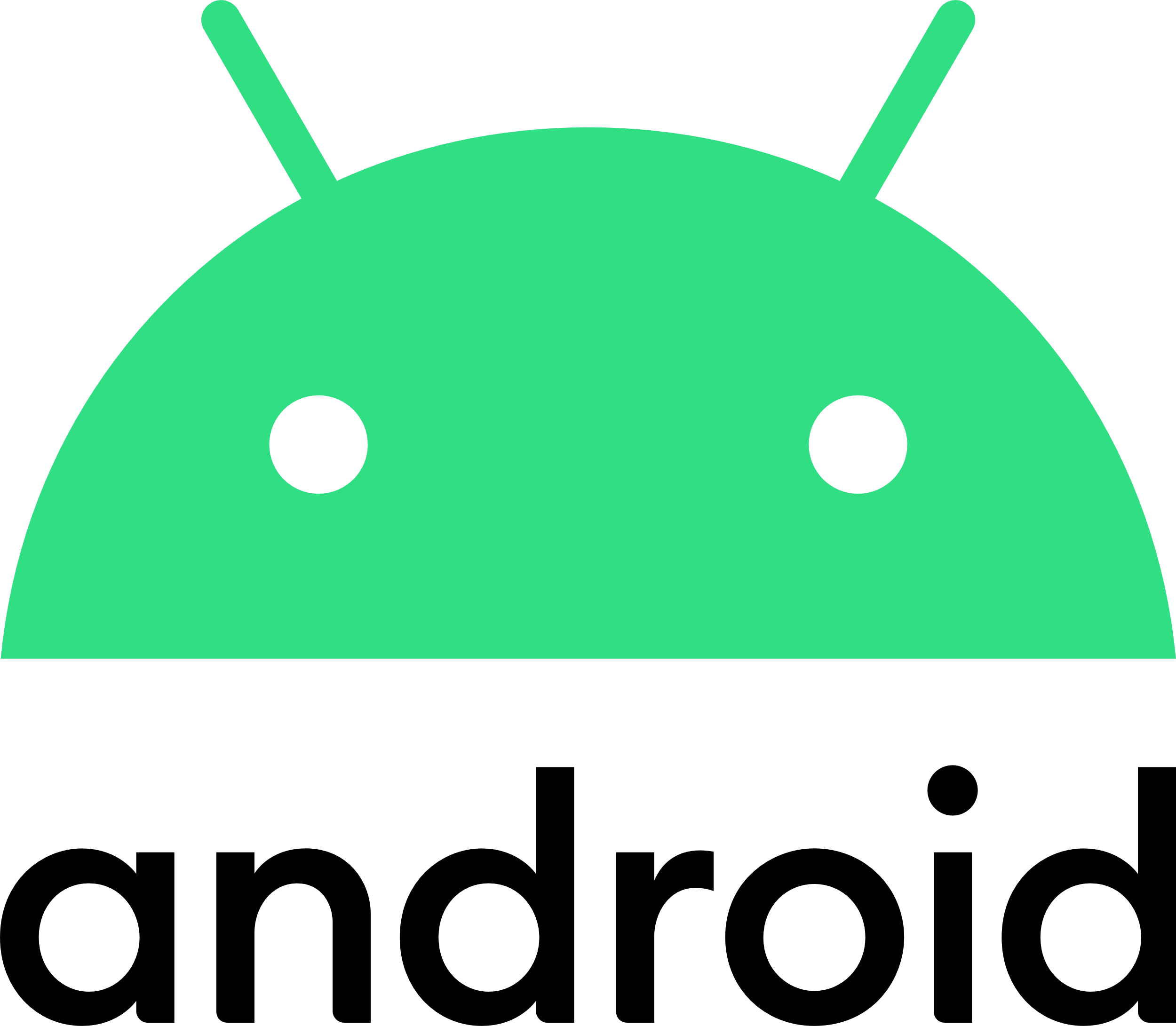
**Library Management APP Project**



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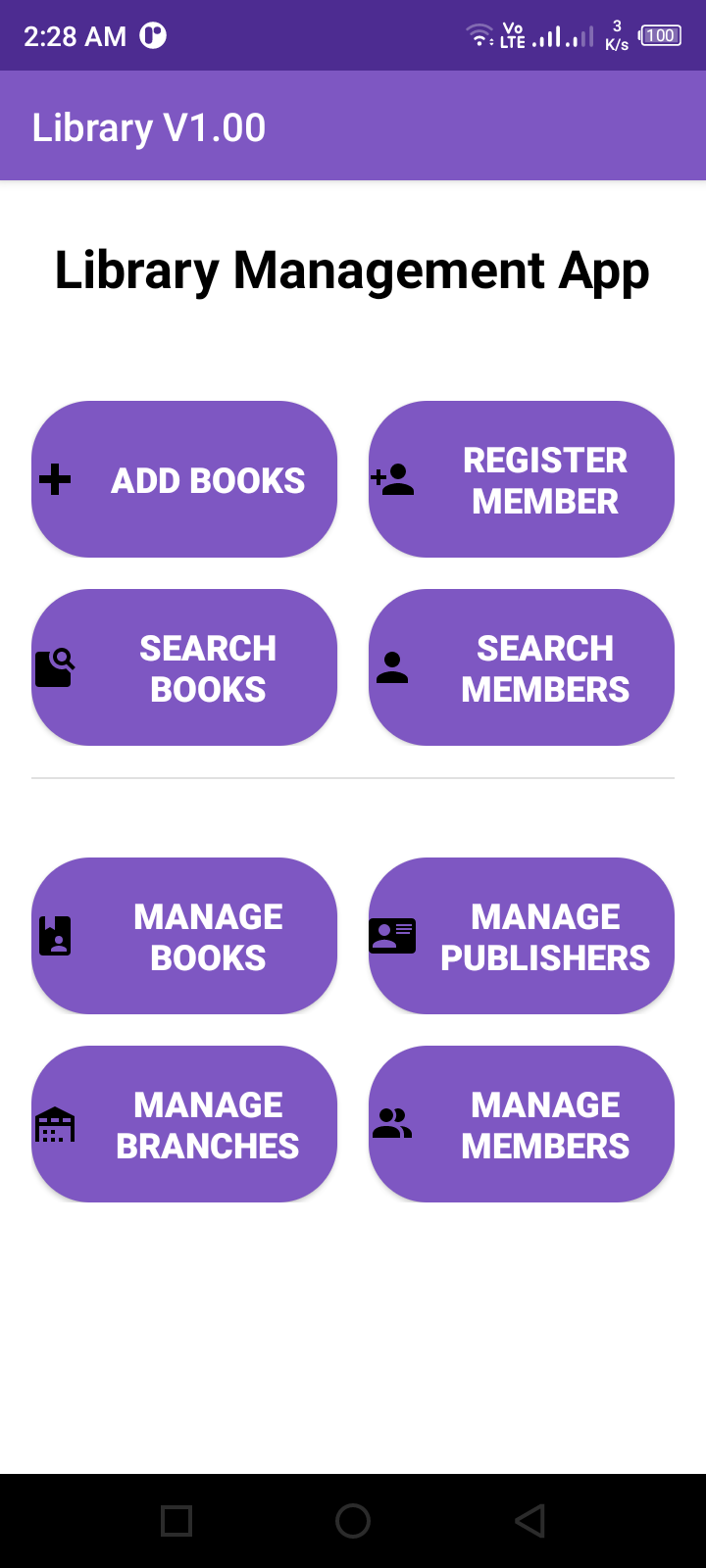
**Name: I.D.I.L Senavirathna**

**Registration Number: ICT/19/20/140**

**Index Number :5073**

**ICT3214 - Mobile Application Development**

1. **UI Design**

****

Buttons

1. **AndroidManifest.xml**

<?xml version="1.0" encoding="utf-8"?>  
<manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.jovanovic.stefan.LibraryManagement">  
  
 <application  
 android:allowBackup="true"  
 android:icon="@mipmap/ic\_launcher"  
 android:label="Library Management"  
 android:roundIcon="@mipmap/ic\_launcher\_round"  
 android:supportsRtl="true"  
 android:theme="@style/AppTheme">  
 <activity android:name="com.jovanovic.stefan.LibraryManagement.UpdateActivity"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.BookActivity"/>  
  
 <activity android:name="com.jovanovic.stefan.LibraryManagement.Publisher\_UpdateActivity"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.PublisherActivity"/>  
  
 <activity android:name="com.jovanovic.stefan.LibraryManagement.Branch\_UpdateActivity"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.BranchActivity"/>  
  
 <activity android:name="com.jovanovic.stefan.LibraryManagement.Member\_UpdateActivity"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.MemberActivity"/>  
 <activity  
 android:name="com.jovanovic.stefan.LibraryManagement.AddActivity"  
 android:label="Add Book"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.BookActivity" />  
 <activity  
 android:name="com.jovanovic.stefan.LibraryManagement.Publisher\_AddActivity"  
 android:label="Add Publisher"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.PublisherActivity" />  
 <activity  
 android:name="com.jovanovic.stefan.LibraryManagement.Branch\_AddActivity"  
 android:label="Add Branch"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.BranchActivity" />  
 <activity  
 android:name="com.jovanovic.stefan.LibraryManagement.Member\_AddActivity"  
 android:label="Add Member"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.MemberActivity" />  
 <activity  
 android:name="com.jovanovic.stefan.LibraryManagement.BookActivity"  
 android:label="Manage Books"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.MainActivity" />  
 <activity  
 android:name="com.jovanovic.stefan.LibraryManagement.PublisherActivity"  
 android:label="Manage Publishers"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.MainActivity" />  
 <activity  
 android:name="com.jovanovic.stefan.LibraryManagement.BranchActivity"  
 android:label="Manage Branch"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.MainActivity" />  
 <activity  
 android:name="com.jovanovic.stefan.LibraryManagement.MemberActivity"  
 android:label="Manage Member"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.MainActivity" />  
 <activity  
 android:name="com.jovanovic.stefan.LibraryManagement.SearchActivity"  
 android:label="Search Member"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.MainActivity" />  
 <activity  
 android:name="com.jovanovic.stefan.LibraryManagement.SearchBook"  
 android:label="Search Member"  
 android:parentActivityName="com.jovanovic.stefan.LibraryManagement.MainActivity" />  
 <activity  
 android:name="com.jovanovic.stefan.LibraryManagement.MainActivity"  
 android:label="Library V1.00">  
  
  
  
 <intent-filter>  
 <action android:name="android.intent.action.MAIN" />  
 <action android:name="android.intent.action.VIEW" />  
  
 <category android:name="android.intent.category.LAUNCHER" />  
 </intent-filter>  
 </activity>  
 </application>  
  
</manifest>

1. **MainActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
public class MainActivity extends AppCompatActivity {  
 Button add\_button,publishers\_button,branch\_button,member\_button;  
 Button add\_books,search\_books,register\_member,search\_member;  
 MyDatabaseHelper myDB;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
  
 myDB = new MyDatabaseHelper(MainActivity.this);  
  
 ////////////////////////////////  
  
  
 ////////////////////////////////  
 add\_button = findViewById(R.id.*button\_books*);  
 publishers\_button = findViewById(R.id.*button\_publishers*);  
 branch\_button = findViewById(R.id.*button\_branches*);  
 member\_button = findViewById(R.id.*button\_members*);  
 add\_books = findViewById(R.id.*add\_books*);  
 search\_books = findViewById(R.id.*search\_books*);  
 register\_member = findViewById(R.id.*register\_member*);  
 search\_member = findViewById(R.id.*search\_member*);  
  
 add\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
  
  
 Intent intent = new Intent(MainActivity.this, BookActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 publishers\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 MyDatabaseHelper db = new MyDatabaseHelper(getApplicationContext());  
  
 Intent intent = new Intent(MainActivity.this, PublisherActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 branch\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 MyDatabaseHelper db = new MyDatabaseHelper(getApplicationContext());  
  
 Intent intent = new Intent(MainActivity.this, BranchActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 member\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 MyDatabaseHelper db = new MyDatabaseHelper(getApplicationContext());  
  
 Intent intent = new Intent(MainActivity.this, MemberActivity.class);  
 startActivity(intent);  
 }  
 });  
 add\_books.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 MyDatabaseHelper db = new MyDatabaseHelper(getApplicationContext());  
  
 Intent intent = new Intent(MainActivity.this, AddActivity.class);  
 startActivity(intent);  
 }  
 });  
 register\_member.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 MyDatabaseHelper db = new MyDatabaseHelper(getApplicationContext());  
  
 Intent intent = new Intent(MainActivity.this, Member\_AddActivity.class);  
 startActivity(intent);  
 }  
 });  
 search\_books.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 MyDatabaseHelper db = new MyDatabaseHelper(getApplicationContext());  
  
 Intent intent = new Intent(MainActivity.this, SearchBook.class);  
 startActivity(intent);  
 }  
 });  
 search\_member.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 MyDatabaseHelper db = new MyDatabaseHelper(getApplicationContext());  
  
 Intent intent = new Intent(MainActivity.this, SearchActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 }  
}

1. **MyDatabaseHelper.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import static androidx.core.content.ContextCompat.*startActivity*;  
  
import android.content.ContentValues;  
import android.content.Context;  
import android.content.Intent;  
  
import android.database.Cursor;  
import android.database.sqlite.SQLiteDatabase;  
import android.database.sqlite.SQLiteOpenHelper;  
import android.widget.Toast;  
  
import androidx.annotation.NonNull;  
import androidx.annotation.Nullable;  
  
class MyDatabaseHelper extends SQLiteOpenHelper {  
  
 private Context context;  
 private static final String *DATABASE\_NAME* = "BookLibrary.db";  
 private static final int *DATABASE\_VERSION* = 1;  
 ///////////////////////////////////////////  
   
 MyDatabaseHelper(Context context) {  
 super(context, *DATABASE\_NAME*, null, *DATABASE\_VERSION*);  
 this.context = context;  
 }  
  
 @Override  
 public void onCreate(SQLiteDatabase db) {  
 String qr1 = "CREATE TABLE Book(\n" +  
 " BOOK\_ID INTEGER PRIMARY KEY AUTOINCREMENT,\n" +  
 " TITLE TEXT,\n" +  
 " PUBLISHER\_NAME TEXT,\n" +  
 " AVAILABLE INTEGER DEFAULT 1\n" +  
 ")";  
 db.execSQL(qr1);  
  
 // create Publisher table  
 String qr2 = "CREATE TABLE Publisher(\n" +  
 "NAME VARCHAR(20),\n" +  
 "ADDRESS VARCHAR(30),\n" +  
 "PHONE VARCHAR(10),\n" +  
 "PRIMARY KEY (NAME));\n";  
 db.execSQL(qr2);  
  
 // create Branch table  
 String qr3 = "CREATE TABLE Branch(\n" +  
 "BRANCH\_ID INTEGER PRIMARY KEY AUTOINCREMENT,\n" +  
 "BRANCH\_NAME TEXT,\n" +  
 "BRANCH\_ADDRESS TEXT);\n";  
 db.execSQL(qr3);  
  
 // create Member table  
 String qr4 = "CREATE TABLE Member(\n" +  
 "CARD\_NO INTEGER PRIMARY KEY AUTOINCREMENT,\n" +  
 "NAME TEXT,\n" +  
 "ADDRESS TEXT,\n" +  
 "PHONE TEXT,\n" +  
 "UNPAID\_DUES REAL DEFAULT 0);\n";  
 db.execSQL(qr4);  
  
 // create Book\_Author table  
 String qr5 = "CREATE TABLE Book\_Author(\n" +  
 "BOOK\_ID INTEGER,\n" +  
 "AUTHOR\_NAME TEXT,\n" +  
 "PRIMARY KEY(BOOK\_ID, AUTHOR\_NAME),\n" +  
 "FOREIGN KEY(BOOK\_ID) REFERENCES Book);\n";  
 db.execSQL(qr5);  
  
