{R.id.textViewSMSSender,R.id.textViewMessageBody};  
                       
                       
                  Cursor cursor;  
                     
                    cursor = getContentResolver().query(Uri.parse("content://sms/inbox"), null, null, null, null);  
                     
                // create an Adapter with arguments layoutID, Cursor, Array Of Columns, and Array of ViewIds which is to be Populated  
                     
                 SimpleCursorAdapter adapter = new SimpleCursorAdapter(this, R.layout.listview\_each\_item, cursor, arrayColumns, arrayViewIDs);  
                 listViewSMS.setAdapter(adapter);  
                   
                   
                   
                **// To handle the click on List View Item**  
                 listViewSMS.setOnItemClickListener(new OnItemClickListener()  
                {  
                      
                                public void onItemClick(AdapterView<?> arg0, View v,int position, long arg3)  
                                {  
                                    // when user clicks on ListView Item , onItemClick is called  
                                    // with position and View of the item which is clicked  
                                    // we can use the position parameter to get index of clicked item  
                                    TextView textViewSMSSender=(TextView)v.findViewById(R.id.textViewSMSSender);  
                                    TextView textViewSMSBody=(TextView)v.findViewById(R.id.textViewMessageBody);  
                                    String smsSender=textViewSMSSender.getText().toString();  
                                    String smsBody=textViewSMSBody.getText().toString();  
                                     
                                  **// Show The Dialog with Selected SMS**  
                                    AlertDialog dialog = new AlertDialog.Builder(context).create();  
                                    dialog.setTitle("SMS From : "+smsSender);  
                                    dialog.setIcon(android.R.drawable.ic\_dialog\_info);  
                                    dialog.setMessage(smsBody);  
                                    dialog.setButton(DialogInterface.BUTTON\_POSITIVE, "OK",  
                                            new DialogInterface.OnClickListener() {  
                                        public void onClick(DialogInterface dialog, int which)  
                                        {  
                                         
                                                dialog.dismiss();  
                                                return;  
                                    }     
                                    });  
                                    dialog.show();  
                                }  
                                  
                            });  
             }  
 }

[](http://3.bp.blogspot.com/-VUL1EoAppO0/UcvX0l-VprI/AAAAAAAAAgY/D1AWoovpYDw/s1600/2.png)