**Atelier2**

**manifests**

AndroidManifest.xml

<?xml version="1.0" encoding="utf-8"?>  
<manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools">  
 <application  
 android:allowBackup="true"  
 android:dataExtractionRules="@xml/data\_extraction\_rules"  
 android:fullBackupContent="@xml/backup\_rules"  
 android:icon="@mipmap/ic\_launcher"  
 android:label="@string/app\_name"  
 android:roundIcon="@mipmap/ic\_launcher\_round"  
 android:supportsRtl="true"  
 android:theme="@style/Theme.Atelier2\_Contact"  
 tools:targetApi="31">  
 <activity  
 android:name=".MainActivity"  
 android:exported="true">  
 <intent-filter>  
 <action android:name="android.intent.action.MAIN" />  
 <category android:name="android.intent.category.LAUNCHER" />  
 </intent-filter>  
 </activity>  
 <activity android:name=".AddContactActivity" />  
 <activity android:name=".ContactListActivity" />  
 </application>  
</manifest>

**Classe java**

AddContactActivity

package tn.enig.atelier2\_contact;  
  
import android.os.Bundle;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast; // Import for showing a toast message  
import androidx.appcompat.app.AppCompatActivity;  
import android.view.View;  
  
public class AddContactActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_add\_contact);  
  
  
 EditText editName = findViewById(R.id.edit\_name);  
 EditText editPhone = findViewById(R.id.edit\_phone);  
 EditText editEmail = findViewById(R.id.edit\_email);  
 Button buttonSubmit = findViewById(R.id.button\_submit);  
 Button backButton = findViewById(R.id.button\_back);  
  
 // Set click listener for submit button  
 buttonSubmit.setOnClickListener(view -> {  
 String name = editName.getText().toString();  
 String phone = editPhone.getText().toString();  
 String email = editEmail.getText().toString();  
  
 if (!name.isEmpty() && !phone.isEmpty() && !email.isEmpty()) {  
  
 DatabaseHelper db = new DatabaseHelper(AddContactActivity.this);  
 db.addContact(name, phone, email);  
  
   
 Toast.makeText(AddContactActivity.this, "Contact ajouté avec succès", Toast.LENGTH\_SHORT).show();  
  
   
 editName.setText("");  
 editPhone.setText("");  
 editEmail.setText("");  
 } else {  
   
 Toast.makeText(AddContactActivity.this, "Veuillez remplir tous les champs", Toast.LENGTH\_SHORT).show();  
 }  
 });  
  
   
 backButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 finish();   
 }  
 });  
 }  
}

ContactListActivity

package tn.enig.atelier2\_contact;  
  
import android.database.Cursor;  
import android.os.Bundle;  
import android.widget.ArrayAdapter;  
import android.widget.ListView;  
import androidx.appcompat.app.AppCompatActivity;  
import java.util.ArrayList;  
  
import android.view.View;  
import android.widget.Button;  
  
  
public class ContactListActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_contact\_list);  
  
 ListView listView = findViewById(R.id.list\_view\_contacts);  
 DatabaseHelper db = new DatabaseHelper(this);  
  
 ArrayList<String> contactList = new ArrayList<>();  
 Cursor cursor = db.getAllContacts();  
  
 if (cursor.moveToFirst()) {  
 do {  
 String name = cursor.getString(cursor.getColumnIndex("name"));  
 String phone = cursor.getString(cursor.getColumnIndex("phone"));  
 String email = cursor.getString(cursor.getColumnIndex("email"));  
 contactList.add(name + " - " + phone + " - " + email);  
 } while (cursor.moveToNext());  
 }  
  
 ArrayAdapter<String> adapter = new ArrayAdapter<>(this, android.R.layout.simple\_list\_item\_1, contactList);  
 listView.setAdapter(adapter);  
  
 Button backButton = findViewById(R.id.button\_back);  
 backButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 finish();  
 }  
 });  
 }  
}

DatabaseHelper

package tn.enig.atelier2\_contact;  
  
  
import android.content.ContentValues;  
import android.content.Context;  
import android.database.Cursor;  
import android.database.sqlite.SQLiteDatabase;  
import android.database.sqlite.SQLiteOpenHelper;  
  
public class DatabaseHelper extends SQLiteOpenHelper {  
  
 private static final String DATABASE\_NAME = "contacts.db";  
 private static final int DATABASE\_VERSION = 1;  
  
 private static final String TABLE\_CONTACTS = "contacts";  
 private static final String COLUMN\_ID = "id";  
 private static final String COLUMN\_NAME = "name";  
 private static final String COLUMN\_PHONE = "phone";  
 private static final String COLUMN\_EMAIL = "email";  
  
 private static final String TABLE\_CREATE =  
 "CREATE TABLE " + TABLE\_CONTACTS + " (" +  
 COLUMN\_ID + " INTEGER PRIMARY KEY AUTOINCREMENT, " +  
 COLUMN\_NAME + " TEXT, " +  
 COLUMN\_PHONE + " TEXT, " +  
 COLUMN\_EMAIL + " TEXT);";  
  
 public DatabaseHelper(Context context) {  
 super(context, DATABASE\_NAME, null, DATABASE\_VERSION);  
 }  
  
 @Override  
 public void onCreate(SQLiteDatabase db) {  
 db.execSQL(TABLE\_CREATE);  
 }  
  