 // create Book\_Copy table  
 String qr6 = "CREATE TABLE Book\_Copy(\n" +  
 "BOOK\_ID INTEGER,\n" +  
 "BRANCH\_ID INTEGER,\n" +  
 "ACCESS\_NO INTEGER PRIMARY KEY AUTOINCREMENT,\n" +  
 "FOREIGN KEY(BOOK\_ID) REFERENCES Book(BOOK\_ID),\n" +  
 "FOREIGN KEY(BRANCH\_ID) REFERENCES Branch(BRANCH\_ID));\n";  
 db.execSQL(qr6);  
  
 // create Book\_Loan table  
 String qr7 = "CREATE TABLE Book\_Loan(\n" +  
 "ACCESS\_NO INTEGER PRIMARY KEY AUTOINCREMENT,\n" +  
 "BRANCH\_ID INTEGER,\n" +  
 "CARD\_NO INTEGER,\n" +  
 "DATE\_OUT TEXT,\n" +  
 "DATE\_DUE TEXT,\n" +  
 "DATE\_RETURNED TEXT,\n" +  
 "FOREIGN KEY(ACCESS\_NO, BRANCH\_ID) REFERENCES Book\_Copy,\n" +  
 "FOREIGN KEY(CARD\_NO) REFERENCES Member,\n" +  
 "FOREIGN KEY(BRANCH\_ID) REFERENCES Branch);\n";  
 db.execSQL(qr7);  
  
  
}  
  
 @Override  
 public void onUpgrade(SQLiteDatabase db, int i, int i1) {  
 db.execSQL("DROP TABLE IF EXISTS " + "Book" );  
 onCreate(db);  
 }  
 public void sample() {  
 SQLiteDatabase db = this.getWritableDatabase();  
  
  
 }  
  
 void addBook(String title, String publisher\_name,String available){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues cv = new ContentValues();  
  
 cv.put("TITLE", title);  
 cv.put("PUBLISHER\_NAME", publisher\_name);  
 cv.put("AVAILABLE", available);  
  
 long result = db.insert("Book",null, cv);  
 if(result == -1){  
 Toast.*makeText*(context, "Failed", Toast.*LENGTH\_SHORT*).show();  
 }else {  
 Toast.*makeText*(context, "Added Successfully!", Toast.*LENGTH\_SHORT*).show();  
  
  
 }  
 }  
  
 void addPublisher(String publisher\_name,String publisher\_address,String publisher\_phone){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues cv = new ContentValues();  
  
 cv.put("NAME", publisher\_name);  
 cv.put("ADDRESS", publisher\_address);  
 cv.put("PHONE", publisher\_phone);  
  
 long result = db.insert("Publisher",null, cv);  
 if(result == -1){  
 Toast.*makeText*(context, "Failed", Toast.*LENGTH\_SHORT*).show();  
 }else {  
 Toast.*makeText*(context, "Added Successfully!", Toast.*LENGTH\_SHORT*).show();  
  
  
 }  
 }  
 void addBranch(String branch\_name,String branch\_address){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues cv = new ContentValues();  
  
  
 cv.put("BRANCH\_NAME", branch\_name);  
 cv.put("BRANCH\_ADDRESS", branch\_address);  
  
 long result = db.insert("Branch",null, cv);  
 if(result == -1){  
 Toast.*makeText*(context, "Failed", Toast.*LENGTH\_SHORT*).show();  
 }else {  
 Toast.*makeText*(context, "Added Successfully!", Toast.*LENGTH\_SHORT*).show();  
  
  
 }  
 }  
 void addMember(String NAME,String ADDRESS,String PHONE,Double UNPAID\_DUES){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues cv = new ContentValues();  
  
  
 cv.put("NAME", NAME);  
 cv.put("ADDRESS", ADDRESS);  
 cv.put("PHONE", PHONE);  
 cv.put("UNPAID\_DUES", UNPAID\_DUES);  
  
 long result = db.insert("Member",null, cv);  
 if(result == -1){  
 Toast.*makeText*(context, "Failed", Toast.*LENGTH\_SHORT*).show();  
 }else {  
 Toast.*makeText*(context, "Added Successfully!", Toast.*LENGTH\_SHORT*).show();  
  
  
 }  
 }  
 void copyBook(String title, String publisher\_name,String available){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues cv = new ContentValues();  
  
 cv.put("TITLE", title);  
 cv.put("PUBLISHER\_NAME", publisher\_name);  
 cv.put("AVAILABLE", available);  
  
 long result = db.insert("Book",null, cv);  
 if(result == -1){  
 Toast.*makeText*(context, "Failed", Toast.*LENGTH\_SHORT*).show();  
 }else {  
 Toast.*makeText*(context, "Added Successfully!", Toast.*LENGTH\_SHORT*).show();  
  
  
 }  
 }  
  
 Cursor readAllData(){  
 String query = "SELECT \* FROM " + "Book";  
 SQLiteDatabase db = this.getReadableDatabase();  
  
 Cursor cursor = null;  
 if(db != null){  
 cursor = db.rawQuery(query, null);  
 }  
 return cursor;  
 }  
 Cursor readAllData\_publisher(){  
 String query = "SELECT \* FROM " + "Publisher";  
 SQLiteDatabase db = this.getReadableDatabase();  
  
 Cursor cursor = null;  
 if(db != null){  
 cursor = db.rawQuery(query, null);  
 }  
 return cursor;  
 }  
 Cursor readAllData\_branch(){  
 String query = "SELECT \* FROM " + "Branch";  
 SQLiteDatabase db = this.getReadableDatabase();  
  
 Cursor cursor = null;  
 if(db != null){  
 cursor = db.rawQuery(query, null);  
 }  
 return cursor;  
 }  
 Cursor readAllData\_member(){  
 String query = "SELECT \* FROM " + "Member";  
 SQLiteDatabase db = this.getReadableDatabase();  
  
 Cursor cursor = null;  
 if(db != null){  
 cursor = db.rawQuery(query, null);  
 }  
 return cursor;  
 }  
  
 void updateData(String row\_id, String title, String publisher\_name,String AVAILABLE){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues cv = new ContentValues();  
 cv.put("TITLE", title);  
 cv.put("PUBLISHER\_NAME", publisher\_name);  
 cv.put("AVAILABLE", AVAILABLE);  
  
 long result = db.update("Book", cv, "BOOK\_ID=?", new String[]{row\_id});  
 if(result == -1){  
 Toast.*makeText*(context, "Failed", Toast.*LENGTH\_SHORT*).show();  
 }else {  
 Toast.*makeText*(context, "Updated Successfully!", Toast.*LENGTH\_SHORT*).show();  
 }  
  
 }  
 void updateData\_publisher(String row\_name, String address, String phone){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues cv = new ContentValues();  
 cv.put("NAME", row\_name);  
 cv.put("ADDRESS", address);  
 cv.put("PHONE", phone);  
  
  
 long result = db.update("Publisher", cv, "NAME=?", new String[]{row\_name});  
 if(result == -1){  
 Toast.*makeText*(context, "Failed", Toast.*LENGTH\_SHORT*).show();  
 }else {  
 Toast.*makeText*(context, "Updated Successfully!", Toast.*LENGTH\_SHORT*).show();  
 }  
  
 }  
 void updateData\_branch(String row\_id, String name, String address){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues cv = new ContentValues();  
 cv.put("BRANCH\_NAME", name);  
 cv.put("BRANCH\_ADDRESS", address);  
  
  
  
 long result = db.update("Branch", cv, "BRANCH\_ID=?", new String[]{row\_id});  
 if(result == -1){  
 Toast.*makeText*(context, "Failed", Toast.*LENGTH\_SHORT*).show();  
 }else {  
 Toast.*makeText*(context, "Updated Successfully!", Toast.*LENGTH\_SHORT*).show();  
 }  
  
 }  
 void updateData\_member(String row\_id,String name, String address, String phone,String UNPAID\_DUES){  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues cv = new ContentValues();  
 cv.put("NAME", name);  
 cv.put("ADDRESS", address);  
 cv.put("PHONE", phone);  
 cv.put("UNPAID\_DUES", UNPAID\_DUES);  
  
  
 long result = db.update("Member", cv, "CARD\_NO=?", new String[]{row\_id});  
 if(result == -1){  
 Toast.*makeText*(context, "Failed", Toast.*LENGTH\_SHORT*).show();  
 }else {  
 Toast.*makeText*(context, "Updated Successfully!", Toast.*LENGTH\_SHORT*).show();  
 }  
  
 }  
 void deleteOneRow(String row\_id){  
 SQLiteDatabase db = this.getWritableDatabase();  
 long result = db.delete("Book", "book\_id=?", new String[]{row\_id});  
 if(result == -1){  
 Toast.*makeText*(context, "Failed to Delete.", Toast.*LENGTH\_SHORT*).show();  
 }else{  
 Toast.*makeText*(context, "Successfully Deleted.", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 void deleteOneRow\_publisher(String row\_name){  
 SQLiteDatabase db = this.getWritableDatabase();  
 long result = db.delete("Publisher", "NAME=?", new String[]{row\_name});  
 if(result == -1){  
 Toast.*makeText*(context, "Failed to Delete.", Toast.*LENGTH\_SHORT*).show();  
 }else{  
 Toast.*makeText*(context, "Successfully Deleted.", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 void deleteOneRow\_branch(String row\_name){  
 SQLiteDatabase db = this.getWritableDatabase();  
 long result = db.delete("Branch", "BRANCH\_ID=?", new String[]{row\_name});  
 if(result == -1){  
 Toast.*makeText*(context, "Failed to Delete.", Toast.*LENGTH\_SHORT*).show();  
 }else{  
 Toast.*makeText*(context, "Successfully Deleted.", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 void deleteOneRow\_member(String row\_name){  
 SQLiteDatabase db = this.getWritableDatabase();  
 long result = db.delete("Member", "CARD\_NO=?", new String[]{row\_name});  
 if(result == -1){  
 Toast.*makeText*(context, "Failed to Delete.", Toast.*LENGTH\_SHORT*).show();  
 }else{  
 Toast.*makeText*(context, "Successfully Deleted.", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 void deleteAllData(){  
 SQLiteDatabase db = this.getWritableDatabase();  
 db.execSQL("DELETE FROM " + "Book");  
 }  
 void deleteAllData\_publisher(){  
 SQLiteDatabase db = this.getWritableDatabase();  
 db.execSQL("DELETE FROM " + "Publisher");  
 }  
 void deleteAllData\_branch(){  
 SQLiteDatabase db = this.getWritableDatabase();  
 db.execSQL("DELETE FROM " + "Branch");  
 }  
 void deleteAllData\_member(){  
 SQLiteDatabase db = this.getWritableDatabase();  
 db.execSQL("DELETE FROM " + "Member");  
 }  
  
}

1. **CustomAdapter.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.app.Activity;  
import android.content.Context;  
import android.content.Intent;  
import android.os.Build;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.view.animation.Animation;  
import android.view.animation.AnimationUtils;  
import android.widget.LinearLayout;  
import android.widget.TextView;  
  
import androidx.annotation.NonNull;  
import androidx.annotation.RequiresApi;  
import androidx.recyclerview.widget.RecyclerView;  
  
import java.util.ArrayList;  
  
public class CustomAdapter extends RecyclerView.Adapter<CustomAdapter.MyViewHolder> {  
  
 private Context context;  
 private Activity activity;  
 private ArrayList book\_id, book\_title, publisher\_name, book\_available;  
  
 CustomAdapter(Activity activity, Context context, ArrayList book\_id, ArrayList book\_title, ArrayList publisher\_name  
 , ArrayList book\_available){  
 this.activity = activity;  
 this.context = context;  
 this.book\_id = book\_id;  
 this.book\_title = book\_title;  
 this.publisher\_name = publisher\_name;  
 this.book\_available = book\_available;  
  
 }  
  
 @NonNull  
 @Override  
 public MyViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {  
 LayoutInflater inflater = LayoutInflater.*from*(context);  
 View view = inflater.inflate(R.layout.*my\_row*, parent, false);  
 return new MyViewHolder(view);  
 }  
  
 @RequiresApi(api = Build.VERSION\_CODES.*M*)  
 @Override  
 public void onBindViewHolder(@NonNull final MyViewHolder holder, final int position) {  
 holder.book\_id\_txt.setText(String.*valueOf*(book\_id.get(position)));  
 holder.book\_title\_txt.setText(String.*valueOf*(book\_title.get(position)));  
 holder.publisher\_name\_txt.setText(String.*valueOf*(publisher\_name.get(position)));  
 holder.book\_available\_txt.setText(String.*valueOf*(book\_available.get(position)));  
  
 //Recyclerview onClickListener  
 holder.mainLayout.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent intent = new Intent(context, UpdateActivity.class);  
 intent.putExtra("BOOK\_ID", String.*valueOf*(book\_id.get(position)));  
 intent.putExtra("TITLE", String.*valueOf*(book\_title.get(position)));  
 intent.putExtra("PUBLISHER\_NAME", String.*valueOf*(publisher\_name.get(position)));  
 intent.putExtra("AVAILABLE", String.*valueOf*(book\_available.get(position)));  
 activity.startActivityForResult(intent, 1);  
 }  
 });  
  
  
 }  
  
 @Override  
 public int getItemCount() {  
 return book\_id.size();  
 }  
  
 class MyViewHolder extends RecyclerView.ViewHolder {  
  
 TextView book\_id\_txt, book\_title\_txt, publisher\_name\_txt,book\_available\_txt;  
 LinearLayout mainLayout;  
  
 MyViewHolder(@NonNull View itemView) {  
 super(itemView);  
 book\_id\_txt = itemView.findViewById(R.id.*book\_id\_txt*);  
 book\_title\_txt = itemView.findViewById(R.id.*book\_title\_txt*);  
 publisher\_name\_txt = itemView.findViewById(R.id.*publisher\_name\_txt*);  
 book\_available\_txt = itemView.findViewById(R.id.*book\_available\_txt*);  
  
 mainLayout = itemView.findViewById(R.id.*mainLayout*);  
 //Animate Recyclerview  
 Animation translate\_anim = AnimationUtils.*loadAnimation*(context, R.anim.*translate\_anim*);  
 mainLayout.setAnimation(translate\_anim);  
 }  
  
 }  
  
}

1. **AddActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
public class AddActivity extends AppCompatActivity {  
  
 EditText title\_input, publisher\_name,book\_available;  
 Button add\_button;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_add*);  
  
 title\_input = findViewById(R.id.*title\_input*);  
 publisher\_name = findViewById(R.id.*author\_input*);  
 book\_available = findViewById(R.id.*book\_available\_input*);  
 add\_button = findViewById(R.id.*add\_button*);  
  
  
 add\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 MyDatabaseHelper myDB = new MyDatabaseHelper(AddActivity.this);  
 myDB.addBook(title\_input.getText().toString().trim(),  
 publisher\_name.getText().toString().trim(),  
 book\_available.getText().toString().trim());  
 }  
 });  
  
 }  
}

1. **BookActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.content.DialogInterface;  
import android.content.Intent;  
import android.database.Cursor;  
import android.database.sqlite.SQLiteDatabase;  
import android.os.Bundle;  
import android.view.Menu;  
import android.view.MenuInflater;  
import android.view.MenuItem;  
import android.view.View;  
import android.widget.ImageView;  
import android.widget.TextView;  
  
import androidx.annotation.Nullable;  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.recyclerview.widget.LinearLayoutManager;  
import androidx.recyclerview.widget.RecyclerView;  
  
import com.google.android.material.floatingactionbutton.FloatingActionButton;  
  
import java.util.ArrayList;  
  
public class BookActivity extends AppCompatActivity {  
  
 RecyclerView recyclerView;  
 FloatingActionButton add\_button;  
 ImageView empty\_imageview;  
 TextView no\_data;  
  
