Contact Manager



# Tạo contact

1. Tạo project, thiết kế layout

*<?***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/txtContactName"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Contact name"** >  
 </**TextView**>  
  
 <**EditText  
 android:id="@+id/inputContactName"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:hint="contact name"  
 android:inputType="text"** >  
 </**EditText**>  
  
 <**TextView  
 android:id="@+id/txtContactEmail"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="email"** >  
 </**TextView**>  
  
 <**EditText  
 android:id="@+id/inputContactEmail"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:hint="email"  
 android:inputType="textEmailAddress"** >  
 </**EditText**>  
  
 <**TextView  
 android:id="@+id/txtContactMobNo"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="phone number"** >  
 </**TextView**>  
  
 <**EditText  
 android:id="@+id/inputContactMobNo"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:hint="phone number"  
 android:inputType="number"** >  
 </**EditText**>  
  
 <**Button  
 android:id="@+id/btnAddContact"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center\_horizontal"  
 android:hint="add contact"** >  
 </**Button**>  
  
</**LinearLayout**>

1. Cấp permission

<**uses-permission android:name="android.permission.READ\_PHONE\_STATE"** />  
<**uses-permission android:name="android.permission.READ\_CONTACTS"** />  
<**uses-permission android:name="android.permission.WRITE\_EXTERNAL\_STORAGE"** />  
<**uses-permission android:name="android.permission.WRITE\_CONTACTS"** />

1. Trong activity khai báo biến

**private** Button **bt\_add**;  
**private** EditText **et\_name** , **et\_email**, **et\_phone**;  
**public static final** String ***LOG\_TAG*** = **"AddContactDemo"**;  
**public static final** String ***ACCOUNT\_TYPE*** = **"REPLACE\_YOUR\_GMAIL\_ACCOUNT\_ADDRESS"**;

1. Ánh xạ và bắt sự kiện click

**bt\_add** = (Button)findViewById(R.id.***btnAddContact***);  
**et\_name** = (EditText)findViewById(R.id.***inputContactName***);  
**et\_email** = (EditText)findViewById(R.id.***inputContactEmail***);  
**et\_phone** = (EditText)findViewById(R.id.***inputContactMobNo***);  
  
  
**bt\_add**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 addContact();  
 }  
});

1. Viết hàm addContact như sau:

**public void** addContact()  
{  
 String name=**et\_name**.getText().toString();  
 String email=**et\_email**.getText().toString();  
 String phone=**et\_phone**.getText().toString();  
 ArrayList<ContentProviderOperation> ops = **new** ArrayList<ContentProviderOperation>();  
 ops.add(ContentProviderOperation.*newInsert*(  
 ContactsContract.RawContacts.***CONTENT\_URI***)  
 .withValue(ContactsContract.RawContacts.***ACCOUNT\_TYPE***, ***ACCOUNT\_TYPE***)  
 .withValue(ContactsContract.RawContacts.***ACCOUNT\_NAME***, **"com.google"**)  
 .build()  
 );  
  
 *//them contact name* ops.add(ContentProviderOperation.*newInsert*(  
 ContactsContract.Data.***CONTENT\_URI***)  
 .withValueBackReference(ContactsContract.Data.***RAW\_CONTACT\_ID***, 0)  
 .withValue(ContactsContract.Data.***MIMETYPE***,  
 ContactsContract.CommonDataKinds.StructuredName.***CONTENT\_ITEM\_TYPE***)  
 .withValue(  
 ContactsContract.CommonDataKinds.StructuredName.***DISPLAY\_NAME***,  
 name).build()  
 );  
 *//them contact email* ops.add(ContentProviderOperation.*newInsert*(ContactsContract.Data.***CONTENT\_URI***)  
 .withValueBackReference(ContactsContract.Data.***RAW\_CONTACT\_ID***, 0)  
 .withValue(ContactsContract.Data.***MIMETYPE***,  
 ContactsContract.CommonDataKinds.Email.***CONTENT\_ITEM\_TYPE***)  
 .withValue(ContactsContract.CommonDataKinds.Email.***DATA***, email)  
 .withValue(ContactsContract.CommonDataKinds.Email.***TYPE***, ContactsContract.CommonDataKinds.Email.***TYPE\_WORK***)  
 .build());  
  
