

My project is about Notes App. It is a simple user-friendly app, with limited features and I use MVVM, Room, Live Data Androids architectural components. It has basic features like create, update, and delete. The project starts with a splash screen and followed by the front page it which stores the notes and at the bottom of the page we can see a add button for adding notes. By clicking, add button we go to next page or the notes creating page. This page contains Title, Subtitle, Priority and Notes, this is about this page and this page contains a delete icon at top which is for deleting the notes that contain in that page and at the bottom we can see a check icon it is used for saving the notes. In this app we can update data also. This is designing for the users use only not for sharing purposes. So, this is the short description about the app.

insertNotesActivity.java

```
package com.example.project_notes.Activity;

import static java.text.DateFormat.*;

import androidx.appcompat.app.AppCompatActivity;
import androidx.lifecycle.ViewModelProviders;

import android.os.Bundle;
import android.renderscript.ScriptGroup;
import android.view.View;
import android.widget.Toast;
```

```
import com.example.project_notes.Model.Notes;
import com.example.project_notes.R;
import com.example.project_notes.databinding.ActivityInsertNotesBinding;
import com.example.project_notes.viewModel.NotesViewModel;

import java.text.DateFormat;
import java.util.Date;

public class insertNotesActivity extends AppCompatActivity {

    ActivityInsertNotesBinding binding;
    String title, subtitle, notes;
    NotesViewModel notesViewModel;
    String priority="1";//by default 1

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        binding = ActivityInsertNotesBinding.inflate(getLayoutInflater());
        setContentView(binding.getRoot());

        notesViewModel = ViewModelProviders.of(this).get(NotesViewModel.class);
//notes is been updated, inserted and deleted and also show here

        binding.orchidPriority.setOnClickListener(v ->{

binding.orchidPriority.setImageResource(R.drawable.ic_baseline_check_24);
        binding.tealPriority.setImageResource(0);
```

```
binding.salmonPriority.setImageResource(0);
binding.olivePriority.setImageResource(0);

priority="1";
});

binding.tealPriority.setOnClickListener(v ->{

    binding.orchidPriority.setImageResource(0);
    binding.tealPriority.setImageResource(R.drawable.ic_baseline_check_24);
    binding.salmonPriority.setImageResource(0);
    binding.olivePriority.setImageResource(0);

    priority="2";

});

binding.salmonPriority.setOnClickListener(v ->{

    binding.orchidPriority.setImageResource(0);
    binding.tealPriority.setImageResource(0);

binding.salmonPriority.setImageResource(R.drawable.ic_baseline_check_24);
    binding.olivePriority.setImageResource(0);

    priority="3";

});

binding.olivePriority.setOnClickListener(v ->{

    binding.orchidPriority.setImageResource(0);
    binding.tealPriority.setImageResource(0);
    binding.salmonPriority.setImageResource(0);
    binding.olivePriority.setImageResource(R.drawable.ic_baseline_check_24);

    priority="4";
```

```

});

binding.doneNotesBtn.setOnClickListener(v -> {

    title = binding.notesTitle.getText().toString();
    subtitle = binding.notesSubtitle.getText().toString();
    notes = binding.notesData.getText().toString();

    CreateNotes(title, subtitle, notes);
});
}
private void CreateNotes(String title, String subtitle, String notes) {

    Notes notes1=new Notes();
    notes1.notesTitle=title;
    notes1.notesSubtitle=subtitle;
    notes1.notes=notes;
    notes1.notesPriority=priority;

    notesViewModel.insertNotes(notes1);

    Toast.makeText(this, →Note Created Successfully",
Toast.LENGTH_SHORT).show();
    finish();

}
}

```

activity_insert_notes.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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="#E6E6FA"
    android:orientation="vertical"
    tools:context=".Activity.insertNotesActivity">

    <LinearLayout

        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical">

        <EditText

            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_marginStart="16dp"
            android:layout_marginRight="16dp"
            android:hint="@string/title"
            android:id="@+id/notesTitle"
            android:background="@drawable/edit_txt_background"
            android:padding="15dp"
            android:fontFamily="@font/bookman_old_style"
            android:layout_marginEnd="16dp"
            android:layout_marginLeft="16dp"

            tools:ignore="TextFields" />

        <EditText

            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_marginStart="16dp"
            android:layout_marginRight="16dp"
            android:hint="Subtitle..."
            android:id="@+id/notesSubtitle"
            android:background="@drawable/edit_txt_background"
            tools:ignore="TextFields" />

    </LinearLayout>

</RelativeLayout>
```

```
android:padding="15dp→  
android:fontFamily="@font/bookman_old_style→  
android:layout_marginEnd="16dp→  
android:layout_marginLeft="16dp→  
tools:ignore="TextFields→ />
```

<LinearLayout

```
android:layout_width="match_parent→  
android:layout_height="50dp→  
android:orientation="horizontal→  
android:gravity="center_vertical→  
android:layout_marginStart="16dp→  
android:layout_marginRight="16dp→  
android:layout_marginEnd="16dp→  
android:layout_marginLeft="16dp">
```

<TextView