 MyDatabaseHelper myDB;  
 ArrayList<String> book\_id, book\_title, publisher\_name,book\_available;  
 CustomAdapter customAdapter;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_book);  
  
 recyclerView = findViewById(R.id.recyclerView);  
 add\_button = findViewById(R.id.add\_button);  
 empty\_imageview = findViewById(R.id.empty\_imageview);  
 no\_data = findViewById(R.id.no\_data);  
 add\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent intent = new Intent(BookActivity.this, AddActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 myDB = new MyDatabaseHelper(BookActivity.this);  
  
 book\_id = new ArrayList<>();  
 book\_title = new ArrayList<>();  
 publisher\_name = new ArrayList<>();  
 book\_available = new ArrayList<>();  
  
  
  
 customAdapter = new CustomAdapter(BookActivity.this,this, book\_id, book\_title, publisher\_name,book\_available);  
 //customAdapter = new CustomAdapter(BookActivity.this,this, "1", book\_title, publisher\_name);  
 recyclerView.setAdapter(customAdapter);  
 recyclerView.setLayoutManager(new LinearLayoutManager(BookActivity.this));  
 storeDataInArrays();  
 }  
  
 @Override  
 protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {  
 super.onActivityResult(requestCode, resultCode, data);  
 if(requestCode == 1){  
 recreate();  
 }  
 }  
  
  
 void storeDataInArrays(){  
 Cursor cursor = myDB.readAllData();  
 if(cursor.getCount() == 0){  
 empty\_imageview.setVisibility(View.VISIBLE);  
 no\_data.setVisibility(View.VISIBLE);  
 }else{  
 while (cursor.moveToNext()){  
 book\_id.add(cursor.getString(0));  
 book\_title.add(cursor.getString(1));  
 publisher\_name.add(cursor.getString(2));  
 book\_available.add(cursor.getString(3));  
  
 }  
 empty\_imageview.setVisibility(View.GONE);  
 no\_data.setVisibility(View.GONE);  
 }  
 }  
  
 @Override  
 public boolean onCreateOptionsMenu(Menu menu) {  
 MenuInflater inflater = getMenuInflater();  
 inflater.inflate(R.menu.my\_menu, menu);  
 return super.onCreateOptionsMenu(menu);  
 }  
  
 @Override  
 public boolean onOptionsItemSelected(MenuItem item) {  
 if(item.getItemId() == R.id.delete\_all){  
 confirmDialog();  
 }  
 return super.onOptionsItemSelected(item);  
 }  
  
 void confirmDialog(){  
 AlertDialog.Builder builder = new AlertDialog.Builder(this);  
 builder.setTitle("Delete All?");  
 builder.setMessage("Are you sure you want to delete all Data?");  
 builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 MyDatabaseHelper myDB = new MyDatabaseHelper(BookActivity.this);  
 myDB.deleteAllData();  
 //Refresh Activity  
 Intent intent = new Intent(BookActivity.this, BookActivity.class);  
 startActivity(intent);  
 finish();  
 }  
 });  
 builder.setNegativeButton("No", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
  
 }  
 });  
 builder.create().show();  
 }  
}

1. **SearchActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import androidx.appcompat.app.AppCompatActivity;  
import android.app.Activity;  
import android.content.Context;  
import android.database.Cursor;  
import android.database.sqlite.SQLiteDatabase;  
import android.os.Bundle;  
import android.text.Editable;  
import android.text.TextWatcher;  
import android.view.View;  
import android.widget.ArrayAdapter;  
import android.widget.EditText;  
import android.widget.ListView;  
import android.widget.Toast;  
  
import java.util.ArrayList;  
public class SearchActivity extends AppCompatActivity {  
  
 EditText searchEditText;  
 ListView listView;  
 ArrayAdapter<String> adapter;  
 SQLiteDatabase sqLiteDatabase;  
 ArrayList<String> memberList = new ArrayList<>();  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_search*);  
  
 searchEditText = findViewById(R.id.*searchEditText*);  
 listView = findViewById(R.id.*listView*);  
 adapter = new ArrayAdapter<>(this, android.R.layout.*simple\_list\_item\_1*, memberList);  
 listView.setAdapter(adapter);  
  
 // Initialize SQLite Database  
 sqLiteDatabase = openOrCreateDatabase("BookLibrary.db", Context.*MODE\_PRIVATE*, null);  
  
 // Call method to fetch all members from the database  
 fetchAllMembers();  
  
 // TextWatcher to listen to changes in the searchEditText  
 searchEditText.addTextChangedListener(new TextWatcher() {  
 @Override  
 public void beforeTextChanged(CharSequence charSequence, int i, int i1, int i2) {}  
  
 @Override  
 public void onTextChanged(CharSequence charSequence, int i, int i1, int i2) {}  
  
 @Override  
 public void afterTextChanged(Editable editable) {  
 // Filter members based on the text entered in the searchEditText  
 filterMembers(editable.toString());  
 }  
 });  
 }  
  
 // Method to fetch all members from the database  
 private void fetchAllMembers() {  
 Cursor cursor = sqLiteDatabase.rawQuery("SELECT \* FROM Member", null);  
 if (cursor.moveToFirst()) {  
 do {  
 String memberName = cursor.getString(cursor.getColumnIndex("NAME"));  
 memberList.add(memberName);  
 } while (cursor.moveToNext());  
 adapter.notifyDataSetChanged();  
 }  
 cursor.close();  
 }  
  
 // Method to filter members based on the search query  
 private void filterMembers(String query) {  
 ArrayList<String> filteredList = new ArrayList<>();  
 for (String member : memberList) {  
 if (member.toLowerCase().contains(query.toLowerCase())) {  
 filteredList.add(member);  
 }  
 }  
 adapter = new ArrayAdapter<>(this, android.R.layout.*simple\_list\_item\_1*, filteredList);  
 listView.setAdapter(adapter);  
 }  
  
}

1. **SearchBook.java**

package com.jovanovic.stefan.LibraryManagement;  
import android.app.Activity;  
import android.content.Context;  
import android.database.Cursor;  
import android.database.sqlite.SQLiteDatabase;  
import android.os.Bundle;  
import android.text.Editable;  
import android.text.TextWatcher;  
import android.view.View;  
import android.widget.ArrayAdapter;  
import android.widget.EditText;  
import android.widget.ListView;  
import android.widget.Toast;  
  
import java.util.ArrayList;  
import androidx.appcompat.app.AppCompatActivity;  
  
public class SearchBook extends AppCompatActivity {  
  
 EditText searchEditText;  
 ListView listView;  
 ArrayAdapter<String> adapter;  
 SQLiteDatabase sqLiteDatabase;  
 ArrayList<String> bookList = new ArrayList<>();  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_searchbook*);  
  
 searchEditText = findViewById(R.id.*searchEditText1*);  
 listView = findViewById(R.id.*listView1*);  
 adapter = new ArrayAdapter<>(this, android.R.layout.*simple\_list\_item\_1*, bookList);  
 listView.setAdapter(adapter);  
  
 // Initialize SQLite Database  
 sqLiteDatabase = openOrCreateDatabase("BookLibrary.db", Context.*MODE\_PRIVATE*, null);  
  
 // Call method to fetch all books from the database  
 fetchAllBooks();  
  
 // TextWatcher to listen to changes in the searchEditText  
 searchEditText.addTextChangedListener(new TextWatcher() {  
 @Override  
 public void beforeTextChanged(CharSequence charSequence, int i, int i1, int i2) {}  
  
 @Override  
 public void onTextChanged(CharSequence charSequence, int i, int i1, int i2) {}  
  
 @Override  
 public void afterTextChanged(Editable editable) {  
 // Filter books based on the text entered in the searchEditText  
 filterBooks(editable.toString());  
 }  
 });  
 }  
  
 // Method to fetch all books from the database  
 private void fetchAllBooks() {  
 Cursor cursor = sqLiteDatabase.rawQuery("SELECT \* FROM Book", null);  
 if (cursor.moveToFirst()) {  
 do {  
 String bookTitle = cursor.getString(cursor.getColumnIndex("TITLE"));  
 bookList.add(bookTitle);  
 } while (cursor.moveToNext());  
 adapter.notifyDataSetChanged();  
 }  
 cursor.close();  
 }  
  
 // Method to filter books based on the search query  
 private void filterBooks(String query) {  
 ArrayList<String> filteredList = new ArrayList<>();  
 for (String book : bookList) {  
 if (book.toLowerCase().contains(query.toLowerCase())) {  
 filteredList.add(book);  
 }  
 }  
 adapter = new ArrayAdapter<>(this, android.R.layout.*simple\_list\_item\_1*, filteredList);  
 listView.setAdapter(adapter);  
 }  
}

1. **UpdateActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import androidx.appcompat.app.ActionBar;  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.DialogInterface;  
import android.os.Bundle;  
import android.util.Log;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
public class UpdateActivity extends AppCompatActivity {  
  
 EditText title\_input, publisher\_name\_input,book\_available\_input2;  
 Button update\_button, copy\_book,delete\_button;  
  
 String book\_id, title, publisher\_name,book\_available;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_update*);  
  
 title\_input = findViewById(R.id.*title\_input2*);  
 publisher\_name\_input = findViewById(R.id.*publisher\_name\_input2*);  
 book\_available\_input2 = findViewById(R.id.*book\_available\_input2*);  
  
 update\_button = findViewById(R.id.*update\_button*);  
 copy\_book = findViewById(R.id.*copy\_book*);  
 delete\_button = findViewById(R.id.*delete\_button*);  
  
 //First we call this  
 getAndSetIntentData();  
  
 //Set actionbar title after getAndSetIntentData method  
 ActionBar ab = getSupportActionBar();  
 if (ab != null) {  
 ab.setTitle(title);  
 }  
  
 update\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 //And only then we call this  
 MyDatabaseHelper myDB = new MyDatabaseHelper(UpdateActivity.this);  
 title = title\_input.getText().toString().trim();  
 publisher\_name = publisher\_name\_input.getText().toString().trim();  
 book\_available = book\_available\_input2.getText().toString().trim();  
 myDB.updateData(book\_id, title, publisher\_name, book\_available);  
 }  
 });  
 copy\_book.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 //And only then we call this  
 MyDatabaseHelper myDB = new MyDatabaseHelper(UpdateActivity.this);  
 title = title\_input.getText().toString().trim();  
 publisher\_name = publisher\_name\_input.getText().toString().trim();  
 book\_available = book\_available\_input2.getText().toString().trim();  
 myDB.copyBook(title,publisher\_name,book\_available);  
 }  
 });  
 delete\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 confirmDialog();  
 }  
 });  
  
 }  
  
 void getAndSetIntentData(){  
 if(getIntent().hasExtra("BOOK\_ID") && getIntent().hasExtra("TITLE") &&  
 getIntent().hasExtra("PUBLISHER\_NAME") &&  
 getIntent().hasExtra("AVAILABLE")){  
 //Getting Data from Intent  
 book\_id = getIntent().getStringExtra("BOOK\_ID");  
 title = getIntent().getStringExtra("TITLE");  
 publisher\_name = getIntent().getStringExtra("PUBLISHER\_NAME");  
 book\_available = getIntent().getStringExtra("AVAILABLE");  
  
 //Setting Intent Data  
 title\_input.setText(title);  
 publisher\_name\_input.setText( publisher\_name);  
 book\_available\_input2.setText( book\_available);  
 Log.*d*("stev", title+" "+ publisher\_name+""+book\_available);  
 }else{  
 Toast.*makeText*(this, "No data.", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
  
 void confirmDialog(){  
 AlertDialog.Builder builder = new AlertDialog.Builder(this);  
 builder.setTitle("Delete " + title + " ?");  
 builder.setMessage("Are you sure you want to delete " + title + " ?");  
 builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 MyDatabaseHelper myDB = new MyDatabaseHelper(UpdateActivity.this);  
 myDB.deleteOneRow(book\_id);  
 finish();  
 }  
 });  
 builder.setNegativeButton("No", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
  
 }  
 });  
 builder.create().show();  
 }  
}

1. **Branch\_AddActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.content.DialogInterface;  
import android.content.Intent;  
import android.database.Cursor;  
import android.os.Bundle;  
import android.view.Menu;  
import android.view.MenuInflater;  
import android.view.MenuItem;  
import android.view.View;  
import android.widget.ImageView;  
import android.widget.TextView;  
  
import androidx.annotation.Nullable;  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.recyclerview.widget.LinearLayoutManager;  
import androidx.recyclerview.widget.RecyclerView;  
  
import com.google.android.material.floatingactionbutton.FloatingActionButton;  
  
import java.util.ArrayList;  
  
public class BranchActivity extends AppCompatActivity {  
  
 RecyclerView recyclerView;  
 FloatingActionButton add\_button;  
 ImageView empty\_imageview;  
 TextView no\_data;  
  
 MyDatabaseHelper myDB;  
 ArrayList<String> branch\_id,branch\_name, branch\_address;  
 Branch\_CustomAdapter customAdapter;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_branch*);  
  
 recyclerView = findViewById(R.id.*recyclerView*);  
 add\_button = findViewById(R.id.*add\_button*);  
 empty\_imageview = findViewById(R.id.*empty\_imageview*);  
 no\_data = findViewById(R.id.*no\_data*);  
 add\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent intent = new Intent(BranchActivity.this, Branch\_AddActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 myDB = new MyDatabaseHelper(BranchActivity.this);  
 branch\_name = new ArrayList<>();  
 branch\_address = new ArrayList<>();  
 branch\_id = new ArrayList<>();  
  
  
 storeDataInArrays();  
  
 customAdapter = new Branch\_CustomAdapter(BranchActivity.this,this, branch\_id,branch\_name, branch\_address);  
 recyclerView.setAdapter(customAdapter);  
 recyclerView.setLayoutManager(new LinearLayoutManager(BranchActivity.this));  
  
 }  
  
 @Override  
 protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {  
 super.onActivityResult(requestCode, resultCode, data);  
 if(requestCode == 1){  
 recreate();  
 }  
 }  
  
 void storeDataInArrays(){  
 Cursor cursor = myDB.readAllData\_branch();  
 if(cursor.getCount() == 0){  
 empty\_imageview.setVisibility(View.*VISIBLE*);  
 no\_data.setVisibility(View.*VISIBLE*);  
 }else{  
 while (cursor.moveToNext()){  
 branch\_id.add(cursor.getString(0));  
 branch\_name.add(cursor.getString(1));  
 branch\_address.add(cursor.getString(2));  
  
  
 }  
 empty\_imageview.setVisibility(View.*GONE*);  
 no\_data.setVisibility(View.*GONE*);  
 }  
 }  
  
 @Override  
 public boolean onCreateOptionsMenu(Menu menu) {  
 MenuInflater inflater = getMenuInflater();  
 inflater.inflate(R.menu.*my\_menu*, menu);  
 return super.onCreateOptionsMenu(menu);  
 }  
  
 @Override  
 public boolean onOptionsItemSelected(MenuItem item) {  
 if(item.getItemId() == R.id.*delete\_all1*){  
 confirmDialog();  
 }  
 return super.onOptionsItemSelected(item);  
 }  
  
 void confirmDialog(){  
 AlertDialog.Builder builder = new AlertDialog.Builder(this);  
 builder.setTitle("Delete All?");  
 builder.setMessage("Are you sure you want to delete all Data?");  
 builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 MyDatabaseHelper myDB = new MyDatabaseHelper(BranchActivity.this);  
 myDB.deleteAllData\_branch();  
 //Refresh Activity  
 Intent intent = new Intent(BranchActivity.this, BranchActivity.class);  
 startActivity(intent);  
 finish();  
 }  
 });  
 builder.setNegativeButton("No", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
  
