Gestion d'une bibliothèque

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Introduction

En tant que voies d'accès au savoir et à la culture, les bibliothèques occupent une place déterminante dans la société. Leurs ressources et services procurent en effet des possibilités d'apprentissage, favorisent l'alphabétisation et l'éducation et contribuent à former les nouvelles idées et perspectives à la base des sociétés créatives et innovantes.

Les bibliothèques contribuent également à garantir un enregistrement authentique des connaissances acquises et accumulées par les générations passées .

Dans un monde dépourvu de bibliothèques, il serait difficile de faire progresser la recherche et le savoir ou de préserver pour les générations futures les connaissances et le patrimoine accumulés par l'humanité.

Non seulement les bibliothèques prêtent des livres, mais elles s'occupent de reproduire des documents à des fins de recherche ou d'étude privée. Les étudiants n'ont en effet pas Les moyens d'acquérir chacun des ouvrages ou de payer pour chacune des émissions de télévision ou des revues auxquels ils doivent pouvoir accéder pour leurs études, si bien qu'ils dépendent des services d'une bibliothèque.

Avant l'informatisation des bibliothèques, toutes les tâches étaient réalisées manuellement.

A propos de notre projet

➢ Notre mini projet « gestion de bibliothèque », a été conçu pour réaliser la conception d'un système d'information permettant la gestion des livres existants dans la bibliothèque, en ajoutant des livres (nom du livre, auteur et nombre de pages), en modifiant les informations en cas d'erreurs ou carrément supprimer un/tous livre(s) de la bibliothèque.

➢ Au cours de ce projet, nous allons présenter les différentes interfaces de notre application ainsi que leur utilité.

Maquette finale de l'application

ACTIVITE REGISTRATION :

En premier lieu il vous faut s'inscrire sur l'application de votre bibliothèque pour pouvoir accéder aux autres interfaces.
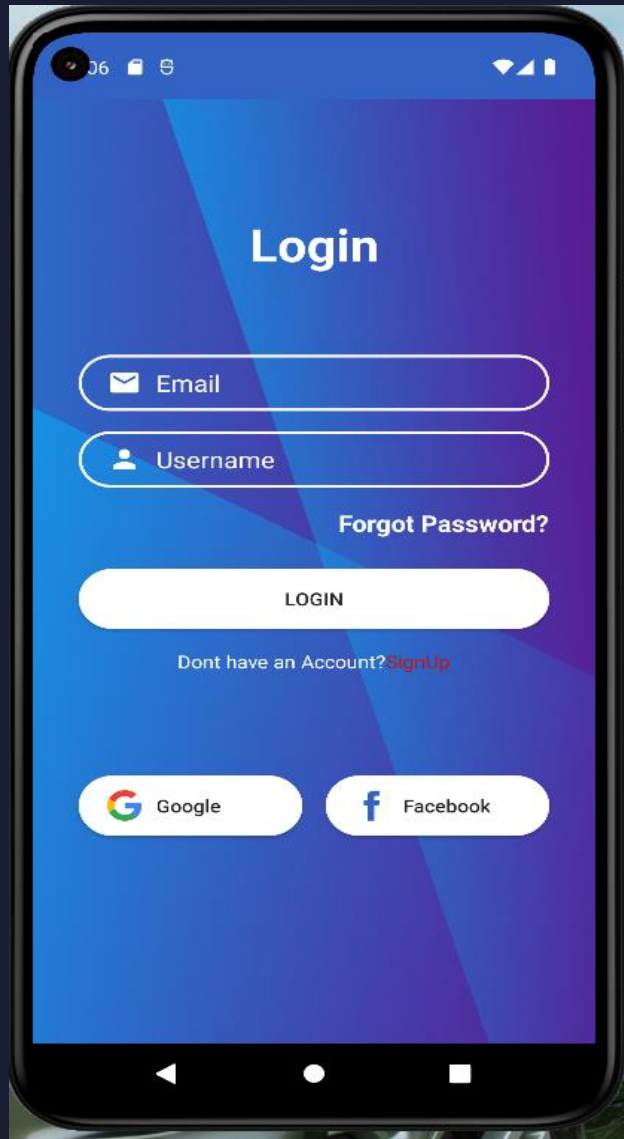
Voilà à quoi ça ressemble cette interface :
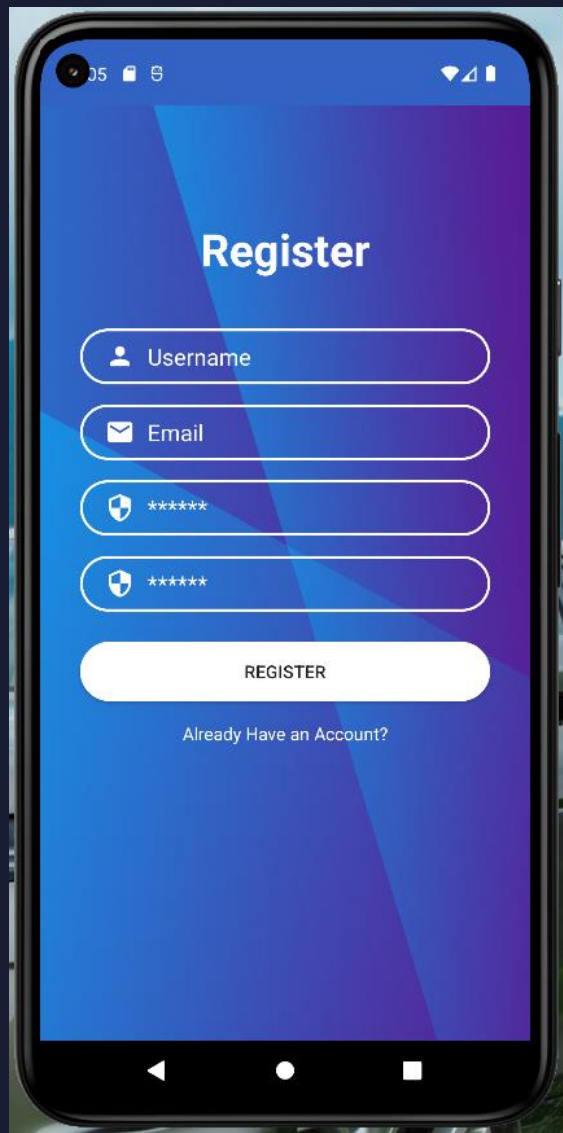
ACTIVITE CONNECTION :