```
android:layout_width="wrap_content→  
android:layout_height="wrap_content→  
android:layout_marginLeft="10dp→  
android:textColor="@color/black→  
android:fontFamily="@font/bookman_old_style→  
android:text="Priority"/>
```

<ImageView

```
android:layout_width="25dp→  
android:layout_height="25dp→  
android:layout_margin="10dp→  
android:id="@+id/orchidPriority→  
android:background="@drawable/orchid_shape→  
android:src="@drawable/ic_baseline_check_24"/>
```

<ImageView

```
android:layout_width="25dp→  
android:layout_height="25dp→  
android:layout_margin="10dp→  
android:id="@+id/tealPriority→  
android:background="@drawable/teal_shape"/>
```

<ImageView

```
    android:layout_width="25dp→  
    android:layout_height="25dp→  
    android:layout_margin="10dp→  
    android:id="@+id/salmonPriority→  
    android:background="@drawable/salmon_shape"/>
```

<ImageView

```
    android:layout_width="25dp→  
    android:layout_height="25dp→  
    android:layout_margin="10dp→  
    android:id="@+id/olivePriority→  
    android:background="@drawable/olive_shape"/>
```

</LinearLayout>

<EditText

```
    android:layout_width="match_parent→  
    android:layout_height="300dp→  
    android:layout_marginStart="16dp→  
    android:layout_marginRight="16dp→  
    android:hint="Notes...."  
    android:id="@+id/notesData→  
    android:background="@drawable/edit_txt_background→  
    android:padding="15dp→  
    android:gravity="start→  
    android:fontFamily="@font/bookman_old_style→  
    android:layout_marginEnd="16dp→  
    android:layout_marginLeft="16dp"/>
```

</LinearLayout>

<com.google.android.material.floatingactionbutton.FloatingActionButton

```
    android:layout_width="match_parent→  
    android:layout_height="wrap_content→
```

```
        android:layout_alignParentRight="true→  
        android:layout_alignParentBottom="true→  
        android:layout_alignParentEnd="true→  
        android:layout_margin="26dp→  
        android:id="@+id/doneNotesBtn→  
        android:src="@drawable/ic_baseline_check_24"  
        android:backgroundTint="@color/light_purple→ />
```

</RelativeLayout>

SplashScreen.java

```
package com.example.project_notes.Activity;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.os.Handler;  
  
import com.example.project_notes.MainActivity;  
import com.example.project_notes.R;  
  
public class SplashScreen extends AppCompatActivity {  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_splash_screen);  
  
        getSupportActionBar().hide();  
  
        new Handler().postDelayed(new Runnable() {
```



```

@Override
public void run() {

    //CODE

    startActivity(new Intent(SplashScreen.this, MainActivity.class));
    finish();
}
},2000);
}
}

```

activity_splash_screen.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=".Activity.SplashScreen">

    <ImageView
        android:id="@+id/imageView"→
        android:layout_width="128dp"→
        android:layout_height="128dp"→
        android:background="@drawable/logo"→
        app:layout_constraintBottom_toBottomOf="parent"→
        app:layout_constraintEnd_toEndOf="parent"→
        app:layout_constraintHorizontal_bias="0.498"→
        app:layout_constraintStart_toStartOf="parent"→
        app:layout_constraintTop_toTopOf="parent"→
        app:layout_constraintVertical_bias="0.406"→
        tools:ignore="MissingConstraints" />

    <TextView
        android:id="@+id/textView"→
        android:layout_width="wrap_content"→
        android:layout_height="wrap_content"→

```

```
android:layout_marginTop="8dp→  
android:fontFamily="@font/bookman_old_style_bold→  
android:text="Notes App→  
android:textColor="@color/purple→  
android:textSize="32dp→  
app:layout_constraintEnd_toEndOf="parent→  
app:layout_constraintHorizontal_bias="0.497"  
app:layout_constraintStart_toStartOf="parent→  
app:layout_constraintTop_toBottomOf="@+id/imageView→ />
```

<TextView

```
android:id="@+id/textView2"  
android:layout_width="wrap_content→  
android:layout_height="wrap_content→  
android:layout_marginTop="50dp→  
android:text="Note to Self→  
android:gravity="center→  
android:textColor="@color/purple→  
android:fontFamily="@font/bookman_old_style→  
app:layout_constraintEnd_toEndOf="parent→  
app:layout_constraintHorizontal_bias="0.498"  
app:layout_constraintStart_toStartOf="parent→  
app:layout_constraintTop_toBottomOf="@+id/textView→ />
```

<ProgressBar

```
android:id="@+id/progressBar→  
style="?android:attr/progressBarStyle→  
android:layout_width="25dp→  
android:layout_height="25dp→  
android:theme="@style/ProgressBar→  
app:layout_constraintBottom_toBottomOf="parent→  
app:layout_constraintEnd_toEndOf="parent→  
app:layout_constraintStart_toStartOf="parent→  
app:layout_constraintTop_toBottomOf="@+id/textView2" />
```