 }  
 });  
 builder.create().show();  
 }  
}

1. **Branch\_CustomAdapter.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.app.Activity;  
import android.content.Context;  
import android.content.Intent;  
import android.os.Build;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.view.animation.Animation;  
import android.view.animation.AnimationUtils;  
import android.widget.LinearLayout;  
import android.widget.TextView;  
  
import androidx.annotation.NonNull;  
import androidx.annotation.RequiresApi;  
import androidx.recyclerview.widget.RecyclerView;  
  
import java.util.ArrayList;  
  
public class Branch\_CustomAdapter extends RecyclerView.Adapter<Branch\_CustomAdapter.MyViewHolder> {  
  
 private Context context;  
 private Activity activity;  
 private ArrayList branch\_id,branch\_name, branch\_address;  
  
 Branch\_CustomAdapter(Activity activity, Context context, ArrayList branch\_id,ArrayList branch\_name, ArrayList branch\_address){  
 this.activity = activity;  
 this.context = context;  
 this.branch\_id= branch\_id;  
 this.branch\_name = branch\_name;  
 this.branch\_address = branch\_address;  
  
  
 }  
  
 @NonNull  
 @Override  
 public MyViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {  
 LayoutInflater inflater = LayoutInflater.*from*(context);  
 View view = inflater.inflate(R.layout.*my\_row\_branch*, parent, false);  
 return new MyViewHolder(view);  
 }  
  
 @RequiresApi(api = Build.VERSION\_CODES.*M*)  
 @Override  
 public void onBindViewHolder(@NonNull final MyViewHolder holder, final int position) {  
 holder.branch\_id\_txt.setText(String.*valueOf*(branch\_id.get(position)));  
 holder.branch\_name\_txt.setText(String.*valueOf*(branch\_name.get(position)));  
 holder.branch\_address\_txt.setText(String.*valueOf*(branch\_address.get(position)));  
  
  
 //Recyclerview onClickListener  
 holder.mainLayout.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent intent = new Intent(context, Branch\_UpdateActivity.class);  
 intent.putExtra("BRANCH\_ID", String.*valueOf*(branch\_name.get(position)));  
 intent.putExtra("BRANCH\_NAME", String.*valueOf*(branch\_name.get(position)));  
 intent.putExtra("BRANCH\_ADDRESS", String.*valueOf*(branch\_address.get(position)));  
  
 activity.startActivityForResult(intent, 1);  
 }  
 });  
  
  
 }  
  
 @Override  
 public int getItemCount() {  
 return branch\_name.size();  
 }  
  
 class MyViewHolder extends RecyclerView.ViewHolder {  
  
 TextView branch\_id\_txt,branch\_name\_txt, branch\_address\_txt;  
 LinearLayout mainLayout;  
  
 MyViewHolder(@NonNull View itemView) {  
 super(itemView);  
 branch\_id\_txt = itemView.findViewById(R.id.*branch\_id\_txt*);  
 branch\_name\_txt = itemView.findViewById(R.id.*branch\_name\_txt*);  
 branch\_address\_txt = itemView.findViewById(R.id.*branch\_address\_txt*);  
  
  
 mainLayout = itemView.findViewById(R.id.*mainLayout*);  
 //Animate Recyclerview  
 Animation translate\_anim = AnimationUtils.*loadAnimation*(context, R.anim.*translate\_anim*);  
 mainLayout.setAnimation(translate\_anim);  
 }  
  
 }  
  
}

1. **Branch\_UpdateActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.content.DialogInterface;  
import android.os.Bundle;  
import android.util.Log;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
import androidx.appcompat.app.ActionBar;  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
  
public class Branch\_UpdateActivity extends AppCompatActivity {  
  
 EditText branch\_name\_input2, branch\_address\_input2;  
 Button update\_button,delete\_button;  
  
 String id,name, address;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_branch\_update*);  
  
 branch\_name\_input2 = findViewById(R.id.*name\_input2*);  
 branch\_address\_input2 = findViewById(R.id.*branch\_address\_input2*);  
  
  
 update\_button = findViewById(R.id.*update\_button*);  
  
 delete\_button = findViewById(R.id.*delete\_button*);  
  
 //First we call this  
 getAndSetIntentData();  
  
 //Set actionbar address after getAndSetIntentData method  
 ActionBar ab = getSupportActionBar();  
 if (ab != null) {  
 ab.setTitle(name);  
 }  
  
 update\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 //And only then we call this  
 MyDatabaseHelper myDB = new MyDatabaseHelper(Branch\_UpdateActivity.this);  
 name = branch\_name\_input2.getText().toString().trim();  
 address = branch\_address\_input2.getText().toString().trim();  
  
 myDB.updateData\_branch(id,name, address);  
 }  
 });  
   
 delete\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 confirmDialog();  
 }  
 });  
  
 }  
  
 void getAndSetIntentData(){  
 if(getIntent().hasExtra("BRANCH\_ID") && getIntent().hasExtra("BRANCH\_NAME") && getIntent().hasExtra("BRANCH\_ADDRESS")){  
 //Getting Data from Intent  
 id = getIntent().getStringExtra("BRANCH\_ID");  
 name = getIntent().getStringExtra("BRANCH\_NAME");  
 address = getIntent().getStringExtra("BRANCH\_ADDRESS");  
  
  
  
 //Setting Intent Data  
 branch\_name\_input2.setText(name);  
 branch\_address\_input2.setText( address);  
  
 Log.*d*("stev", name+" "+address);  
 }else{  
 Toast.*makeText*(this, "No data.", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
  
 void confirmDialog(){  
 AlertDialog.Builder builder = new AlertDialog.Builder(this);  
 builder.setTitle("Delete " + name + " ?");  
 builder.setMessage("Are you sure you want to delete " + name + " ?");  
 builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 MyDatabaseHelper myDB = new MyDatabaseHelper(Branch\_UpdateActivity.this);  
 myDB.deleteOneRow\_branch(id);  
 finish();  
 }  
 });  
 builder.setNegativeButton("No", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
  
 }  
 });  
 builder.create().show();  
 }  
}

1. **BranchActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.content.DialogInterface;  
import android.content.Intent;  
import android.database.Cursor;  
import android.os.Bundle;  
import android.view.Menu;  
import android.view.MenuInflater;  
import android.view.MenuItem;  
import android.view.View;  
import android.widget.ImageView;  
import android.widget.TextView;  
  
import androidx.annotation.Nullable;  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.recyclerview.widget.LinearLayoutManager;  
import androidx.recyclerview.widget.RecyclerView;  
  
import com.google.android.material.floatingactionbutton.FloatingActionButton;  
  
import java.util.ArrayList;  
  
public class BranchActivity extends AppCompatActivity {  
  
 RecyclerView recyclerView;  
 FloatingActionButton add\_button;  
 ImageView empty\_imageview;  
 TextView no\_data;  
  
 MyDatabaseHelper myDB;  
 ArrayList<String> branch\_id,branch\_name, branch\_address;  
 Branch\_CustomAdapter customAdapter;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_branch*);  
  
 recyclerView = findViewById(R.id.*recyclerView*);  
 add\_button = findViewById(R.id.*add\_button*);  
 empty\_imageview = findViewById(R.id.*empty\_imageview*);  
 no\_data = findViewById(R.id.*no\_data*);  
 add\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent intent = new Intent(BranchActivity.this, Branch\_AddActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 myDB = new MyDatabaseHelper(BranchActivity.this);  
 branch\_name = new ArrayList<>();  
 branch\_address = new ArrayList<>();  
 branch\_id = new ArrayList<>();  
  
  
 storeDataInArrays();  
  
 customAdapter = new Branch\_CustomAdapter(BranchActivity.this,this, branch\_id,branch\_name, branch\_address);  
 recyclerView.setAdapter(customAdapter);  
 recyclerView.setLayoutManager(new LinearLayoutManager(BranchActivity.this));  
  
 }  
  
 @Override  
 protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {  
 super.onActivityResult(requestCode, resultCode, data);  
 if(requestCode == 1){  
 recreate();  
 }  
 }  
  
 void storeDataInArrays(){  
 Cursor cursor = myDB.readAllData\_branch();  
 if(cursor.getCount() == 0){  
 empty\_imageview.setVisibility(View.*VISIBLE*);  
 no\_data.setVisibility(View.*VISIBLE*);  
 }else{  
 while (cursor.moveToNext()){  
 branch\_id.add(cursor.getString(0));  
 branch\_name.add(cursor.getString(1));  
 branch\_address.add(cursor.getString(2));  
  
  
 }  
 empty\_imageview.setVisibility(View.*GONE*);  
 no\_data.setVisibility(View.*GONE*);  
 }  
 }  
  
 @Override  
 public boolean onCreateOptionsMenu(Menu menu) {  
 MenuInflater inflater = getMenuInflater();  
 inflater.inflate(R.menu.*my\_menu*, menu);  
 return super.onCreateOptionsMenu(menu);  
 }  
  
 @Override  
 public boolean onOptionsItemSelected(MenuItem item) {  
 if(item.getItemId() == R.id.*delete\_all1*){  
 confirmDialog();  
 }  
 return super.onOptionsItemSelected(item);  
 }  
  
 void confirmDialog(){  
 AlertDialog.Builder builder = new AlertDialog.Builder(this);  
 builder.setTitle("Delete All?");  
 builder.setMessage("Are you sure you want to delete all Data?");  
 builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 MyDatabaseHelper myDB = new MyDatabaseHelper(BranchActivity.this);  
 myDB.deleteAllData\_branch();  
 //Refresh Activity  
 Intent intent = new Intent(BranchActivity.this, BranchActivity.class);  
 startActivity(intent);  
 finish();  
 }  
 });  
 builder.setNegativeButton("No", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
  
 }  
 });  
 builder.create().show();  
 }  
}

1. **Member\_AddActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
public class Member\_AddActivity extends AppCompatActivity {  
  
 EditText name\_input, address\_input,phone\_input,unpaid\_dues\_input;  
 Button add\_button;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_member\_add*);  
  
 name\_input = findViewById(R.id.*name\_input*);  
 address\_input = findViewById(R.id.*address\_input*);  
 phone\_input = findViewById(R.id.*phone\_input*);  
 unpaid\_dues\_input = findViewById(R.id.*unpaid\_input*);  
 add\_button = findViewById(R.id.*add\_button*);  
  
  
 add\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 MyDatabaseHelper myDB = new MyDatabaseHelper(Member\_AddActivity.this);  
 myDB.addMember(name\_input.getText().toString().trim(),  
 address\_input.getText().toString().trim(),  
 phone\_input.getText().toString().trim(),  
 Double.*parseDouble*(unpaid\_dues\_input.getText().toString())  
 );  
  
 }  
 });  
  
 }  
}

1. **Member\_CustomAdapter.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.app.Activity;  
import android.content.Context;  
import android.content.Intent;  
import android.os.Build;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.view.animation.Animation;  
import android.view.animation.AnimationUtils;  
import android.widget.LinearLayout;  
import android.widget.TextView;  
  
import androidx.annotation.NonNull;  
import androidx.annotation.RequiresApi;  
import androidx.recyclerview.widget.RecyclerView;  
  
import java.util.ArrayList;  
  
public class Member\_CustomAdapter extends RecyclerView.Adapter<Member\_CustomAdapter.MyViewHolder> {  
  
 private Context context;  
 private Activity activity;  
 private ArrayList card\_no,member\_name, member\_address, member\_phone,member\_unpaid;  
  
 Member\_CustomAdapter(Activity activity, Context context, ArrayList card\_no,ArrayList member\_name, ArrayList member\_address, ArrayList member\_phone, ArrayList member\_unpaid){  
 this.activity = activity;  
 this.context = context;  
 this.card\_no = card\_no;  
 this.member\_name = member\_name;  
 this.member\_address = member\_address;  
 this.member\_phone = member\_phone;  
 this.member\_unpaid = member\_unpaid;  
  
 }  
  
 @NonNull  
 @Override  
 public MyViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {  
 LayoutInflater inflater = LayoutInflater.*from*(context);  
 View view = inflater.inflate(R.layout.*my\_row\_member*, parent, false);  
 return new MyViewHolder(view);  
 }  
  
 @RequiresApi(api = Build.VERSION\_CODES.*M*)  
 @Override  
 public void onBindViewHolder(@NonNull final MyViewHolder holder, final int position) {  
 holder.card\_no\_txt.setText(String.*valueOf*(card\_no.get(position)));  
 holder.member\_name\_txt.setText(String.*valueOf*(member\_name.get(position)));  
 holder.member\_address\_txt.setText(String.*valueOf*(member\_address.get(position)));  
 holder.member\_phone\_txt.setText(String.*valueOf*(member\_phone.get(position)));  
 holder.member\_unpaid\_txt.setText(String.*valueOf*(member\_unpaid.get(position)));  
  
 //Recyclerview onClickListener  
 holder.mainLayout.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent intent = new Intent(context, Member\_UpdateActivity.class);  
 intent.putExtra("CARD\_NO", String.*valueOf*(card\_no.get(position)));  
 intent.putExtra("NAME", String.*valueOf*(member\_name.get(position)));  
 intent.putExtra("ADDRESS", String.*valueOf*(member\_address.get(position)));  
 intent.putExtra("PHONE", String.*valueOf*(member\_phone.get(position)));  
 intent.putExtra("UNPAID\_DUES", String.*valueOf*(member\_unpaid.get(position)));  
 activity.startActivityForResult(intent, 1);  
 }  
 });  
  
  
 }  
  
 @Override  
 public int getItemCount() {  
  
 return member\_name.size();  
 }  
  
 class MyViewHolder extends RecyclerView.ViewHolder {  
  
 TextView card\_no\_txt,member\_name\_txt, member\_address\_txt, member\_phone\_txt,member\_unpaid\_txt;  
 LinearLayout mainLayout;  
  
 MyViewHolder(@NonNull View itemView) {  
 super(itemView);  
 card\_no\_txt = itemView.findViewById(R.id.*card\_no\_txt*);  
 member\_name\_txt = itemView.findViewById(R.id.*member\_name\_txt*);  
 member\_address\_txt = itemView.findViewById(R.id.*member\_address\_txt*);  
 member\_phone\_txt = itemView.findViewById(R.id.*member\_phone\_txt*);  
 member\_unpaid\_txt = itemView.findViewById(R.id.*member\_unpaid\_txt*);  
  
 mainLayout = itemView.findViewById(R.id.*mainLayout*);  
 //Animate Recyclerview  
 Animation translate\_anim = AnimationUtils.*loadAnimation*(context, R.anim.*translate\_anim*);  
 mainLayout.setAnimation(translate\_anim);  
 }  
  
 }  
  
}

1. **Member\_UpdateActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.content.DialogInterface;  
import android.os.Bundle;  
import android.util.Log;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
import androidx.appcompat.app.ActionBar;  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
  
public class Member\_UpdateActivity extends AppCompatActivity {  
  
 EditText name\_input2, member\_address\_input2,member\_phone\_input2,member\_unpaid\_dues\_input2;  
 Button update\_button,delete\_button;  
  
 String id,name, address, phone,unpaid;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_member\_update*);  
  
 name\_input2 = findViewById(R.id.*name\_input2*);  
 member\_address\_input2 = findViewById(R.id.*member\_address\_input2*);  
 member\_phone\_input2 = findViewById(R.id.*member\_phone\_input2*);  
 member\_unpaid\_dues\_input2 = findViewById(R.id.*member\_unpaid\_dues\_input2*);  
  
 update\_button = findViewById(R.id.*update\_button*);  
  
 delete\_button = findViewById(R.id.*delete\_button*);  
  
 //First we call this  
 getAndSetIntentData();  
  
 //Set actionbar address after getAndSetIntentData method  
 ActionBar ab = getSupportActionBar();  
 if (ab != null) {  
 ab.setTitle(name);  
 }  
  
 update\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 //And only then we call this  
 MyDatabaseHelper myDB = new MyDatabaseHelper(Member\_UpdateActivity.this);  
 name = name\_input2.getText().toString().trim();  
 address = member\_address\_input2.getText().toString().trim();  
 phone = member\_phone\_input2.getText().toString().trim();  
 unpaid = member\_unpaid\_dues\_input2.getText().toString().trim();  
 myDB.updateData\_member(id,name, address, phone,unpaid);  
 }  
 });  
   
 delete\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 confirmDialog();  
 }  
 });  
  