Si vous avez déjà un compte sur votre application alors il vous suffit de cliquer sur le bouton « I already have an account»

Voilà cette interface :

ACTIVITE PAGE D'ACCUEIL :

Cette page en premier lieu est vide, en cliquant sur le bouton + vous pouvez ajouter le nombre de livre que vous voulez

La Voilà:

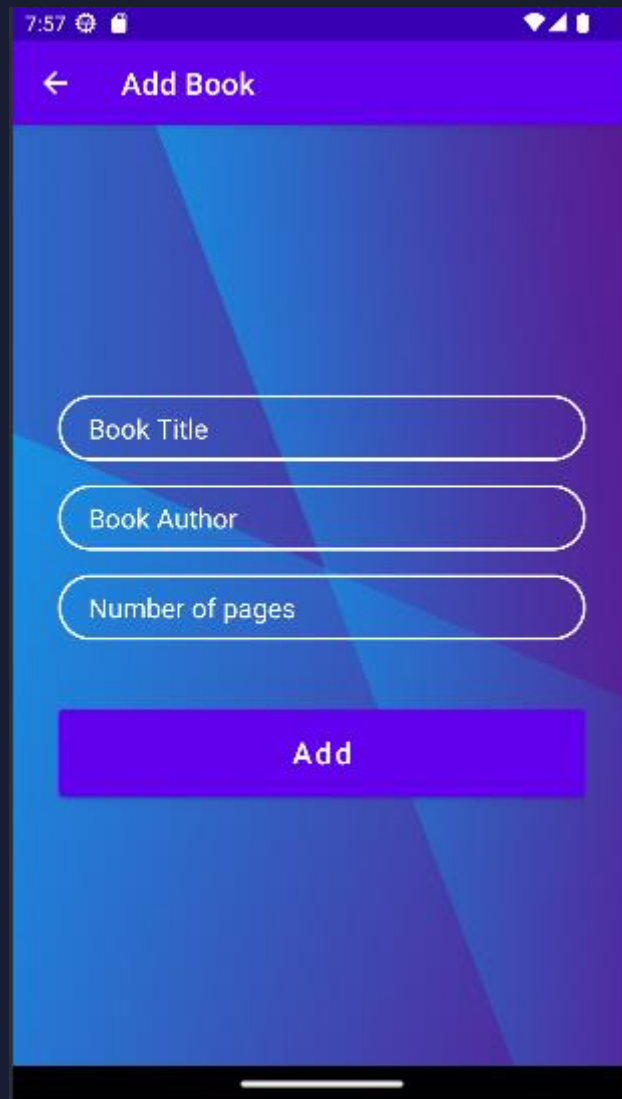## ACTIVITE AJOUT :

Après un simple clique vous pouvez entrer les informations nécessaires relatives à votre livre

Voilà à quoi ça ressemble:

Nous avons ajouté le livre intitulé « Animal Farm » de « George Alwell » avec le nombre de page 200, après le clique add un pop up affiche que l'élément est bien ajouté.

Si on revient à la page d'accueil on trouve bien évidement cet élément.

La Voilà :
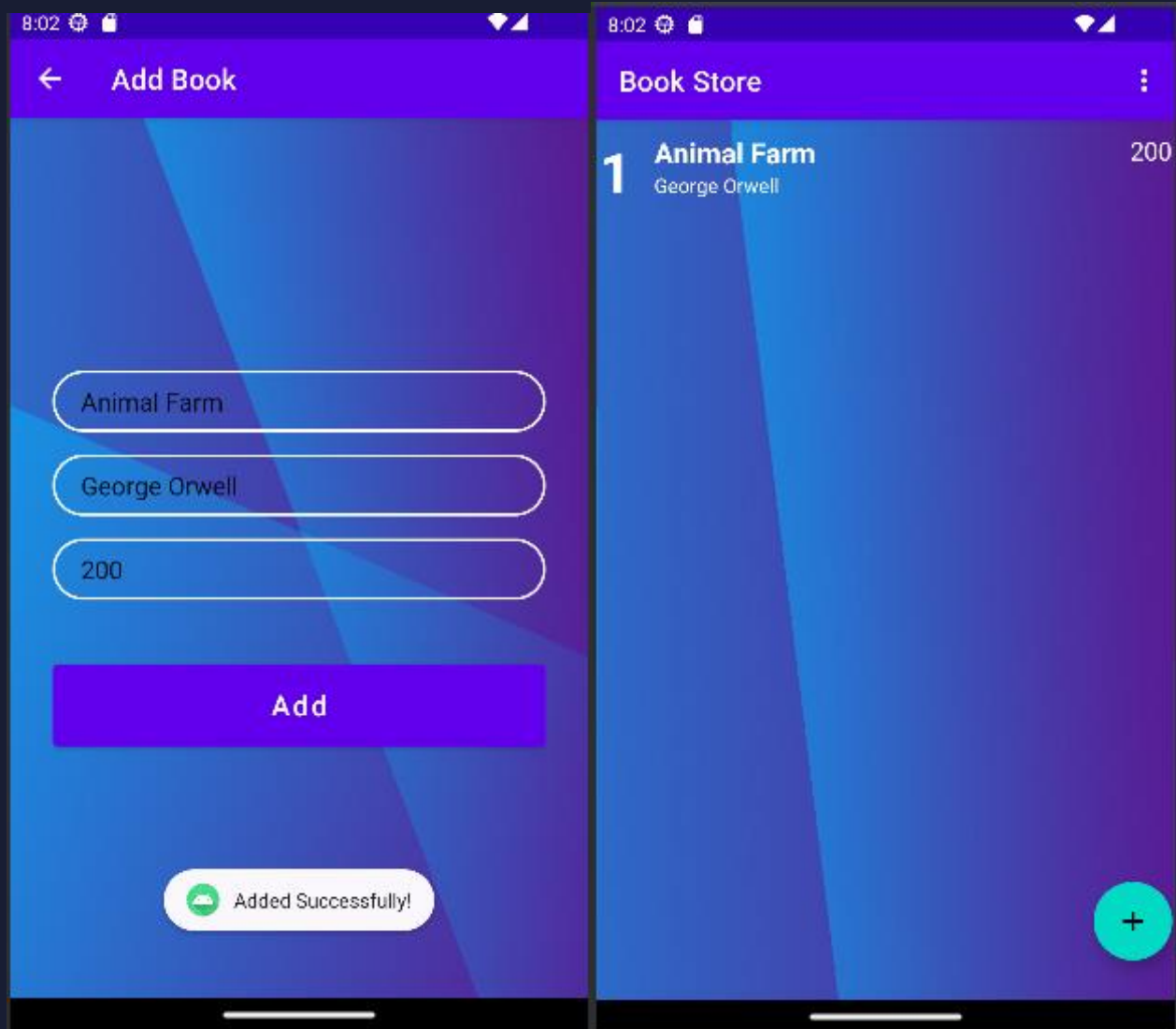
ACTIVITE MODIFIER/SUPPRIMER :

