**DatabaseHandler.java**

**package** com.jevitha.sqllitestorageapp;

**import** android.content.ContentValues;

**import** android.content.Context;

**import** android.database.Cursor;

**import** android.database.sqlite.SQLiteDatabase;

**import** android.database.sqlite.SQLiteOpenHelper;

**import** android.util.Log;

**import** java.util.ArrayList;

**import** java.util.List;

**public class** DatabaseHandler **extends** SQLiteOpenHelper {

*// All Static variables*

*// Database Version*

**private static final int *DATABASE\_VERSION*** = 1;

*// Database Name*

**private static final** String ***DATABASE\_NAME*** = **"contactsManager"**;

*// Contacts table name*

**private static final** String ***TABLE\_CONTACTS*** = **"contacts"**;

*// Contacts Table Columns names*

**private static final** String ***KEY\_ID*** = **"id"**;

**private static final** String ***KEY\_NAME*** = **"name"**;

**private static final** String ***KEY\_PH\_NO*** = **"phone\_number"**;

Context **context** = **null**;

**public** DatabaseHandler(Context context) {

**super**(context, ***DATABASE\_NAME***, **null**, ***DATABASE\_VERSION***);

**this**.**context** = context;

}

*// Creating Tables*

@Override

**public void** onCreate(SQLiteDatabase db) {

String CREATE\_CONTACTS\_TABLE = **"CREATE TABLE "** + ***TABLE\_CONTACTS*** + **"("**

+ ***KEY\_ID*** + **" INTEGER PRIMARY KEY,"** + ***KEY\_NAME*** + **" TEXT,"**

+ ***KEY\_PH\_NO*** + **" TEXT"** + **")"**;

db.execSQL(CREATE\_CONTACTS\_TABLE);

}

*// Upgrading database*

@Override

**public void** onUpgrade(SQLiteDatabase db, **int** oldVersion, **int** newVersion) {

*// Drop older table if existed*

db.execSQL(**"DROP TABLE IF EXISTS "** + ***TABLE\_CONTACTS***);

*// Create tables again*

onCreate(db);

}

*// Adding new contact*

**public void** addContact(Contact contact) {

SQLiteDatabase db = **this**.getWritableDatabase();

ContentValues values = **new** ContentValues();

values.put(***KEY\_NAME***, contact.getName()); *// Contact Name*

values.put(***KEY\_PH\_NO***, contact.getPhoneNumber()); *// Contact Phone Number*

*// Inserting Row*

db.insert(***TABLE\_CONTACTS***, **null**, values);

db.close(); *// Closing database connection*

}

*// Getting single contact*

**public** Contact getContact(**int** id) {

SQLiteDatabase db = **this**.getReadableDatabase();

Log.*d*(**"DB"**, **"db - readable database Is ReadOnly : "**+db.isReadOnly());

Cursor cursor = db.query(***TABLE\_CONTACTS***, **new** String[] { ***KEY\_ID***,

***KEY\_NAME***, ***KEY\_PH\_NO*** }, ***KEY\_ID*** + **"=?"**,

**new** String[] { String.*valueOf*(id) }, **null**, **null**, **null**, **null**);

**if** (cursor != **null**)

cursor.moveToFirst();

Contact contact = **new** Contact(Integer.*parseInt*(cursor.getString(0)),

cursor.getString(1), cursor.getString(2));

*// return contact*

**return** contact;

}

*// Getting All Contacts*

**public** List<Contact> getAllContacts() {

List<Contact> contactList = **new** ArrayList<Contact>();

*// Select All Query*

String selectQuery = **"SELECT \* FROM "** + ***TABLE\_CONTACTS***;

SQLiteDatabase db = **this**.getReadableDatabase();

Log.*d*(**"DB"**, **"db - readable database Is ReadOnly : "**+db.isReadOnly());

Cursor cursor = db.rawQuery(selectQuery, **null**);

*// looping through all rows and adding to list*

**if** (cursor.moveToFirst()) {

**do** {

Contact contact = **new** Contact();

contact.setID(Integer.*parseInt*(cursor.getString(0)));

contact.setName(cursor.getString(1));

contact.setPhoneNumber(cursor.getString(2));

*// Adding contact to list*

contactList.add(contact);

} **while** (cursor.moveToNext());

}

*// return contact list*

**return** contactList;

}

*// Getting contacts Count*

**public int** getContactsCount() {

String countQuery = **"SELECT \* FROM "** + ***TABLE\_CONTACTS***;