 }  
  
 void getAndSetIntentData(){  
 if(getIntent().hasExtra("CARD\_NO") && getIntent().hasExtra("NAME") && getIntent().hasExtra("ADDRESS") &&  
 getIntent().hasExtra("PHONE")&&  
 getIntent().hasExtra("UNPAID\_DUES") ){  
 //Getting Data from Intent  
 id = getIntent().getStringExtra("CARD\_NO");  
 name = getIntent().getStringExtra("NAME");  
 address = getIntent().getStringExtra("ADDRESS");  
 phone = getIntent().getStringExtra("PHONE");  
 unpaid = getIntent().getStringExtra("UNPAID\_DUES");  
  
  
 //Setting Intent Data  
 name\_input2.setText(name);  
 member\_address\_input2.setText( address);  
 member\_phone\_input2.setText( phone);  
 member\_unpaid\_dues\_input2.setText( unpaid);  
 Log.*d*("stev", name+" "+address+" "+ phone+""+unpaid);  
 }else{  
 Toast.*makeText*(this, "No data.", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
  
 void confirmDialog(){  
 AlertDialog.Builder builder = new AlertDialog.Builder(this);  
 builder.setTitle("Delete " + name + " ?");  
 builder.setMessage("Are you sure you want to delete " + name + " ?");  
 builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 MyDatabaseHelper myDB = new MyDatabaseHelper(Member\_UpdateActivity.this);  
 myDB.deleteOneRow\_member(id);  
 finish();  
 }  
 });  
 builder.setNegativeButton("No", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
  
 }  
 });  
 builder.create().show();  
 }  
}

1. **MemberActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.content.DialogInterface;  
import android.content.Intent;  
import android.database.Cursor;  
import android.os.Bundle;  
import android.view.Menu;  
import android.view.MenuInflater;  
import android.view.MenuItem;  
import android.view.View;  
import android.widget.ImageView;  
import android.widget.TextView;  
  
import androidx.annotation.Nullable;  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.recyclerview.widget.LinearLayoutManager;  
import androidx.recyclerview.widget.RecyclerView;  
  
import com.google.android.material.floatingactionbutton.FloatingActionButton;  
  
import java.util.ArrayList;  
  
public class MemberActivity extends AppCompatActivity {  
  
 RecyclerView recyclerView;  
 FloatingActionButton add\_button;  
 ImageView empty\_imageview;  
 TextView no\_data;  
  
 MyDatabaseHelper myDB;  
 ArrayList<String> card\_no, member\_name, member\_address, member\_phone;  
 ArrayList<Double> member\_unpaid;  
 Member\_CustomAdapter customAdapter;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_member*);  
  
 recyclerView = findViewById(R.id.*recyclerView*);  
 add\_button = findViewById(R.id.*add\_button*);  
 empty\_imageview = findViewById(R.id.*empty\_imageview*);  
 no\_data = findViewById(R.id.*no\_data*);  
  
 add\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent intent = new Intent(MemberActivity.this, Member\_AddActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 myDB = new MyDatabaseHelper(MemberActivity.this);  
  
 card\_no = new ArrayList<>();  
 member\_name = new ArrayList<>();  
 member\_address = new ArrayList<>();  
 member\_phone = new ArrayList<>();  
 member\_unpaid = new ArrayList<>();  
  
  
 storeDataInArrays();  
  
 customAdapter = new Member\_CustomAdapter(MemberActivity.this,this, card\_no, member\_name, member\_address, member\_phone,member\_unpaid);  
  
  
 recyclerView.setAdapter(customAdapter);  
 recyclerView.setLayoutManager(new LinearLayoutManager(MemberActivity.this));  
  
 }  
  
 @Override  
 protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {  
 super.onActivityResult(requestCode, resultCode, data);  
 if(requestCode == 1){  
 recreate();  
 }  
 }  
  
 void storeDataInArrays(){  
 Cursor cursor = myDB.readAllData\_member();  
 if(cursor.getCount() == 0){  
 empty\_imageview.setVisibility(View.*VISIBLE*);  
 no\_data.setVisibility(View.*VISIBLE*);  
 }else{  
 while (cursor.moveToNext()){  
 card\_no.add(cursor.getString(0));  
 member\_name.add(cursor.getString(1));  
 member\_address.add(cursor.getString(2));  
 member\_phone.add(cursor.getString(3));  
 member\_unpaid.add(Double.*valueOf*(cursor.getString(4)));  
  
 }  
 empty\_imageview.setVisibility(View.*GONE*);  
 no\_data.setVisibility(View.*GONE*);  
 }  
 }  
  
 @Override  
 public boolean onCreateOptionsMenu(Menu menu) {  
 MenuInflater inflater = getMenuInflater();  
 inflater.inflate(R.menu.*my\_menu*, menu);  
 return super.onCreateOptionsMenu(menu);  
 }  
  
 @Override  
 public boolean onOptionsItemSelected(MenuItem item) {  
 if(item.getItemId() == R.id.*delete\_all1*){  
 confirmDialog();  
 }  
 return super.onOptionsItemSelected(item);  
 }  
  
 void confirmDialog(){  
 AlertDialog.Builder builder = new AlertDialog.Builder(this);  
 builder.setTitle("Delete All?");  
 builder.setMessage("Are you sure you want to delete all Data?");  
 builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 MyDatabaseHelper myDB = new MyDatabaseHelper(MemberActivity.this);  
 myDB.deleteAllData\_member();  
 //Refresh Activity  
 Intent intent = new Intent(MemberActivity.this, MemberActivity.class);  
 startActivity(intent);  
 finish();  
 }  
 });  
 builder.setNegativeButton("No", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
  
 }  
 });  
 builder.create().show();  
 }  
}

1. **Publisher\_AddActivity.java**
2. package com.jovanovic.stefan.LibraryManagement;  
     
   import android.os.Bundle;  
   import android.view.View;  
   import android.widget.Button;  
   import android.widget.EditText;  
     
   import androidx.appcompat.app.AppCompatActivity;  
     
   public class Publisher\_AddActivity extends AppCompatActivity {  
     
    EditText name\_input, address\_input,phone\_input;  
    Button add\_button;  
     
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.*activity\_publisher\_add*);  
     
    name\_input = findViewById(R.id.*name\_input*);  
    address\_input = findViewById(R.id.*address\_input*);  
    phone\_input = findViewById(R.id.*phone\_input*);  
     
    add\_button = findViewById(R.id.*add\_button*);  
     
     
    add\_button.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View view) {  
    MyDatabaseHelper myDB = new MyDatabaseHelper(Publisher\_AddActivity.this);  
    myDB.addPublisher(name\_input.getText().toString().trim(),  
    address\_input.getText().toString().trim(),  
    phone\_input.getText().toString().trim());  
    }  
    });  
     
    }  
   }
3. **Publisher\_CustomAdapter.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.app.Activity;  
import android.content.Context;  
import android.content.Intent;  
import android.os.Build;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.view.animation.Animation;  
import android.view.animation.AnimationUtils;  
import android.widget.LinearLayout;  
import android.widget.TextView;  
  
import androidx.annotation.NonNull;  
import androidx.annotation.RequiresApi;  
import androidx.recyclerview.widget.RecyclerView;  
  
import java.util.ArrayList;  
  
public class Publisher\_CustomAdapter extends RecyclerView.Adapter<Publisher\_CustomAdapter.MyViewHolder> {  
  
 private Context context;  
 private Activity activity;  
 private ArrayList publisher\_name, publisher\_address, publisher\_phone;  
  
 Publisher\_CustomAdapter(Activity activity, Context context, ArrayList publisher\_name, ArrayList publisher\_address, ArrayList publisher\_phone  
 ){  
 this.activity = activity;  
 this.context = context;  
 this.publisher\_name = publisher\_name;  
 this.publisher\_address = publisher\_address;  
 this.publisher\_phone = publisher\_phone;  
  
 }  
  
 @NonNull  
 @Override  
 public MyViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {  
 LayoutInflater inflater = LayoutInflater.*from*(context);  
 View view = inflater.inflate(R.layout.*my\_row\_publisher*, parent, false);  
 return new MyViewHolder(view);  
 }  
  
 @RequiresApi(api = Build.VERSION\_CODES.*M*)  
 @Override  
 public void onBindViewHolder(@NonNull final MyViewHolder holder, final int position) {  
 holder.publisher\_name\_txt.setText(String.*valueOf*(publisher\_name.get(position)));  
 holder.publisher\_address\_txt.setText(String.*valueOf*(publisher\_address.get(position)));  
 holder.publisher\_phone\_txt.setText(String.*valueOf*(publisher\_phone.get(position)));  
  
 //Recyclerview onClickListener  
 holder.mainLayout.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent intent = new Intent(context, Publisher\_UpdateActivity.class);  
 intent.putExtra("publisher\_name", String.*valueOf*(publisher\_name.get(position)));  
 intent.putExtra("publisher\_address", String.*valueOf*(publisher\_address.get(position)));  
 intent.putExtra("publisher\_phone", String.*valueOf*(publisher\_phone.get(position)));  
  
 activity.startActivityForResult(intent, 1);  
 }  
 });  
  
  
 }  
  
 @Override  
 public int getItemCount() {  
 return publisher\_name.size();  
 }  
  
 class MyViewHolder extends RecyclerView.ViewHolder {  
  
 TextView publisher\_name\_txt, publisher\_address\_txt, publisher\_phone\_txt;  
 LinearLayout mainLayout;  
  
 MyViewHolder(@NonNull View itemView) {  
 super(itemView);  
 publisher\_name\_txt = itemView.findViewById(R.id.*book\_id\_txt*);  
 publisher\_address\_txt = itemView.findViewById(R.id.*book\_title\_txt*);  
 publisher\_phone\_txt = itemView.findViewById(R.id.*publisher\_name\_txt*);  
  
 mainLayout = itemView.findViewById(R.id.*mainLayout*);  
 //Animate Recyclerview  
 Animation translate\_anim = AnimationUtils.*loadAnimation*(context, R.anim.*translate\_anim*);  
 mainLayout.setAnimation(translate\_anim);  
 }  
  
 }  
  
}

1. **Publisher\_UpdateActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.content.DialogInterface;  
import android.os.Bundle;  
import android.util.Log;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
import androidx.appcompat.app.ActionBar;  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
  
public class Publisher\_UpdateActivity extends AppCompatActivity {  
  
 EditText name\_input2, publisher\_address\_input2,publisher\_phone\_input2;  
 Button update\_button,delete\_button;  
  
 String name, address, phone;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_publisher\_update*);  
  
 name\_input2 = findViewById(R.id.*name\_input2*);  
 publisher\_address\_input2 = findViewById(R.id.*publisher\_address\_input2*);  
 publisher\_phone\_input2 = findViewById(R.id.*publisher\_phone\_input2*);  
  
 update\_button = findViewById(R.id.*update\_button*);  
  
 delete\_button = findViewById(R.id.*delete\_button*);  
  
 //First we call this  
 getAndSetIntentData();  
  
 //Set actionbar address after getAndSetIntentData method  
 ActionBar ab = getSupportActionBar();  
 if (ab != null) {  
 ab.setTitle(name);  
 }  
  
 update\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 //And only then we call this  
 MyDatabaseHelper myDB = new MyDatabaseHelper(Publisher\_UpdateActivity.this);  
 name = name\_input2.getText().toString().trim();  
 address = publisher\_address\_input2.getText().toString().trim();  
 phone = publisher\_phone\_input2.getText().toString().trim();  
 myDB.updateData\_publisher(name, address, phone);  
 }  
 });  
   
 delete\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 confirmDialog();  
 }  
 });  
  
 }  
  
 void getAndSetIntentData(){  
 if(getIntent().hasExtra("publisher\_name") && getIntent().hasExtra("publisher\_address") &&  
 getIntent().hasExtra("publisher\_phone") ){  
 //Getting Data from Intent  
 name = getIntent().getStringExtra("publisher\_name");  
 address = getIntent().getStringExtra("publisher\_address");  
 phone = getIntent().getStringExtra("publisher\_phone");  
  
  
 //Setting Intent Data  
 name\_input2.setText(name);  
 publisher\_address\_input2.setText( address);  
 publisher\_phone\_input2.setText( phone);  
 Log.*d*("stev", name+" "+address+" "+ phone);  
 }else{  
 Toast.*makeText*(this, "No data.", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
  
 void confirmDialog(){  
 AlertDialog.Builder builder = new AlertDialog.Builder(this);  
 builder.setTitle("Delete " + name + " ?");  
 builder.setMessage("Are you sure you want to delete " + name + " ?");  
 builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 MyDatabaseHelper myDB = new MyDatabaseHelper(Publisher\_UpdateActivity.this);  
 myDB.deleteOneRow\_publisher(name);  
 finish();  
 }  
 });  
 builder.setNegativeButton("No", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
  
 }  
 });  
 builder.create().show();  
 }  
}

1. **PublisherActivity.java**

package com.jovanovic.stefan.LibraryManagement;  
  
import android.content.DialogInterface;  
import android.content.Intent;  
import android.database.Cursor;  
import android.os.Bundle;  
import android.view.Menu;  
import android.view.MenuInflater;  
import android.view.MenuItem;  
import android.view.View;  
import android.widget.ImageView;  
import android.widget.TextView;  
  
import androidx.annotation.Nullable;  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.recyclerview.widget.LinearLayoutManager;  
import androidx.recyclerview.widget.RecyclerView;  
  
import com.google.android.material.floatingactionbutton.FloatingActionButton;  
  
import java.util.ArrayList;  
  
public class PublisherActivity extends AppCompatActivity {  
  
 RecyclerView recyclerView;  
 FloatingActionButton add\_button;  
 ImageView empty\_imageview;  
 TextView no\_data;  
  
 MyDatabaseHelper myDB;  
 ArrayList<String> publisher\_name, publisher\_address, publisher\_phone;  
 Publisher\_CustomAdapter customAdapter;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_publisher*);  
  
 recyclerView = findViewById(R.id.*recyclerView*);  
 add\_button = findViewById(R.id.*add\_button*);  
 empty\_imageview = findViewById(R.id.*empty\_imageview*);  
 no\_data = findViewById(R.id.*no\_data*);  
 add\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent intent = new Intent(PublisherActivity.this, Publisher\_AddActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 myDB = new MyDatabaseHelper(PublisherActivity.this);  
 publisher\_name = new ArrayList<>();  
 publisher\_address = new ArrayList<>();  
 publisher\_phone = new ArrayList<>();  
  
  
 storeDataInArrays();  
  
 customAdapter = new Publisher\_CustomAdapter(PublisherActivity.this,this, publisher\_name, publisher\_address, publisher\_phone);  
 recyclerView.setAdapter(customAdapter);  
 recyclerView.setLayoutManager(new LinearLayoutManager(PublisherActivity.this));  
  
 }  
  
 @Override  
 protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {  
 super.onActivityResult(requestCode, resultCode, data);  
 if(requestCode == 1){  
 recreate();  
 }  
 }  
  
 void storeDataInArrays(){  
 Cursor cursor = myDB.readAllData\_publisher();  
 if(cursor.getCount() == 0){  
 empty\_imageview.setVisibility(View.VISIBLE);  
 no\_data.setVisibility(View.VISIBLE);  
 }else{  
 while (cursor.moveToNext()){  
 publisher\_name.add(cursor.getString(0));  
 publisher\_address.add(cursor.getString(1));  
 publisher\_phone.add(cursor.getString(2));  
  
 }  
 empty\_imageview.setVisibility(View.GONE);  
 no\_data.setVisibility(View.GONE);  
 }  
 }  
  