Si on clique sur l'élément ajouté on a accès de le modifier ou le supprimer (remarquer que le nom de l'activité est celui du livre)

Dans ce cas, On a choisi de changer le nombre de page, au lieu de 200 on a 299. Donc le pop up mentionne que l'éléments est bien modifié

Voilà à quoi ça ressemble:
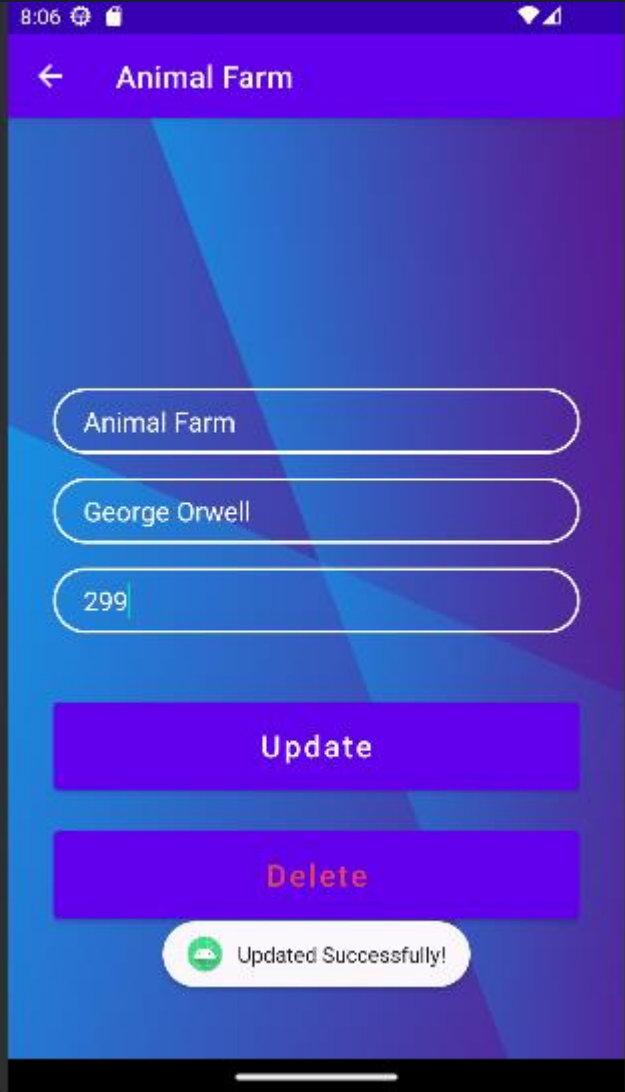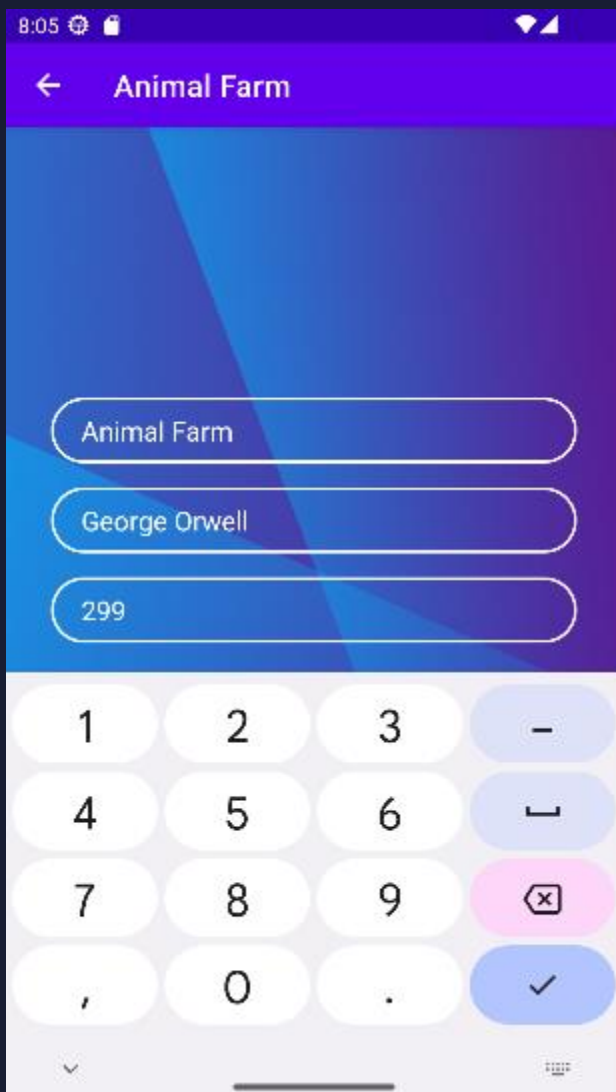
Si on veut supprimer cet élément :
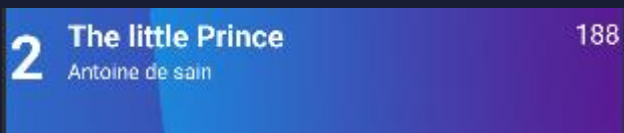
Voici le pop up qui s'affiche :
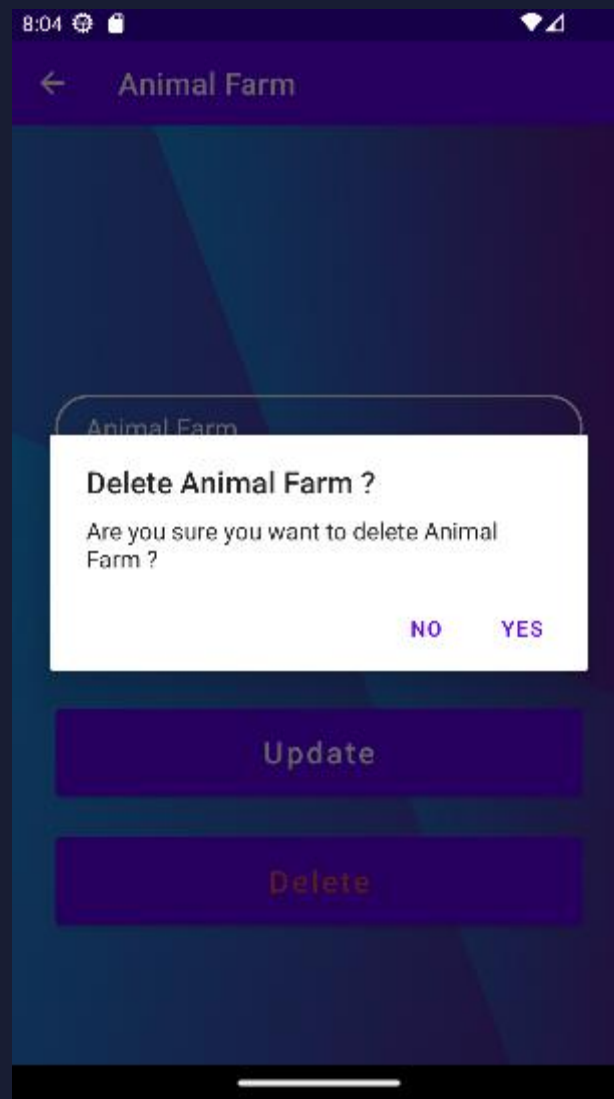
Apres la suppression de cet element :