 *//them contact mobile number* ops.add(ContentProviderOperation.  
 *newInsert*(ContactsContract.Data.***CONTENT\_URI***)  
 .withValueBackReference(ContactsContract.Data.***RAW\_CONTACT\_ID***, 0)  
 .withValue(ContactsContract.Data.***MIMETYPE***,  
 ContactsContract.CommonDataKinds.Phone.***CONTENT\_ITEM\_TYPE***)  
 .withValue(ContactsContract.CommonDataKinds.Phone.***NUMBER***, phone)  
 .withValue(ContactsContract.CommonDataKinds.Phone.***TYPE***,  
 ContactsContract.CommonDataKinds.Phone.***TYPE\_MOBILE***)  
 .build()  
 );  
 *//them more mobile number* ops.add(ContentProviderOperation.  
 *newInsert*(ContactsContract.Data.***CONTENT\_URI***)  
 .withValueBackReference(ContactsContract.Data.***RAW\_CONTACT\_ID***, 0)  
 .withValue(ContactsContract.Data.***MIMETYPE***,  
 ContactsContract.CommonDataKinds.Phone.***CONTENT\_ITEM\_TYPE***)  
 .withValue(ContactsContract.CommonDataKinds.Phone.***NUMBER***, **"111111111"**)  
 .withValue(ContactsContract.CommonDataKinds.Phone.***TYPE***,  
 ContactsContract.CommonDataKinds.Phone.***TYPE\_MOBILE***)  
 .build()  
 );  
  
 **try** {  
 getContentResolver().applyBatch(ContactsContract.***AUTHORITY***, ops);  
 }**catch**(Exception e)  
 {  
  
 }  
}

# Xem contact

Tạo thêm một button xem contact, ánh xạ bắt sự kiện rồi gọi hàm xem như sau:

**private void** displayContacts() {  
  
 ContentResolver cr = getContentResolver();  
 Cursor cur = cr.query(ContactsContract.Contacts.***CONTENT\_URI***,  
 **null**, **null**, **null**, **null**);  
 **if** (cur.getCount() > 0) {  
 **while** (cur.moveToNext()) {  
 String id = cur.getString(cur.getColumnIndex(ContactsContract.Contacts.***\_ID***));  
 String name = cur.getString(cur.getColumnIndex(ContactsContract.Contacts.***DISPLAY\_NAME***));  
 **if** (Integer.*parseInt*(cur.getString(  
 cur.getColumnIndex(ContactsContract.Contacts.***HAS\_PHONE\_NUMBER***))) > 0) {  
 Cursor pCur = cr.query(  
 ContactsContract.CommonDataKinds.Phone.***CONTENT\_URI***,  
 **null**,  
 ContactsContract.CommonDataKinds.Phone.***CONTACT\_ID*** +**" = ?"**,  
 **new** String[]{id}, **null**);  
 **while** (pCur.moveToNext()) {  
 String phoneNo = pCur.getString(pCur.getColumnIndex(ContactsContract.CommonDataKinds.Phone.***NUMBER***));  
 Toast.*makeText*(MainActivity.**this**, **"Name: "** + name + **", Phone No: "** + phoneNo, Toast.***LENGTH\_SHORT***).show();  
 }  
 pCur.close();  
 }  
 }  
 }  
}

# Xóa contact

**void** xoacontact()  
{  
 ContentResolver cr = getContentResolver();  
 String where = ContactsContract.Data.***DISPLAY\_NAME*** + **" = ? "**;  
 String[] params = **new** String[] {**"Teo"**};  
  
 ArrayList<ContentProviderOperation> ops = **new** ArrayList<ContentProviderOperation>();  
 ops.add(ContentProviderOperation.*newDelete*(ContactsContract.RawContacts.***CONTENT\_URI***)  
 .withSelection(where, params)  
 .build());  
 **try** {  
 cr.applyBatch(ContactsContract.***AUTHORITY***, ops);  
 } **catch** (Exception e) {  
  
 }  
}