 @Override  
 public boolean onCreateOptionsMenu(Menu menu) {  
 MenuInflater inflater = getMenuInflater();  
 inflater.inflate(R.menu.my\_menu\_publisher, menu);  
 return super.onCreateOptionsMenu(menu);  
 }  
  
 @Override  
 public boolean onOptionsItemSelected(MenuItem item) {  
 if(item.getItemId() == R.id.delete\_all1){  
 confirmDialog();  
 }  
 return super.onOptionsItemSelected(item);  
 }  
  
 void confirmDialog(){  
 AlertDialog.Builder builder = new AlertDialog.Builder(this);  
 builder.setTitle("Delete All?");  
 builder.setMessage("Are you sure you want to delete all Data?");  
 builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 MyDatabaseHelper myDB = new MyDatabaseHelper(PublisherActivity.this);  
 myDB.deleteAllData\_publisher();  
 //Refresh Activity  
 Intent intent = new Intent(PublisherActivity.this, PublisherActivity.class);  
 startActivity(intent);  
 finish();  
 }  
 });  
 builder.setNegativeButton("No", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
  
 }  
 });  
 builder.create().show();  
 }  
}

**Interface XML Files**

1. **activity\_add.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".AddActivity"  
 android:padding="30dp">  
  
 <EditText  
 android:id="@+id/title\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="15dp"  
 android:ems="10"  
 android:hint="Book Title"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/author\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
  
 android:hint="Publisher Name"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/title\_input" />  
 <EditText  
 android:id="@+id/book\_available\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Available Books"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/author\_input" />  
  
  
  
 <Button  
 android:id="@+id/add\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="40dp"  
 android:text="Add"  
 android:background="@drawable/rounded\_button"  
 android:textSize="20sp"  
 android:textAllCaps="false"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/book\_available\_input" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

1. **activity\_book.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".BookActivity">  
  
 <com.google.android.material.floatingactionbutton.FloatingActionButton  
 android:id="@+id/add\_button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginEnd="28dp"  
 android:layout\_marginRight="28dp"  
 android:layout\_marginBottom="28dp"  
 android:clickable="true"  
 android:focusable="true"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:srcCompat="@drawable/ic\_add" />  
  
 <androidx.recyclerview.widget.RecyclerView  
 android:id="@+id/recyclerView"  
 android:layout\_width="370dp"  
 android:layout\_height="673dp"  
 android:layout\_marginRight="28dp"  
 android:layout\_marginBottom="28dp"  
  
 app:layout\_constraintBottom\_toTopOf="@+id/add\_button"  
 app:layout\_constraintEnd\_toStartOf="@+id/add\_button"  
 app:layout\_constraintHorizontal\_bias="0.012"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.0" />  
  
 <ImageView  
 android:id="@+id/empty\_imageview"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="230dp"  
 android:alpha="0.1"  
 android:visibility="gone"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:srcCompat="@drawable/ic\_empty" />  
  
 <TextView  
 android:id="@+id/no\_data"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:text="No Data."  
 android:textSize="20sp"  
 android:alpha="0.4"  
 android:visibility="gone"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/empty\_imageview" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

1. **activity\_branch.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".BranchActivity">  
  
 <com.google.android.material.floatingactionbutton.FloatingActionButton  
 android:id="@+id/add\_button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginEnd="28dp"  
 android:layout\_marginRight="28dp"  
 android:layout\_marginBottom="28dp"  
 android:clickable="true"  
 android:focusable="true"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:srcCompat="@drawable/ic\_add" />  
  
 <androidx.recyclerview.widget.RecyclerView  
 android:id="@+id/recyclerView"  
 android:layout\_width="370dp"  
 android:layout\_height="673dp"  
 android:layout\_marginRight="28dp"  
 android:layout\_marginBottom="28dp"  
  
 app:layout\_constraintBottom\_toTopOf="@+id/add\_button"  
 app:layout\_constraintEnd\_toStartOf="@+id/add\_button"  
 app:layout\_constraintHorizontal\_bias="0.012"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.0" />  
  
 <ImageView  
 android:id="@+id/empty\_imageview"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="230dp"  
 android:alpha="0.1"  
 android:visibility="gone"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:srcCompat="@drawable/ic\_empty" />  
  
 <TextView  
 android:id="@+id/no\_data"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:text="No Data."  
 android:textSize="20sp"  
 android:alpha="0.4"  
 android:visibility="gone"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/empty\_imageview" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

1. **activity\_branch\_add.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".Branch\_AddActivity"  
 android:padding="30dp">  
  
 <EditText  
 android:id="@+id/name\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="150dp"  
 android:ems="10"  
 android:hint="Branch Name"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/address\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Branch Address"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/name\_input" />  
  
  
 <Button  
 android:id="@+id/add\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="40dp"  
 android:background="@drawable/rounded\_button"  
 android:text="Add"  
 android:textSize="20sp"  
 android:textAllCaps="false"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/address\_input" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

1. **activity\_branch\_update.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".Branch\_UpdateActivity"  
 android:padding="30dp">  
  
 <EditText  
 android:id="@+id/name\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="150dp"  
 android:ems="10"  
 android:hint="Branch Name"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/branch\_address\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Branch Address"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/name\_input2" />  
  
  
 <Button  
 android:id="@+id/update\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="40dp"  
 android:text="Update"  
 android:textSize="20sp"  
 android:textAllCaps="false"  
 android:background="@drawable/rounded\_button"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/branch\_address\_input2" />  
  
 <Button  
 android:id="@+id/delete\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="16dp"  
 android:text="Delete"  
 android:textAllCaps="false"  
 android:textColor="@color/red"  
 android:background="@drawable/rounded\_button"  
 android:textSize="20sp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/update\_button" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

1. **activity\_main.xml**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout 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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:padding="16dp"  
  
 android:background="@android:color/white"  
 tools:context=".MainActivity">  
  
  
  
 <TextView  
 android:id="@+id/text"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center|center\_horizontal"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginBottom="50dp"  
 android:text="Library Management App"  
 android:textColor="@android:color/black"  
 android:textSize="27sp"  
 android:textStyle="bold" />  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 android:gravity="center"  
 android:layout\_marginBottom="16dp">  
  
 <Button  
 android:id="@+id/add\_books"  
 android:layout\_width="0dp"  
 android:layout\_height="80dp"  
 android:layout\_marginEnd="8dp"  
 android:layout\_weight="1"  
  
 android:background="@drawable/rounded\_button"  
 android:drawableLeft="@drawable/plus\_thick"  
 android:text="ADD BOOKS"  
 android:textColor="@android:color/white"  
 android:textSize="18sp"  
 android:textStyle="bold" />  
  
 <Button  
 android:id="@+id/register\_member"  
 android:background="@drawable/rounded\_button"  
 android:drawableLeft="@drawable/account\_plus"  
 android:layout\_width="0dp"  
 android:layout\_height="80dp"  
 android:layout\_marginStart="8dp"  
 android:layout\_weight="1"  
  
 android:text="Register Member"  
 android:textColor="@android:color/white"  
 android:textSize="18sp"  
 android:textStyle="bold" />  
 </LinearLayout>  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 android:gravity="center"  
 android:layout\_marginBottom="16dp">  
  
 <Button  
 android:id="@+id/search\_books"  
 android:layout\_width="0dp"  
 android:layout\_height="80dp"  
 android:drawableLeft="@drawable/feature\_search"  
 android:layout\_marginEnd="8dp"  
 android:layout\_weight="1"  
 android:background="@drawable/rounded\_button"  
 android:text="Search BOOKS"  
 android:textColor="@android:color/white"  
  
 android:textSize="18sp"  
 android:textStyle="bold" />  
  
 <Button  
 android:id="@+id/search\_member"  
 android:layout\_width="0dp"  
 android:layout\_height="80dp"  
 android:layout\_marginStart="8dp"  
 android:layout\_weight="1"  
 android:background="@drawable/rounded\_button"  
 android:drawableLeft="@drawable/ic\_baseline\_person\_24"  
 android:text="Search Members"  
 android:textColor="@android:color/white"  
 android:textSize="18sp"  
 android:textStyle="bold" />  
 </LinearLayout>  
  
 <View  
 android:id="@+id/divider"  
 android:layout\_width="match\_parent"  
 android:layout\_height="1dp"  
 android:background="?android:attr/listDivider" />  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 android:gravity="center"  
 android:layout\_marginBottom="16dp"  
 android:layout\_marginTop="40dp">  
  
 <Button  
 android:id="@+id/button\_books"  
 android:layout\_width="0dp"  
 android:layout\_height="80dp"  
 android:layout\_marginEnd="8dp"  
 android:drawableLeft="@drawable/book\_account"  
 android:layout\_weight="1"  
 android:background="@drawable/rounded\_button"  
 android:text="Manage Books"  
 android:textColor="@android:color/white"  
 android:textSize="18sp"  
 android:textStyle="bold" />  
  
 <Button  
 android:id="@+id/button\_publishers"  
 android:layout\_width="0dp"  
 android:layout\_height="80dp"  
 android:layout\_marginStart="8dp"  
 android:drawableLeft="@drawable/card\_account\_details"  
 android:layout\_weight="1"  
 android:background="@drawable/rounded\_button"  
 android:text="Manage Publishers"  
 android:textColor="@android:color/white"  
 android:textSize="18sp"  
 android:textStyle="bold" />  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 android:gravity="center"  
 android:layout\_marginBottom="16dp">  
  
 <Button  
 android:id="@+id/button\_branches"  
 android:layout\_width="0dp"  
 android:layout\_height="80dp"  
 android:layout\_marginEnd="8dp"  
 android:drawableLeft="@drawable/warehouse"  
 android:layout\_weight="1"  
 android:background="@drawable/rounded\_button"  
 android:text="Manage Branches"  
 android:textColor="@android:color/white"  
 android:textSize="18sp"  
 android:textStyle="bold" />  
  
 <Button  
 android:id="@+id/button\_members"  
 android:layout\_width="0dp"  
 android:layout\_height="80dp"  
 android:layout\_marginStart="8dp"  
 android:drawableLeft="@drawable/account\_multiple"  
 android:layout\_weight="1"  
 android:background="@drawable/rounded\_button"  
 android:text="Manage Members"  
 android:textColor="@android:color/white"  
 android:textSize="18sp"  
 android:textStyle="bold" />  
 </LinearLayout>  
 </LinearLayout>

1. **activity\_member.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MemberActivity">  
  
 <com.google.android.material.floatingactionbutton.FloatingActionButton  
 android:id="@+id/add\_button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginEnd="28dp"  
 android:layout\_marginRight="28dp"  
 android:layout\_marginBottom="28dp"  
 android:clickable="true"  
 android:focusable="true"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:srcCompat="@drawable/ic\_add" />  
  
 <androidx.recyclerview.widget.RecyclerView  
 android:id="@+id/recyclerView"  
 android:layout\_width="370dp"  
 android:layout\_height="673dp"  
 android:layout\_marginRight="28dp"  
 android:layout\_marginBottom="28dp"  
  
 app:layout\_constraintBottom\_toTopOf="@+id/add\_button"  
 app:layout\_constraintEnd\_toStartOf="@+id/add\_button"  
 app:layout\_constraintHorizontal\_bias="0.012"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.0" />  
  
 <ImageView  
 android:id="@+id/empty\_imageview"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="230dp"  
 android:alpha="0.1"  
 android:visibility="gone"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:srcCompat="@drawable/ic\_empty" />  
  
 <TextView  
 android:id="@+id/no\_data"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:text="No Data."  
 android:textSize="20sp"  
 android:alpha="0.4"  
 android:visibility="gone"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/empty\_imageview" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

1. **activity\_member\_add.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".Member\_AddActivity"  
 android:padding="30dp">  
  
 <EditText  
 android:id="@+id/name\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="150dp"  
 android:ems="10"  
 android:hint="Member Name"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/address\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Member Address"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/name\_input" />  
  
 <EditText  
 android:id="@+id/phone\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Member Phone Number"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/address\_input" />  
  
 <EditText  
 android:id="@+id/unpaid\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Unpaid Dues"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/phone\_input" />  
  
 <Button  
 android:id="@+id/add\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="40dp"  
 android:text="Add"  
 android:textSize="20sp"  
 android:background="@drawable/rounded\_button"  
 android:textAllCaps="false"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/unpaid\_input" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

1. **activity\_member\_update.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".Member\_UpdateActivity"  
 android:padding="25dp">  
  
 <EditText  
 android:id="@+id/name\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="150dp"  
 android:ems="10"  
 android:hint="Member Name"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/member\_address\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Member Address"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/name\_input2" />  
  
 <EditText  
 android:id="@+id/member\_phone\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Member Phone"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/member\_address\_input2" />  
  
 <EditText  
 android:id="@+id/member\_unpaid\_dues\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Member Phone"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/member\_phone\_input2" />  
  
 <Button  
 android:id="@+id/update\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="40dp"  
 android:text="Update"  
 android:textSize="20sp"  
 android:textAllCaps="false"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 android:background="@drawable/rounded\_button"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/member\_unpaid\_dues\_input2" />  
  
 <Button  
 android:id="@+id/delete\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="16dp"  
 android:text="Delete"  
 android:textAllCaps="false"  
 android:textColor="@color/red"  
 android:background="@drawable/rounded\_button"  
 android:textSize="20sp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/update\_button" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

1. **activity\_publisher\_add.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".AddActivity"  
 android:padding="30dp">  
  
 <EditText  
 android:id="@+id/name\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="15dp"  
 android:ems="10"  
 android:hint="Publisher Name"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/address\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Publisher Address"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/name\_input" />  
  
 <EditText  
 android:id="@+id/phone\_input"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Publisher Phone"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/address\_input" />  
  
  
 <Button  
 android:id="@+id/add\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="40dp"  
 android:text="Add"  
 android:textSize="20sp"  
 android:background="@drawable/rounded\_button"  
 android:textAllCaps="false"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/phone\_input" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

1. **activity\_publisher\_update.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".Publisher\_UpdateActivity"  
 android:padding="30dp">  
  
 <EditText  
 android:id="@+id/name\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="150dp"  
 android:ems="10"  
 android:hint="Publisher Name"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/publisher\_address\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Publisher Address"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/name\_input2" />  
  
 <EditText  
 android:id="@+id/publisher\_phone\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Publisher Phone"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/publisher\_address\_input2" />  
  
 <Button  
 android:id="@+id/update\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="40dp"  
 android:text="Update"  
 android:textSize="20sp"  
 android:textAllCaps="false"  
 android:background="@drawable/rounded\_button"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/publisher\_phone\_input2" />  
  
 <Button  
 android:id="@+id/delete\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="16dp"  
 android:text="Delete"  
  
 android:textAllCaps="false"  
 android:textColor="@color/red"  
 android:background="@drawable/rounded\_button"  
 android:textSize="20sp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/update\_button" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

1. **activity\_search.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"  
 android:padding="16dp">  
  
 <EditText  
 android:id="@+id/searchEditText"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Search Member"  
 android:inputType="text"  
 android:maxLines="1"  
 android:singleLine="true" />  
  
 <ListView  
 android:id="@+id/listView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp" />  
  
</LinearLayout>

1. **activity\_searchbook.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"  
 android:padding="16dp">  
  
 <EditText  
 android:id="@+id/searchEditText1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Search Book"  
 android:inputType="text"  
 android:maxLines="1"  
 android:singleLine="true" />  
  
 <ListView  
 android:id="@+id/listView1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp" />  
  
</LinearLayout>

1. **activity\_update.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".AddActivity"  
 android:padding="30dp">  
  
 <EditText  
 android:id="@+id/title\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="15dp"  
 android:ems="10"  
 android:hint="Book Title"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/publisher\_name\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Book Publisher"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/title\_input2" />  
 <EditText  
 android:id="@+id/book\_available\_input2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:hint="Book Available"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/publisher\_name\_input2" />  
  