On peut supprimer tous :
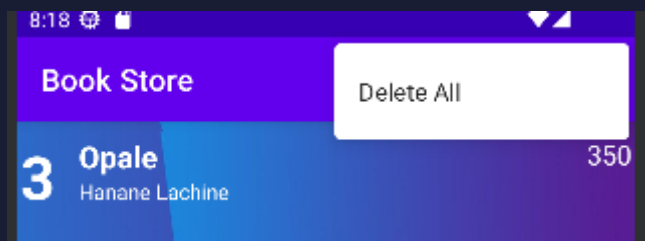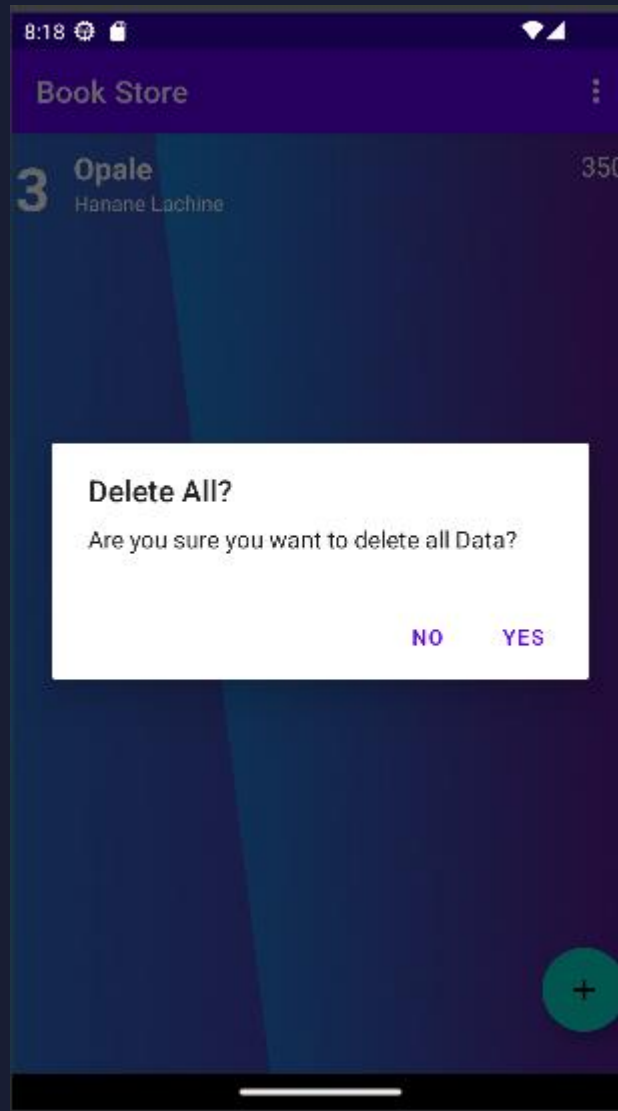
Code Source

AddActivity.java

```java
package com.example.bookstore;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;

// Inside this activity we will add items inside database in our table
public class AddActivity extends AppCompatActivity {
    EditText title_input, author_input, pages_input;
    Button add_button;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```java
        setContentView(R.layout.activity_add);
        //To find the id of each element
        title_input = findViewById(R.id.name_input);
        author_input = findViewById(R.id.author_input);
        pages_input = findViewById(R.id.pages_input);
        add_button = findViewById(R.id.add_button);
        //set onClickListener for the button
        add_button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                MyDatabaseHelper myDB = new MyDatabaseHelper(AddActivity.this);
                //call method addBook from MyDatabaseHelper class
                myDB.addBook(title_input.getText().toString().trim(),
                        author_input.getText().toString().trim(),
                        Integer.valueOf(pages_input.getText().toString().trim()));
            }
        });
    }
}
```

```java
package com.example.registration;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;

public class RegisterActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_register);

        TextView btn=findViewById(R.id.alreadyHaveAccount);
        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                startActivity(new Intent(RegisterActivity.this,LoginActivity.class));
            }
        });
    }
}
```

```java
package com.example.registration;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;

public class LoginActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_login);
        TextView btn=findViewById(R.id.textViewSignUp);
        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                startActivity(new Intent(LoginActivity.this,RegisterActivity.class));
            }
        });
```

```java
        }
}
```