 @Override  
 public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {  
 db.execSQL("DROP TABLE IF EXISTS " + TABLE\_CONTACTS);  
 onCreate(db);  
 }  
  
   
 public void addContact(String name, String phone, String email) {  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues values = new ContentValues();  
 values.put(COLUMN\_NAME, name);  
 values.put(COLUMN\_PHONE, phone);  
 values.put(COLUMN\_EMAIL, email);  
 db.insert(TABLE\_CONTACTS, null, values);  
 db.close();  
 }  
  
   
 public Cursor getAllContacts() {  
 SQLiteDatabase db = this.getReadableDatabase();  
 return db.query(TABLE\_CONTACTS, null, null, null, null, null, null);  
 }  
  
  
 public void clearDatabase() {  
 SQLiteDatabase db = this.getWritableDatabase();  
 db.delete(TABLE\_CONTACTS, null, null);  
 db.close();  
 }  
}

MainActivity

package tn.enig.atelier2\_contact;  
  
import android.os.Bundle;  
import android.widget.Button;  
  
import androidx.activity.EdgeToEdge;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.graphics.Insets;  
import androidx.core.view.ViewCompat;  
import androidx.core.view.WindowInsetsCompat;  
  
import android.content.Intent;  
import android.view.View;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_main); // Linking to your XML layout  
  
   
 Button ajouterButton = findViewById(R.id.button\_add\_contact);  
 Button listeButton = findViewById(R.id.button\_list\_contacts);  
 Button viderButton = findViewById(R.id.button\_clear\_database);  
  
  
 ajouterButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 Intent intent = new Intent(MainActivity.this, AddContactActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 listeButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
   
 Intent intent = new Intent(MainActivity.this, ContactListActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 viderButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 try {  
 DatabaseHelper db = new DatabaseHelper(MainActivity.this);  
 db.clearDatabase();   
 } catch (Exception e) {  
 e.printStackTrace(); }  
 }  
 });  
 }  
}

**Layout**

activity\_add\_contact.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/background\_color"> <!-- Set background color -->  
  
 <LinearLayout  
 android:orientation="vertical"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:padding="16dp">  
  
 <!-- Back button with style -->  
 <Button  
 android:id="@+id/button\_back"  
 android:text="Retour"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@drawable/button\_background"  
 android:textColor="@color/button\_text\_color"  
 android:layout\_marginBottom="10dp"/>  
  
 <!-- Styled input fields -->  
 <EditText  
 android:id="@+id/edit\_name"  
 android:hint="Nom"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:background="@drawable/input\_background"  
 android:padding="10dp"/>  
  
 <EditText  
 android:id="@+id/edit\_phone"  
 android:hint="Téléphone"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:background="@drawable/input\_background"  
 android:padding="10dp"/>  
  
 <EditText  
 android:id="@+id/edit\_email"  
 android:hint="Email"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:background="@drawable/input\_background"  
 android:padding="10dp"/>  
  
 <!-- Styled submit button -->  
 <Button  
 android:id="@+id/button\_submit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:background="@drawable/button\_background"  
 android:text="Envoyer"  
 android:textColor="@color/button\_text\_color" />  
 </LinearLayout>  
  
</androidx.constraintlayout.widget.ConstraintLayout>

activity\_contact\_list.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/background\_color">  
 <LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 android:orientation="vertical"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:padding="16dp">  
  
 <TextView  
 android:id="@+id/title\_text"  
 android:text="Liste des contacts"  
 android:textSize="24sp"  
 android:gravity="center"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content" />  
  
 <!-- Back button to return to the previous page -->  
 <Button  
 android:id="@+id/button\_back"  
 android:text="Retour"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="start"  
 android:layout\_marginBottom="10dp"/>  
  
 <!-- List of contacts will go here -->  
 <ListView  
 android:id="@+id/list\_view\_contacts"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content" />  
  
 </LinearLayout>  
  
</androidx.constraintlayout.widget.ConstraintLayout>

activity\_contact\_list.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
  
 <LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 android:orientation="vertical"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:padding="16dp">  
  
 <!-- Title at the top -->  
 <TextView  
 android:id="@+id/title\_text"  
 android:text="Gestion des contacts"  
 android:textSize="24sp"  
 android:gravity="center"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content" />  
  
 <!-- Button to go to 'Ajouter un contact' -->  
 <Button  
 android:id="@+id/button\_add\_contact"  
 android:text="Ajouter un contact"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:onClick="addContact"/>  
  
 <!-- Button to go to 'Liste des contacts' -->  
 <Button  
 android:id="@+id/button\_list\_contacts"  
 android:text="Liste des contacts"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="10dp"/>  
  
 <!-- Button to clear the database -->  
 <Button  
 android:id="@+id/button\_clear\_database"  
 android:text="Vider la base"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="10dp"/>  
 </LinearLayout>  
  
</androidx.constraintlayout.widget.ConstraintLayout>

Build.gradle.kts

plugins {  
 alias(libs.plugins.android.application)  
}  
  
android {  
 namespace = "tn.enig.atelier2\_contact"  
 compileSdk = 34  
  
 defaultConfig {  
 applicationId = "tn.enig.atelier2\_contact"  
 minSdk = 26  
 targetSdk = 34  
 versionCode = 1  
 versionName = "1.0"  
  
 testInstrumentationRunner = "androidx.test.runner.AndroidJUnitRunner"  
 }  
 buildTypes {  
 release {  
 isMinifyEnabled = false  
 proguardFiles(  
 getDefaultProguardFile("proguard-android-optimize.txt"),  
 "proguard-rules.pro"  
 )  
 }  
 }  
 compileOptions {  
 sourceCompatibility = JavaVersion.VERSION\_1\_8  
 targetCompatibility = JavaVersion.VERSION\_1\_8  
 }  
}  
  
dependencies {  
 implementation(libs.appcompat)  
 implementation(libs.material)  
 implementation(libs.activity)  
 implementation(libs.constraintlayout)  
 testImplementation(libs.junit)  
 androidTestImplementation(libs.ext.junit)  
 androidTestImplementation(libs.espresso.core)  
 implementation("androidx.sqlite:sqlite:2.2.0")  
}