 <Button  
 android:id="@+id/update\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="40dp"  
 android:text="Update"  
 android:textSize="20sp"  
 android:textAllCaps="false"  
 android:background="@drawable/rounded\_button"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/book\_available\_input2" />  
 <Button  
 android:id="@+id/copy\_book"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="40dp"  
 android:text="Copy Book Details"  
 android:background="@drawable/rounded\_button"  
 android:textSize="20sp"  
 android:textAllCaps="false"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/update\_button" />  
 <Button  
 android:id="@+id/delete\_button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="16dp"  
 android:text="Delete"  
 android:background="@drawable/rounded\_button"  
 android:textAllCaps="false"  
 android:textColor="@color/red"  
 android:textSize="20sp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/copy\_book" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

1. **myrow.xml**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout 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:orientation="vertical" android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/mainLayout">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cardView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="12dp">  
  
 <androidx.constraintlayout.widget.ConstraintLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:padding="12dp">  
  
 <TextView  
 android:id="@+id/book\_id\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="1"  
 android:textSize="40sp"  
 android:textStyle="bold"  
 android:textColor="#000"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/book\_title\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:text="Title 1"  
 android:textSize="20sp"  
 android:textStyle="bold"  
 android:textColor="#000"  
 app:layout\_constraintStart\_toEndOf="@+id/book\_id\_txt"  
 app:layout\_constraintTop\_toTopOf="@+id/book\_id\_txt" />  
  
 <TextView  
 android:id="@+id/publisher\_name\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Author1"  
 app:layout\_constraintStart\_toStartOf="@+id/book\_title\_txt"  
 app:layout\_constraintTop\_toBottomOf="@+id/book\_title\_txt" />  
  
 <TextView  
 android:id="@+id/book\_available\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginEnd="42dp"  
 android:layout\_marginBottom="31dp"  
 android:text="Author1"  
 android:textSize="15sp"  
 android:textStyle="bold"  
 android:textColor="#000"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 </androidx.constraintlayout.widget.ConstraintLayout>  
 </androidx.cardview.widget.CardView>  
  
</LinearLayout>

1. **myrow\_branch.xml**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout 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:orientation="vertical" android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/mainLayout">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cardView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="12dp">  
  
 <androidx.constraintlayout.widget.ConstraintLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:padding="12dp">  
  
 <TextView  
 android:id="@+id/branch\_id\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="1"  
 android:textSize="40sp"  
 android:textStyle="bold"  
 android:textColor="#000"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/branch\_name\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:text="Title 1"  
 android:textSize="20sp"  
 android:textStyle="bold"  
 android:textColor="#000"  
 app:layout\_constraintStart\_toEndOf="@+id/branch\_id\_txt"  
 app:layout\_constraintTop\_toTopOf="@+id/branch\_id\_txt" />  
  
 <TextView  
 android:id="@+id/branch\_address\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Author1"  
 app:layout\_constraintStart\_toStartOf="@+id/branch\_name\_txt"  
 app:layout\_constraintTop\_toBottomOf="@+id/branch\_name\_txt" />  
  
 </androidx.constraintlayout.widget.ConstraintLayout>  
 </androidx.cardview.widget.CardView>  
</LinearLayout>

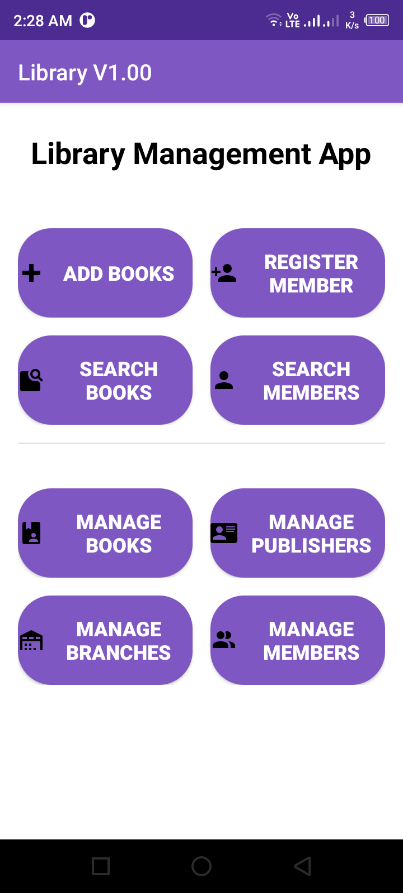
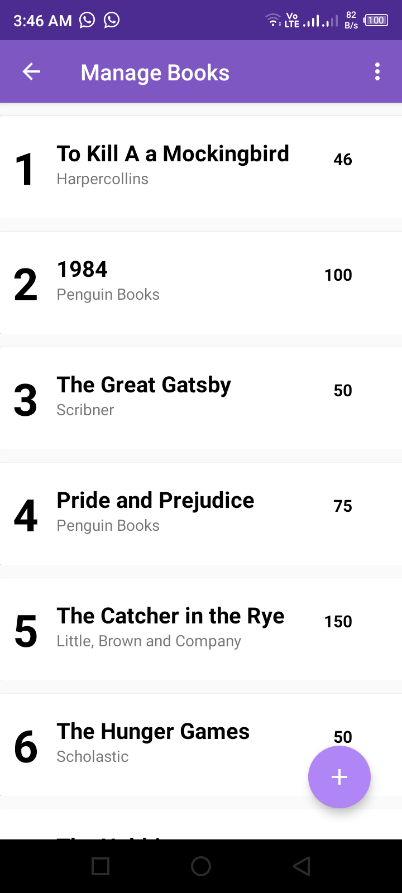
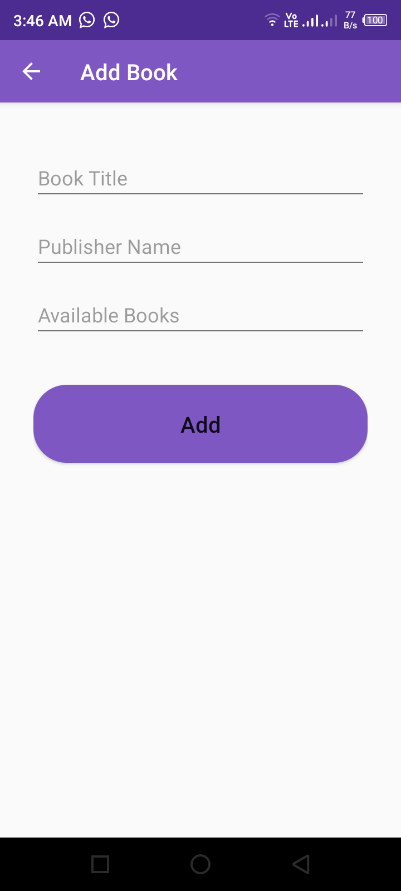
1. **myrow\_member.xml**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout 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:orientation="vertical" android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/mainLayout">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cardView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="12dp">  
  
 <androidx.constraintlayout.widget.ConstraintLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:padding="12dp">  
  
 <TextView  
 android:id="@+id/card\_no\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="1"  
 android:textSize="40sp"  
 android:textStyle="bold"  
 android:textColor="#000"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/member\_name\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:text="Title 1"  
 android:textSize="20sp"  
 android:textStyle="bold"  
 android:textColor="#000"  
 app:layout\_constraintStart\_toEndOf="@+id/card\_no\_txt"  
 app:layout\_constraintTop\_toTopOf="@+id/card\_no\_txt" />  
  
 <TextView  
 android:id="@+id/member\_address\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Author1"  
 app:layout\_constraintStart\_toStartOf="@+id/member\_name\_txt"  
 app:layout\_constraintTop\_toBottomOf="@+id/member\_name\_txt" />  
  
 <TextView  
 android:id="@+id/member\_phone\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="1dp"  
 android:text="Author1"  
 app:layout\_constraintStart\_toStartOf="@+id/member\_name\_txt"  
 app:layout\_constraintTop\_toBottomOf="@+id/member\_address\_txt" />  
  
 <TextView  
 android:id="@+id/member\_unpaid\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginEnd="42dp"  
 android:layout\_marginBottom="31dp"  
 android:text="Author1"  
 android:textSize="15sp"  
 android:textStyle="bold"  
 android:textColor="#000"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
  
 </androidx.constraintlayout.widget.ConstraintLayout>  
 </androidx.cardview.widget.CardView>  
</LinearLayout>

1. **myrow\_publisher.xml**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout 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:orientation="vertical" android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/mainLayout">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/cardView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="12dp">  
  
 <androidx.constraintlayout.widget.ConstraintLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:padding="12dp">  
  
 <TextView  
 android:id="@+id/book\_id\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="1"  
 android:textSize="40sp"  
 android:textStyle="bold"  
 android:textColor="#000"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/book\_title\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:text="Title 1"  
 android:textSize="20sp"  
 android:textStyle="bold"  
 android:textColor="#000"  
 app:layout\_constraintStart\_toEndOf="@+id/book\_id\_txt"  
 app:layout\_constraintTop\_toTopOf="@+id/book\_id\_txt" />  
  
 <TextView  
 android:id="@+id/publisher\_name\_txt"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Author1"  
 app:layout\_constraintStart\_toStartOf="@+id/book\_title\_txt"  
 app:layout\_constraintTop\_toBottomOf="@+id/book\_title\_txt" />  
  
 </androidx.constraintlayout.widget.ConstraintLayout>  
 </androidx.cardview.widget.CardView>  
</LinearLayout>

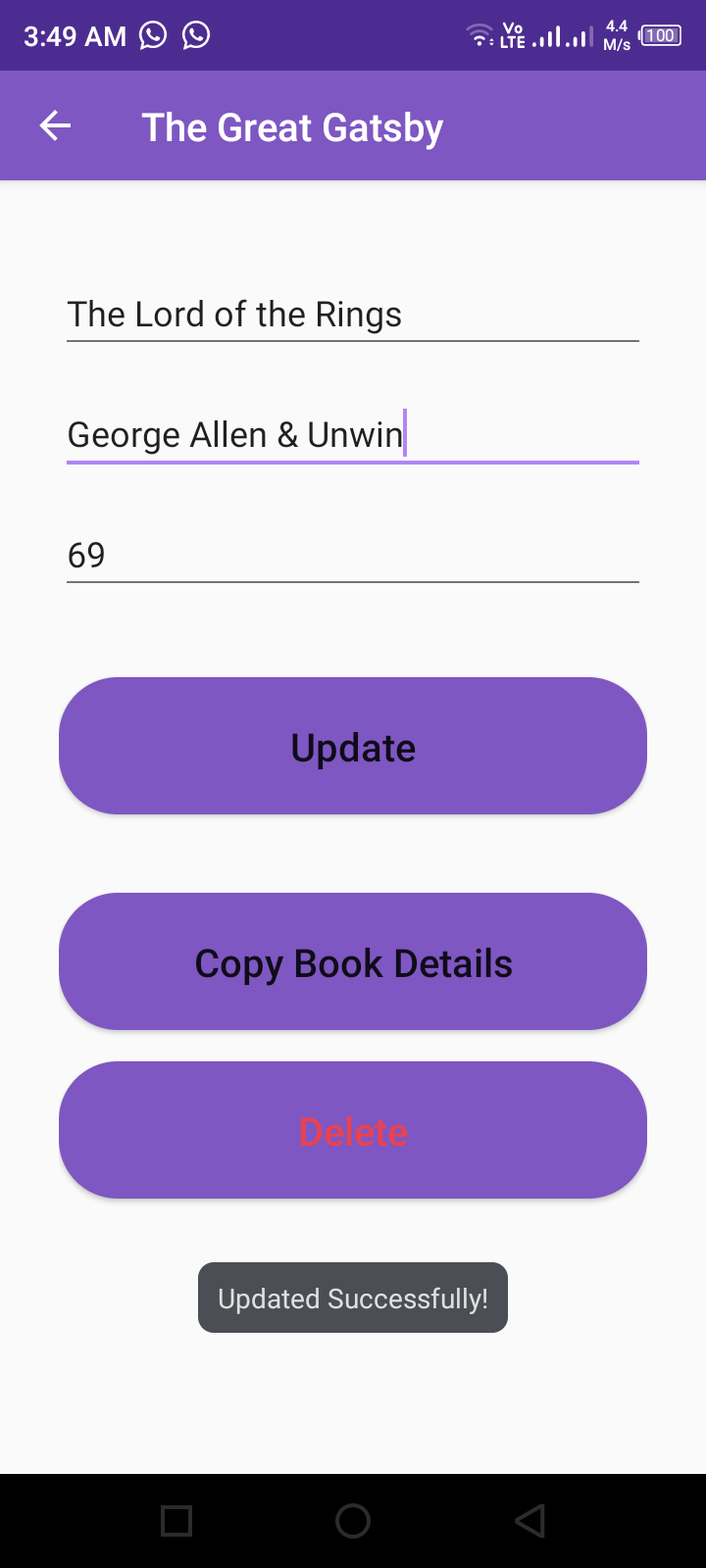
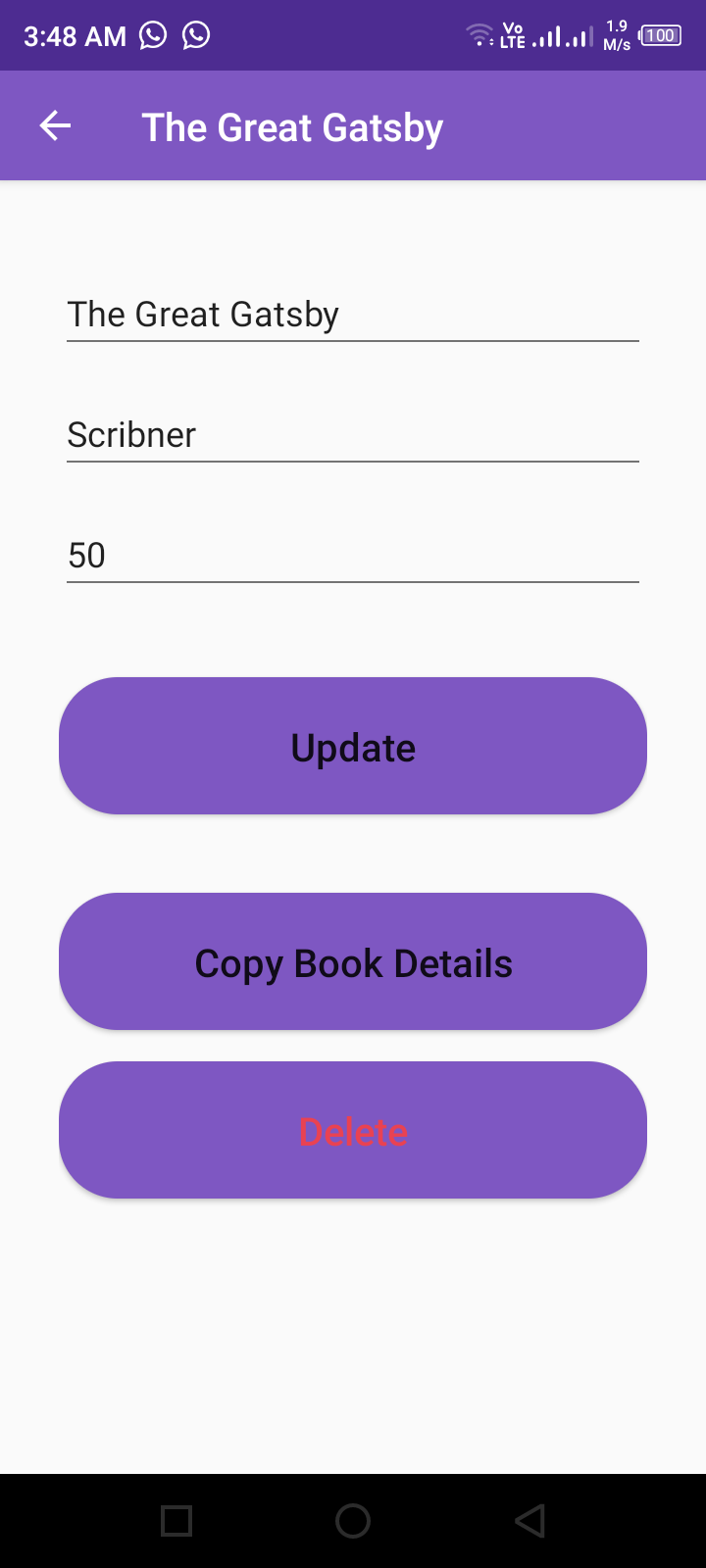
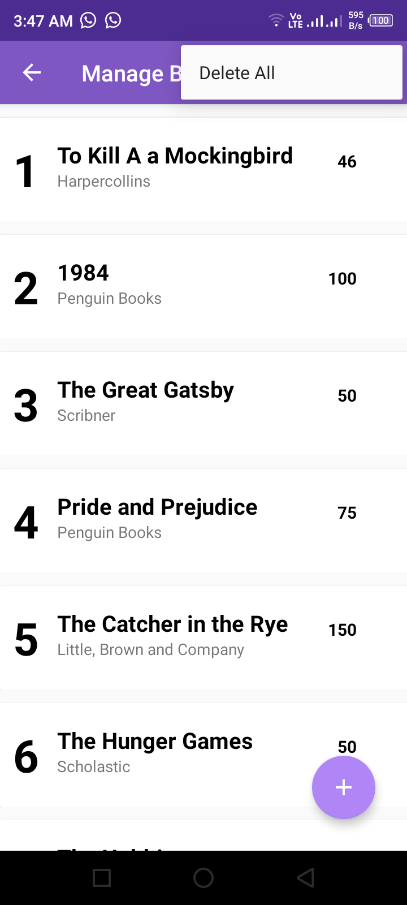
1. **App Screenshots**