CustomAdapter.java

```java
package com.example.bookstore;


import android.annotation.SuppressLint;
import android.app.Activity;
import android.content.Context;
import android.content.Intent;
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.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, book_author, book_pages;
    Animation translate_anim;

    CustomAdapter(Activity activity,Context context, ArrayList book_id, ArrayList book_title,
                  ArrayList book_author, ArrayList book_pages){
        //set the values so we can access the objects in our class
        this.activity = activity;
        this.context = context;
        this.book_id = book_id;
        this.book_title = book_title;
        this.book_author = book_author;
        this.book_pages = book_pages;


    }
    @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);
    }


    @Override
    public void onBindViewHolder(@NonNull MyViewHolder holder,
                                 @SuppressLint("RecyclerView") final int position ) {
        //get all the data from our arrays
        holder.book_id_txt.setText(String.valueOf(book_id.get(position)));
        holder.book_title_txt.setText(String.valueOf(book_title.get(position)));
        holder.book_author_txt.setText(String.valueOf(book_author.get(position)));
        holder.book_pages_txt.setText(String.valueOf(book_pages.get(position)));


        holder.mainLayout.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent intent = new Intent(context, UpdateActivity.class);
                intent.putExtra("id", String.valueOf(book_id.get(position)));
                intent.putExtra("title", String.valueOf(book_title.get(position)));
```

```java
                intent.putExtra("author", String.valueOf(book_author.get(position)));
                intent.putExtra("pages", String.valueOf(book_pages.get(position)));
                // start the activity
                activity.startActivityForResult(intent,1);
            }
        });

    }

    @Override
    public int getItemCount() {
        return book_id.size();
    }

    class MyViewHolder extends RecyclerView.ViewHolder {

        TextView book_id_txt, book_title_txt, book_author_txt, book_pages_txt;
        LinearLayout mainLayout;

        MyViewHolder(@NonNull View itemView) {
            super(itemView);
            //get the id of the 4 TextViews
            book_id_txt = itemView.findViewById(R.id.book_id_txt);
            book_title_txt = itemView.findViewById(R.id.book_title_txt);
            book_author_txt = itemView.findViewById(R.id.book_author_txt);
            book_pages_txt = itemView.findViewById(R.id.book_pages_txt);
            mainLayout = itemView.findViewById(R.id.mainLayout);
            // Animate recycleView
            translate_anim = AnimationUtils.LoadAnimation(context, R.anim.translate_anim);
            mainLayout.setAnimation(translate_anim);
        }


    }
}
```

MainActivity

```java
package com.example.bookstore;


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 android.annotation.SuppressLint;
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.Button;
import android.widget.EditText;
import android.widget.ImageView;
import android.widget.TextView;
import android.widget.Toast;


import com.google.android.material.floatingactionbutton.FloatingActionButton;


import java.util.ArrayList;
```

```java
public class MainActivity extends AppCompatActivity {
    RecyclerView recyclerView;
    FloatingActionButton add_button;

    MyDatabaseHelper myDB;
    ArrayList<String> book_id, book_title, book_author, book_pages;
    CustomAdapter customAdapter;


    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        // Find the id of this recyclerView and  add_button
        recyclerView = findViewById(R.id.recyclerView);
        add_button = findViewById(R.id.add_button);


        // To go in the next activity
        add_button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent intent = new Intent(MainActivity.this, AddActivity.class);
                startActivity(intent);
            }
        });
        myDB = new MyDatabaseHelper(MainActivity.this);
        //initialise
        book_id = new ArrayList<>();
        book_title = new ArrayList<>();
        book_author = new ArrayList<>();
        book_pages = new ArrayList<>();

        storeDataInArrays();
        customAdapter = new CustomAdapter(MainActivity.this,this, book_id, book_title, book_author,
                book_pages);
        recyclerView.setAdapter(customAdapter);
        recyclerView.setLayoutManager(new LinearLayoutManager(MainActivity.this));
    }
    @Override
    protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {
        super.onActivityResult(requestCode, resultCode, data);
        if(requestCode == 1){
            recreate(); //refreshing our MainActivity
        }
    }
    @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 storeDataInArrays(){
        //Store the result from our readAllData inside Cursor object
        Cursor cursor = myDB.readAllData();
        if(cursor.getCount() == 0){ // no data
```

```java
                Toast.makeText(this,"No data",Toast.LENGTH_SHORT).show();
        }else{
            while (cursor.moveToNext()){
                book_id.add(cursor.getString(0)); // 0: read the first column
                book_title.add(cursor.getString(1)); // 1: read the 2nd column
                book_author.add(cursor.getString(2));
                book_pages.add(cursor.getString(3));
            }
        }
    }
    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(MainActivity.this);
                myDB.deleteAllData();
                //Refresh Activity
                Intent intent = new Intent(MainActivity.this, MainActivity.class);
                startActivity(intent);
                finish();
            }
        });
        builder.setNegativeButton("No", new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialogInterface, int i) {


            }
        });
        builder.create().show();
    }
}
```