SQLiteDatabase db = **this**.getReadableDatabase();

Cursor cursor = db.rawQuery(countQuery, **null**);

cursor.close();

*// return count*

**return** cursor.getCount();

}

*// Updating single contact*

**public int** updateContact(Contact contact) {

SQLiteDatabase db = **this**.getWritableDatabase();

ContentValues values = **new** ContentValues();

values.put(***KEY\_NAME***, contact.getName());

values.put(***KEY\_PH\_NO***, contact.getPhoneNumber());

*// updating row*

**return** db.update(***TABLE\_CONTACTS***, values, ***KEY\_ID*** + **" = ?"**,

**new** String[] { String.*valueOf*(contact.getID()) });

}

*// Deleting single contact*

**public void** deleteContact(Contact contact) {

SQLiteDatabase db = **this**.getWritableDatabase();

db.delete(***TABLE\_CONTACTS***, ***KEY\_ID*** + **" = ?"**,

**new** String[] { String.*valueOf*(contact.getID()) });

db.close();

}

}

Contact.java

**package** com.jevitha.sqllitestorageapp;

**public class** Contact {

*//private variables*

**int \_id**;

String **\_name**;

String **\_phone\_number**;

*// Empty constructor*

**public** Contact(){

}

*// constructor*

**public** Contact(**int** id, String name, String \_phone\_number){

**this**.**\_id** = id;

**this**.**\_name** = name;

**this**.**\_phone\_number** = \_phone\_number;

}

*// constructor*

**public** Contact(String name, String \_phone\_number){

**this**.**\_name** = name;

**this**.**\_phone\_number** = \_phone\_number;

}

*// getting ID*

**public int** getID(){

**return this**.**\_id**;

}

*// setting id*

**public void** setID(**int** id){

**this**.**\_id** = id;

}

*// getting name*

**public** String getName(){

**return this**.**\_name**;

}

*// setting name*

**public void** setName(String name){

**this**.**\_name** = name;

}

*// getting phone number*

**public** String getPhoneNumber(){

**return this**.**\_phone\_number**;

}

*// setting phone number*

**public void** setPhoneNumber(String phone\_number){

**this**.**\_phone\_number** = phone\_number;

}

}

MainActivity.java

**package** com.jevitha.sqllitestorageapp;

**import** android.content.Intent;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.util.Log;

**import** android.view.Menu;

**import** android.view.View;

**import** android.widget.AdapterView;

**import** android.widget.ArrayAdapter;

**import** android.widget.ListView;

**import** java.util.ArrayList;

**import** java.util.List;

**public class** MainActivity **extends** AppCompatActivity {

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

DatabaseHandler db = **new** DatabaseHandler(**this**);

*/\*\**

*\* CRUD Operations*

*\* \*/*

*// Inserting Contacts*

Log.*d*(**"Insert: "**, **"Inserting .."**);

db.addContact(**new** Contact(**"Ravi"**, **"9100000000"**));

db.addContact(**new** Contact(**"Srinivas"**, **"9199999999"**));

db.addContact(**new** Contact(**"Tommy"**, **"9522222222"**));

db.addContact(**new** Contact(**"Karthik"**, **"9533333333"**));

*// Reading all contacts*

Log.*d*(**"Reading: "**, **"Reading all contacts.."**);

List<Contact> contacts = db.getAllContacts();

**for** (Contact cn : contacts) {

String log = **"Id: "** + cn.getID() + **" ,Name: "** + cn.getName() + **" ,Phone: "** + cn.getPhoneNumber();

*// Writing Contacts to log*

Log.*d*(**"Name: "**, log);

}

}

}

Activity\_main.xml

*<?***xml version="1.0" encoding="utf-8"***?>*

<**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"**

**xmlns:tools="http://schemas.android.com/tools" android:id="@+id/activity\_main"**

**android:layout\_width="match\_parent" android:layout\_height="match\_parent"**

**android:paddingBottom="@dimen/activity\_vertical\_margin"**

**android:paddingLeft="@dimen/activity\_horizontal\_margin"**

**android:paddingRight="@dimen/activity\_horizontal\_margin"**

**android:paddingTop="@dimen/activity\_vertical\_margin"**

**tools:context="com.jevitha.sqllitestorageapp.MainActivity"**>

<**TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"**

**android:text="Hello World!"** />

</**RelativeLayout**>