Add Book Page

Manage Book Page

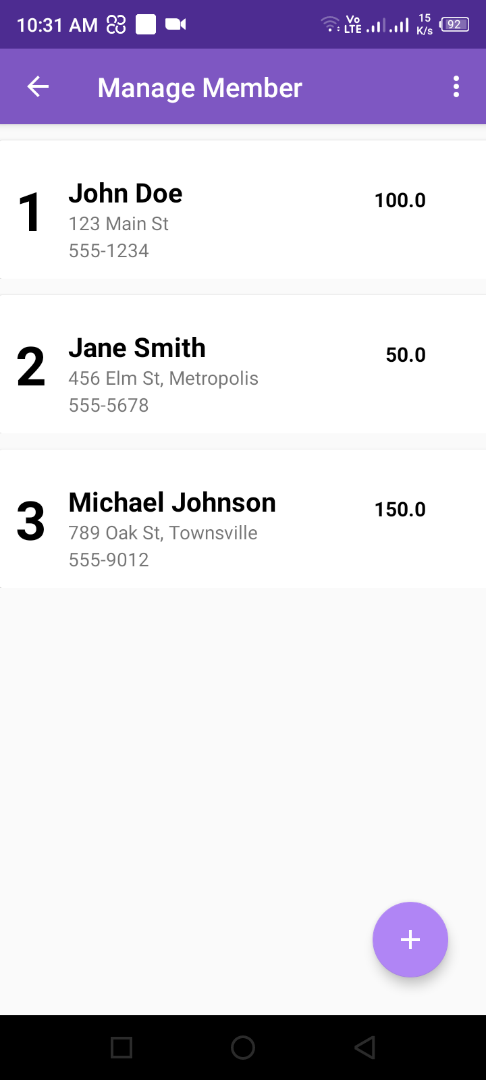
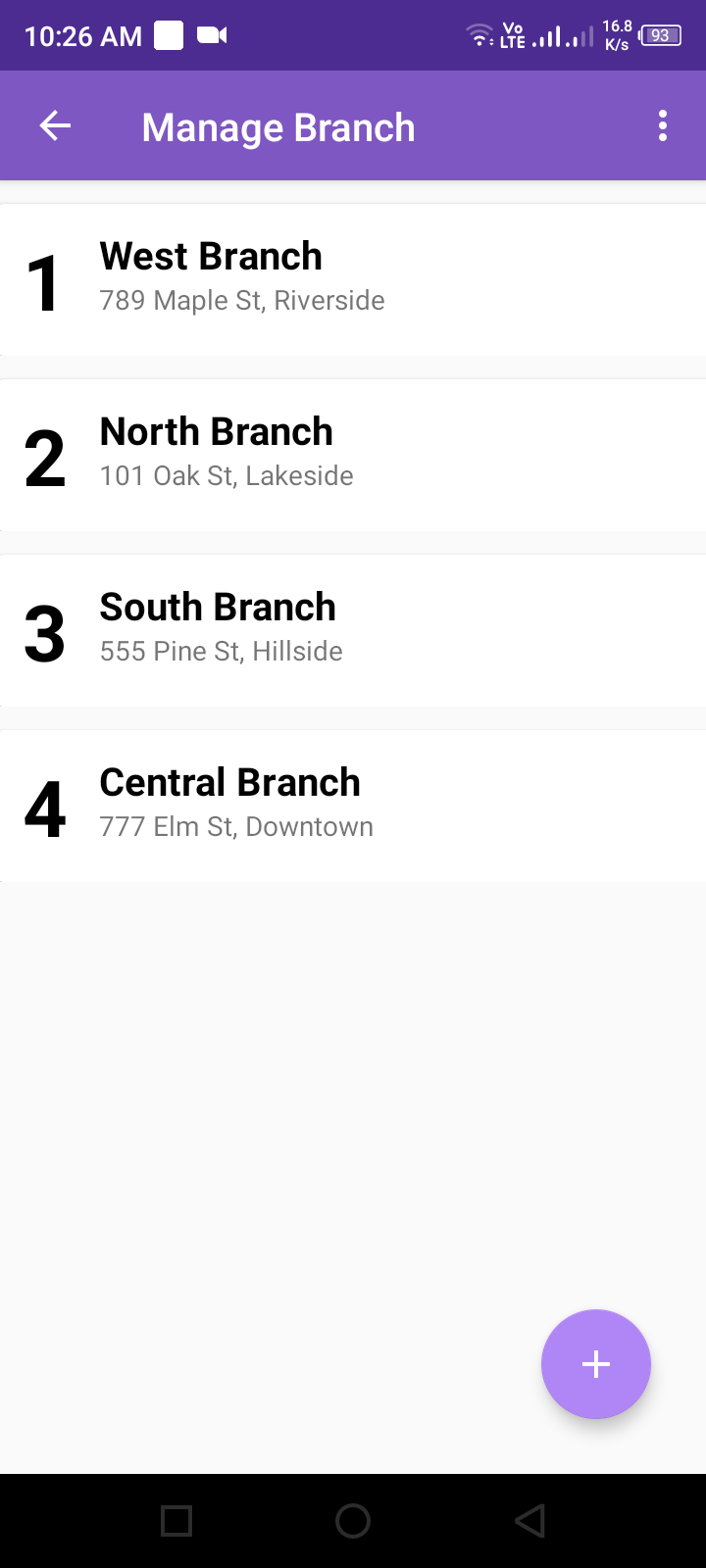
Home Page



After clicked update button, message show “update successfully”

For Book details update, tap on a book list

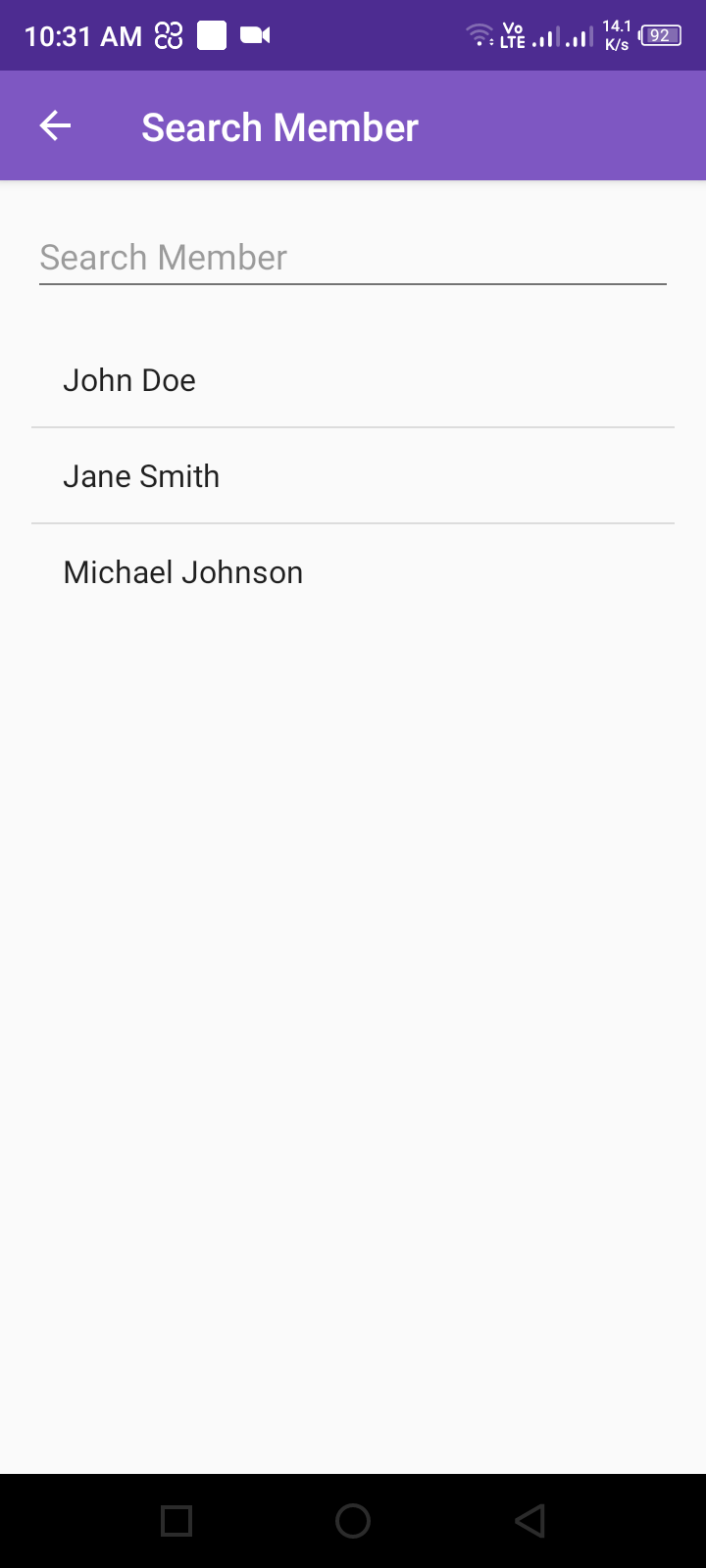
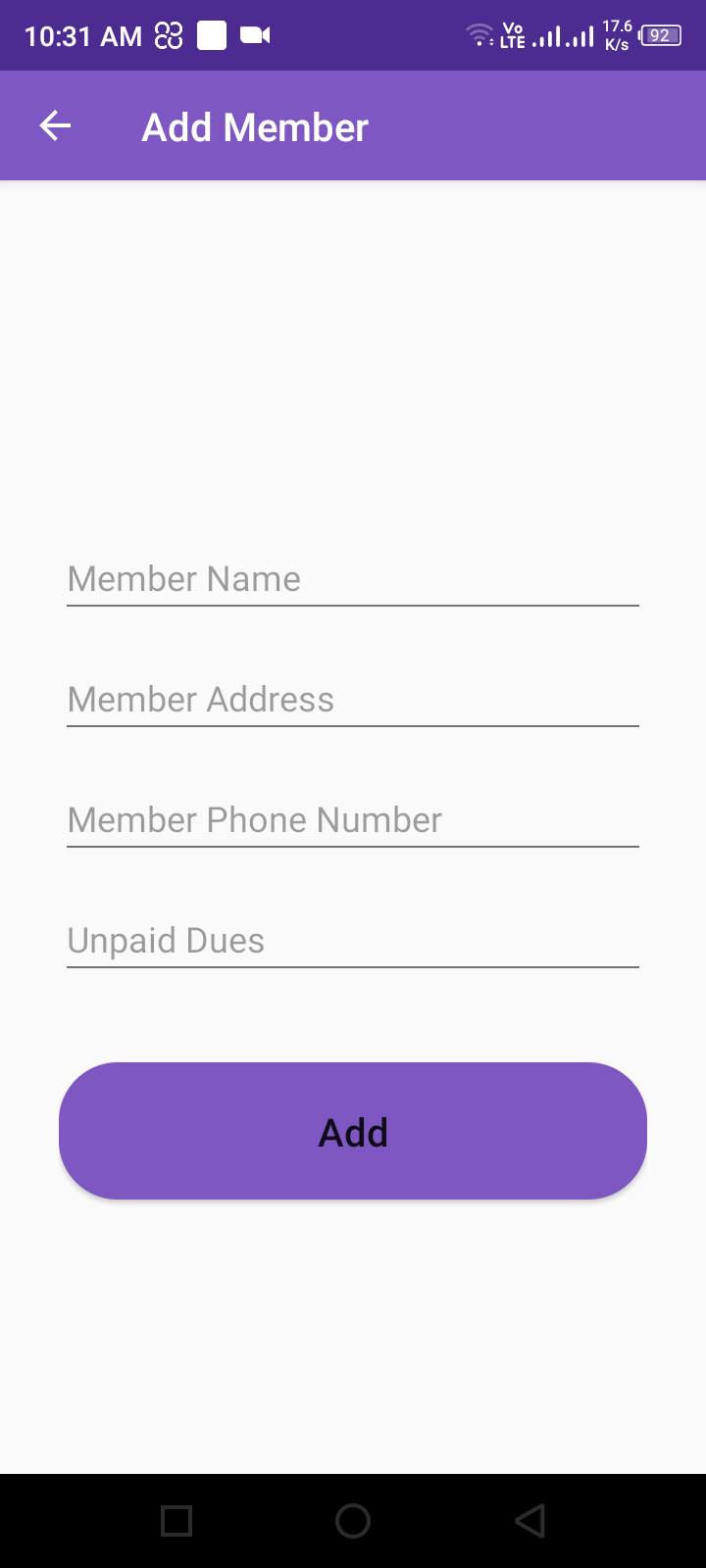
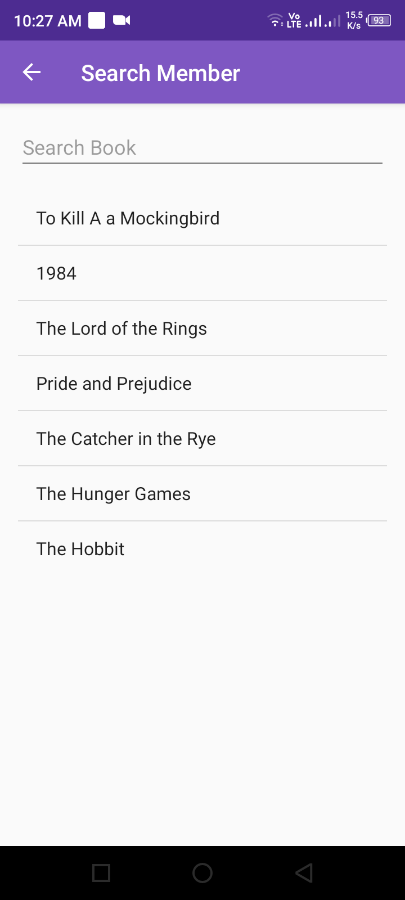
Delete All option



Manage Member page

Manage Branch page

Manage Publisher page



Search Member page

Add Member page

Search Book page

1. **SQLite Screenshots**