MyDatabaseHelper

```java
package com.example.bookstore;


import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
import android.widget.Toast;


import androidx.annotation.Nullable;


public class MyDatabaseHelper extends SQLiteOpenHelper {
    private Context context;
    private static final String DATABASE_NAME = "BookLibrary.db"; // our database
    private static final int DATABASE_VERSION = 1;
    private static final String TABLE_NAME = "my_library";


    //in our database we will have 4 columns
    private static final String COLUMN_ID = "_id";
    private static final String COLUMN_TITLE = "book_title";
    private static final String COLUMN_AUTHOR = "book_author";
    private static final String COLUMN_PAGES = "book_pages";


    MyDatabaseHelper(@Nullable Context context) {
        super(context, DATABASE_NAME, null, DATABASE_VERSION);
        this.context = context;
    }
```

```java
    @Override
    public void onCreate(SQLiteDatabase db) {
        String query = "CREATE TABLE " + TABLE_NAME +
                " (" + COLUMN_ID + " INTEGER PRIMARY KEY AUTOINCREMENT, " +
                COLUMN_TITLE + " TEXT, " +
                COLUMN_AUTHOR + " TEXT, " +
                COLUMN_PAGES + " INTEGER);";
        db.execSQL(query);


    }


    @Override
    public void onUpgrade(SQLiteDatabase db, int i, int i1) {
        db.execSQL("DROP TABLE IF EXISTS " + TABLE_NAME);
        // when ever we upgrade our table we need to call our create methode
        onCreate(db);
    }
    void addBook(String title, String author, int pages){
        //create sql database object
        //this refer to SqliteOpenHelper class, we use this methode to write our table
        SQLiteDatabase db = this.getWritableDatabase();
        // in cv object we are going to store all our data
        ContentValues cv = new ContentValues();
        // Put it in database
        cv.put(COLUMN_TITLE, title);
        cv.put(COLUMN_AUTHOR, author);
        cv.put(COLUMN_PAGES, pages);
        //insert data inside database table
        long result = db.insert(TABLE_NAME,null, cv);


        if(result == -1){ // if we failed to insert the data
            Toast.makeText(context, "Failed", Toast.LENGTH_SHORT).show();
        }else {            //successfully do the insert
            Toast.makeText(context, "Added Successfully!", Toast.LENGTH_SHORT).show();
        }
    }
    Cursor readAllData(){ //Read all data from our database
        //Selecting all th data
        String query = "SELECT * FROM " + TABLE_NAME;
        SQLiteDatabase db = this.getReadableDatabase();


        Cursor cursor = null;
        if(db != null){ //If we have some data inside
            cursor = db.rawQuery(query, null);
        }
        return cursor;
    }
    void updateData(String row_id, String title, String author, String pages){
        SQLiteDatabase db = this.getWritableDatabase();
        ContentValues cv = new ContentValues();
        cv.put(COLUMN_TITLE, title);
        cv.put(COLUMN_AUTHOR, author);
        cv.put(COLUMN_PAGES, pages);


        long result = db.update(TABLE_NAME, cv, "_id=?", new String[]{row_id});
        if(result == -1){ // if there is no data
            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();
```

```java
        long result = db.delete(TABLE_NAME, "_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();
        }
    }


    //delete all database
    void deleteAllData(){
        SQLiteDatabase db = this.getWritableDatabase();
        db.execSQL("DELETE FROM " + TABLE_NAME);
    }


}
```

UpdateActivity

```java
package com.example.bookstore;



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, author_input, pages_input;
    Button update_button, delete_button;

    String id, title, author, pages;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_update);
        //getting id of each element
        title_input = findViewById(R.id.title_input2);
        author_input = findViewById(R.id.author_input2);
        pages_input = findViewById(R.id.pages_input2);
        update_button = findViewById(R.id.update_button);
        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) {
```

```java
                //And only then we call this
                MyDatabaseHelper myDB = new MyDatabaseHelper(UpdateActivity.this);
                title = title_input.getText().toString().trim();
                author = author_input.getText().toString().trim();
                pages = pages_input.getText().toString().trim();
                myDB.updateData(id, title, author, pages);
            }
        });
        delete_button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                confirmDialog();
            }
        });

    }


    void getAndSetIntentData(){
        if(getIntent().hasExtra("id") && getIntent().hasExtra("title") &&
                getIntent().hasExtra("author") && getIntent().hasExtra("pages")){
            //Getting Data from Intent
            id = getIntent().getStringExtra("id");
            title = getIntent().getStringExtra("title");
            author = getIntent().getStringExtra("author");
            pages = getIntent().getStringExtra("pages");

            //Setting Intent Data
            title_input.setText(title);
            author_input.setText(author);
            pages_input.setText(pages);
            Log.d("stev", title+" "+author+" "+pages);
        }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(id);
                finish();
            }
        });
        builder.setNegativeButton("No", new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialogInterface, int i) {


            }
        });
        builder.create().show();
    }
}
```

activity_add.xml

```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"
```

```xml
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".AddActivity"
    android:background="@drawable/bb"
    android:padding="30dp">

    <EditText
        android:id="@+id/name_input"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="150dp"
        android:background="@drawable/input_bg"
        android:ems="10"
        android:hint="Book Title"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColorHint="#FFFFFF"
        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:background="@drawable/input_bg"
        android:ems="10"
        android:hint="Book Author"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColorHint="#FFFFFF"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/name_input" />

    <EditText
        android:id="@+id/pages_input"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:background="@drawable/input_bg"
        android:ems="10"
        android:hint="Number of pages"
        android:inputType="number"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColorHint="#FFFFFF"
        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"
```

```xml
            android:textSize="20sp"
            android:textAllCaps="false"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toBottomOf="@+id/pages_input" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

activity_main.xml

```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=".MainActivity"
    android:background="@drawable/bb">

    <com.google.android.material.floatingactionbutton.FloatingActionButton
        android:id="@+id/add_button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginEnd="2dp"
        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:paddingTop="?attr/actionBarSize"
        android:layout_width="409dp"
        android:layout_height="729dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

registration

```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=".RegisterActivity"
    android:background="@drawable/bb">

    <TextView
        android:id="@+id/logo"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Register"
        android:textColor="@color/colorWhite"
        android:textSize="36sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
```

```xml
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.13" />

    <EditText
        android:id="@+id/inputUsername"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginStart="32dp"<?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=".RegisterActivity"
    android:background="@drawable/bb">

    <TextView
        android:id="@+id/logo"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Register"
        android:textColor="@color/colorWhite"
        android:textSize="36sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.13" />

    <EditText
        android:id="@+id/inputUsername"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginStart="32dp"
        android:layout_marginTop="40dp"
        android:layout_marginEnd="32dp"
        android:background="@drawable/input_bg"
        android:drawableLeft="@drawable/ic_person"
        android:drawablePadding="10dp"
        android:ems="10"
        android:hint="Username"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="@color/colorWhite"
        android:textColorHint="@color/colorWhite"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/logo" />

    <EditText
        android:id="@+id/inputEmail"
```

```xml
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:background="@drawable/input_bg"
        android:drawableLeft="@drawable/ic_email"
        android:drawablePadding="10dp"
        android:ems="10"
        android:hint="Email"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="@color/colorWhite"
        android:textColorHint="@color/colorWhite"
        app:layout_constraintEnd_toEndOf="@+id/inputUsername"
        app:layout_constraintStart_toStartOf="@+id/inputUsername"
        app:layout_constraintTop_toBottomOf="@+id/inputUsername" />

    <EditText
        android:id="@+id/inputPassword"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:background="@drawable/input_bg"
        android:drawableLeft="@drawable/ic_security"
        android:drawablePadding="10dp"
        android:ems="10"
        android:hint="******"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="@color/colorWhite"
        android:textColorHint="@color/colorWhite"
        app:layout_constraintEnd_toEndOf="@+id/inputEmail"
        app:layout_constraintStart_toStartOf="@+id/inputEmail"
        app:layout_constraintTop_toBottomOf="@+id/inputEmail" />

    <EditText
        android:id="@+id/inputConformPassword"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:background="@drawable/input_bg"
        android:drawableLeft="@drawable/ic_security"
        android:drawablePadding="10dp"
        android:ems="10"
        android:hint="******"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="@color/colorWhite"
        android:textColorHint="@color/colorWhite"
        app:layout_constraintEnd_toEndOf="@+id/inputPassword"
```

```xml
            app:layout_constraintStart_toStartOf="@+id/inputPassword"
            app:layout_constraintTop_toBottomOf="@+id/inputPassword" />

    <Button
        android:id="@+id/btnRegister"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        android:background="@drawable/btn_bg"
        android:text="Register"
        app:layout_constraintEnd_toEndOf="@+id/inputConformPassword"
        app:layout_constraintStart_toStartOf="@+id/inputConformPassword"
        app:layout_constraintTop_toBottomOf="@+id/inputConformPassword" />

    <TextView
        android:id="@+id/alreadyHaveAccount"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:shadowColor="@color/colorWhite"
        android:text="Already Have an Account?"
        android:textColor="@color/colorWhite"
        app:layout_constraintEnd_toEndOf="@+id/btnRegister"
        app:layout_constraintStart_toStartOf="@+id/btnRegister"
        app:layout_constraintTop_toBottomOf="@+id/btnRegister" />
</androidx.constraintlayout.widget.ConstraintLayout>

        android:layout_marginTop="40dp"
        android:layout_marginEnd="32dp"
        android:background="@drawable/input_bg"
        android:drawableLeft="@drawable/ic_person"
        android:drawablePadding="10dp"
        android:ems="10"
        android:hint="Username"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="@color/colorWhite"
        android:textColorHint="@color/colorWhite"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/logo" />

    <EditText
        android:id="@+id/inputEmail"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:background="@drawable/input_bg"
        android:drawableLeft="@drawable/ic_email"
        android:drawablePadding="10dp"
        android:ems="10"
        android:hint="Email"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="@color/colorWhite"
        android:textColorHint="@color/colorWhite"
```

```xml
            app:layout_constraintEnd_toEndOf="@+id/inputUsername"
            app:layout_constraintStart_toStartOf="@+id/inputUsername"
            app:layout_constraintTop_toBottomOf="@+id/inputUsername" />

    <EditText
        android:id="@+id/inputPassword"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:background="@drawable/input_bg"
        android:drawableLeft="@drawable/ic_security"
        android:drawablePadding="10dp"
        android:ems="10"
        android:hint="******"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="@color/colorWhite"
        android:textColorHint="@color/colorWhite"
        app:layout_constraintEnd_toEndOf="@+id/inputEmail"
        app:layout_constraintStart_toStartOf="@+id/inputEmail"
        app:layout_constraintTop_toBottomOf="@+id/inputEmail" />

    <EditText
        android:id="@+id/inputConformPassword"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:background="@drawable/input_bg"
        android:drawableLeft="@drawable/ic_security"
        android:drawablePadding="10dp"
        android:ems="10"
        android:hint="******"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="@color/colorWhite"
        android:textColorHint="@color/colorWhite"
        app:layout_constraintEnd_toEndOf="@+id/inputPassword"
        app:layout_constraintStart_toStartOf="@+id/inputPassword"
        app:layout_constraintTop_toBottomOf="@+id/inputPassword" />

    <Button
        android:id="@+id/btnRegister"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        android:background="@drawable/btn_bg"
        android:text="Register"
        app:layout_constraintEnd_toEndOf="@+id/inputConformPassword"
        app:layout_constraintStart_toStartOf="@+id/inputConformPassword"
        app:layout_constraintTop_toBottomOf="@+id/inputConformPassword" />

    <TextView
        android:id="@+id/alreadyHaveAccount"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:shadowColor="@color/colorWhite"
        android:text="Already Have an Account?"
        android:textColor="@color/colorWhite"
        app:layout_constraintEnd_toEndOf="@+id/btnRegister"
```

```xml
                    app:layout_constraintStart_toStartOf="@+id/btnRegister"
                    app:layout_constraintTop_toBottomOf="@+id/btnRegister" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

login

```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"
    android:background="@drawable/bb"
    tools:context=".LoginActivity">


    <TextView
        android:id="@+id/logo"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Login"
        android:textColor="@color/colorWhite"
        android:textSize="36sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.13" />

    <EditText
        android:id="@+id/inputPassword"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:background="@drawable/input_bg"
        android:drawableLeft="@drawable/ic_person"
        android:drawablePadding="10dp"
        android:ems="10"
        android:hint="Username"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="@color/colorWhite"
        android:textColorHint="@color/colorWhite"
        app:layout_constraintEnd_toEndOf="@+id/inputEmail"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintStart_toStartOf="@+id/inputEmail"
        app:layout_constraintTop_toBottomOf="@+id/inputEmail" />

    <EditText
        android:id="@+id/inputEmail"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginStart="32dp"
        android:layout_marginTop="64dp"
        android:layout_marginEnd="32dp"
        android:background="@drawable/input_bg"
        android:drawableLeft="@drawable/ic_email"
        android:drawablePadding="10dp"
        android:ems="10"
        android:hint="Email"
```

```xml
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="@color/colorWhite"
        android:textColorHint="@color/colorWhite"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/logo" />

    <TextView
        android:id="@+id/forgotPassword"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:text="Forgot Password?"
        android:textColor="@color/colorWhite"
        android:textSize="18sp"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="@+id/inputPassword"
        app:layout_constraintTop_toBottomOf="@+id/inputPassword" />

    <Button
        android:id="@+id/btnlogin"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        android:background="@drawable/btn_bg"
        android:text="Login"
        app:layout_constraintEnd_toEndOf="@+id/inputPassword"
        app:layout_constraintStart_toStartOf="@+id/inputPassword"
        app:layout_constraintTop_toBottomOf="@+id/forgotPassword" />

    <LinearLayout
        android:id="@+id/linearLayout"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:gravity="center"
        android:orientation="horizontal"
        android:textAlignment="center"
        app:layout_constraintEnd_toEndOf="@+id/btnlogin"
        app:layout_constraintHorizontal_bias="0.0"
        app:layout_constraintStart_toStartOf="@+id/btnlogin"
        app:layout_constraintTop_toBottomOf="@+id/btnlogin">

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Dont have an Account?"
            android:textColor="@color/colorWhite" />

        <TextView
            android:id="@+id/textViewSignUp"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="SignUp"
            android:textColor="@color/colorRed" />

    </LinearLayout>

    <Button
        android:id="@+id/btnGoogle"
        android:layout_width="0dp"
```

```xml
            android:layout_height="wrap_content"
            android:layout_marginStart="32dp"
            android:layout_marginEnd="8dp"
            android:background="@drawable/btn_bg"
            android:drawableLeft="@drawable/ic_google"
            android:drawablePadding="10dp"
            android:paddingLeft="20dp"
            android:text="Google"
            android:textAlignment="textStart"
            android:textAllCaps="false"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toStartOf="@+id/btnFacebook"
            app:layout_constraintHorizontal_bias="0.5"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toBottomOf="@+id/linearLayout"
            app:layout_constraintVertical_bias="0.32999998" />

        <Button
            android:id="@+id/btnFacebook"
            android:layout_width="0dp"
            android:layout_height="wrap_content"
            android:layout_marginStart="8dp"
            android:layout_marginEnd="32dp"
            android:background="@drawable/btn_bg"
            android:drawableStart="@drawable/ic_facebook"
            android:drawablePadding="10dp"
            android:paddingLeft="20dp"
            android:text="Facebook"
            android:textAlignment="textStart"
            android:textAllCaps="false"
            app:layout_constraintBottom_toBottomOf="@+id/btnGoogle"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.5"
            app:layout_constraintStart_toEndOf="@+id/btnGoogle"
            app:layout_constraintTop_toTopOf="@+id/btnGoogle" />


</androidx.constraintlayout.widget.ConstraintLayout>
```

activity_update.xml

```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"
    android:background="@drawable/bb">


    <EditText
        android:id="@+id/title_input2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="150dp"
        android:background="@drawable/input_bg"
        android:ems="10"
        android:hint="Book Title"
        android:inputType="textPersonName"
```

```xml
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="@color/white"
        android:textColorHighlight="#158585"
        android:textColorHint="#FFFFFF"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />


    <EditText
        android:id="@+id/author_input2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:background="@drawable/input_bg"
        android:ems="10"
        android:hint="Book Author"
        android:inputType="textPersonName"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="#FFFFFF"
        android:textColorHint="#FFFFFF"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/title_input2" />


    <EditText
        android:id="@+id/pages_input2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:background="@drawable/input_bg"
        android:ems="10"
        android:hint="Number of pages"
        android:inputType="number"
        android:paddingLeft="20dp"
        android:paddingTop="10dp"
        android:paddingRight="10dp"
        android:paddingBottom="10dp"
        android:textColor="#FFFFFF"
        android:textColorHint="#FFFFFF"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/author_input2" />


    <Button
        android:id="@+id/update_button"
        android:layout_width="match_parent"
        android:layout_height="70dp"
        android:layout_marginTop="40dp"
        android:text="Update"
        android:textAllCaps="false"
        android:textSize="20sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/pages_input2" />


    <Button
        android:id="@+id/delete_button"
        android:layout_width="match_parent"
        android:layout_height="70dp"
        android:layout_marginTop="16dp"
```

```xml
            android:text="Delete"
            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/update_button" />


</androidx.constraintlayout.widget.ConstraintLayout>
```

my_row.xml

```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:layout_marginTop="1dp"
    android:id="@+id/mainLayout"
    android:background="@drawable/bb">


    <androidx.cardview.widget.CardView
        android:id="@+id/cardView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="2dp">


    </androidx.cardview.widget.CardView>

    <androidx.constraintlayout.widget.ConstraintLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:padding="1dp">

        <TextView
            android:id="@+id/book_id_txt"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="1"
            android:textColor="#FFFFFF"
            android:textSize="40sp"
            android:textStyle="bold"
            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:textColor="#FFFFFF"
            android:textSize="20sp"
            android:textStyle="bold"
            app:layout_constraintStart_toEndOf="@+id/book_id_txt"
            app:layout_constraintTop_toTopOf="@+id/book_id_txt" />


        <TextView
            android:id="@+id/book_author_txt"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Author1"
```

```xml
            android:textColor="@color/white"
            app:layout_constraintStart_toStartOf="@+id/book_title_txt"
            app:layout_constraintTop_toBottomOf="@+id/book_title_txt" />


        <TextView
            android:id="@+id/book_pages_txt"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="120"
            android:textColor="@color/white"
            android:textSize="18sp"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintTop_toTopOf="parent" />
    </androidx.constraintlayout.widget.ConstraintLayout>
</LinearLayout>
```

CONCLUSION

Tout d'abord, nous adressons nos remerciements à nos chère professeure, M. Sarra ROUBI

Nous avons tenté de clarifier notre conception, vous trouvez ci-joint dans le git le code source de notre application commenté .