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

updateNotesActivity.java

```
package com.example.project_notes.Activity;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.lifecycle.ViewModelProviders;

import android.os.Bundle;
import android.view.LayoutInflater;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.LinearLayout;
import android.widget.TextView;
import android.widget.Toast;

import com.example.project_notes.Model.Notes;
import com.example.project_notes.R;
import com.example.project_notes.databinding.ActivityUpdateNotesBinding;
import com.example.project_notes.viewModel.NotesViewModel;
import com.google.android.material.bottomsheet.BottomSheetDialog;

public class updateNotesActivity extends AppCompatActivity {

    ActivityUpdateNotesBinding binding;
    String priority="1";

    String stitle,ssubtitle,snotes,spriority;
    NotesViewModel notesViewModel;
    int iid;
```

@Override

```
protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    binding=ActivityUpdateNotesBinding.inflate((getLayoutInflater()));  
    setContentView(binding.getRoot());  
  
    iid=getIntent().getIntExtra("id",0);  
    stitle=getIntent().getStringExtra("title");  
    ssubtitle=getIntent().getStringExtra("subtitle");  
    snotes=getIntent().getStringExtra("notes");  
    spriority=getIntent().getStringExtra("priority");  
  
    binding.updateTitle.setText(stitle);  
    binding.updateSubtitle.setText(ssubtitle);  
    binding.updateNotes.setText(snotes);  
  
    if(spriority.equals("1"))  
    {  
binding.orchidPriority.setImageResource(R.drawable.ic_baseline_check_24);  
    }  
    else if(spriority.equals("2"))  
    {  
        binding.tealPriority.setImageResource(R.drawable.ic_baseline_check_24);  
    }  
    else if(spriority.equals("3")){  
binding.salmonPriority.setImageResource(R.drawable.ic_baseline_check_24);  
  
    }  
    else if(spriority.equals("4"))  
    {  
        binding.olivePriority.setImageResource(R.drawable.ic_baseline_check_24);
```

```
}
```

```
notesViewModel = ViewModelProviders.of(this).get(NotesViewModel.class);
```

```
//notes is been updated, inserted and deleted and also show here
```

```
binding.orchidPriority.setOnClickListener(v ->{
```

```
binding.orchidPriority.setImageResource(R.drawable.ic_baseline_check_24);  
binding.tealPriority.setImageResource(0);  
binding.salmonPriority.setImageResource(0);  
binding.olivePriority.setImageResource(0);
```

```
    priority="1";  
});
```

```
binding.tealPriority.setOnClickListener(v ->{
```

```
    binding.orchidPriority.setImageResource(0);  
    binding.tealPriority.setImageResource(R.drawable.ic_baseline_check_24);  
    binding.salmonPriority.setImageResource(0);  
    binding.olivePriority.setImageResource(0);
```

```
    priority="2";
```

```
});
```

```
binding.salmonPriority.setOnClickListener(v ->{
```

```
    binding.orchidPriority.setImageResource(0);  
    binding.tealPriority.setImageResource(0);
```

```

binding.salmonPriority.setImageResource(R.drawable.ic_baseline_check_24);
binding.olivePriority.setImageResource(0);

priority="3";

});

binding.olivePriority.setOnClickListener(v ->{

    binding.orchidPriority.setImageResource(0);
    binding.tealPriority.setImageResource(0);
    binding.salmonPriority.setImageResource(0);
    binding.olivePriority.setImageResource(R.drawable.ic_baseline_check_24);

    priority="4";
});

binding.updateBtn.setOnClickListener(V->{

    String title = binding.updateTitle.getText().toString();
    String subtitle = binding.updateSubtitle.getText().toString();
    String notes = binding.updateNotes.getText().toString();
    UpdateNotes(title, subtitle, notes);

});
}

private void UpdateNotes(String title, String subtitle, String notes) {

    Notes updateNotes=new Notes();

    updateNotes.id=iid;
    updateNotes.notesTitle=title;

```

```

        updateNotes.notesSubtitle=subtitle;
        updateNotes.notes=notes;
        updateNotes.notesPriority=priority;

        notesViewModel.updateNotes(updateNotes);
        Toast.makeText(this, →Note Updated Successfully",
Toast.LENGTH_SHORT).show();
        finish();
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        getMenuInflater().inflate(R.menu.delete_menu,menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(@NonNull MenuItem item) {
        if(item.getItemId()==R.id.ic_delete){
            BottomSheetDialog sheetDialog=new
BottomSheetDialog(updateNotesActivity.this, R.style.BottomSheetStyle);

            View view=
LayoutInflater.from(updateNotesActivity.this).inflate(R.layout.delete_bottom_sheet,(L
inearLayout)findViewById(R.id.bottomSheet));
            sheetDialog.setContentView(view);
            TextView yes,no;
            yes=view.findViewById(R.id.delete_yes);
            no=view.findViewById(R.id.delete_no);

            yes.setOnClickListener(v->{

                notesViewModel.deleteNotes(iid);
                finish();

            });

```

```

        no.setOnClickListener(v->{

            sheetDialog.dismiss();
        });

        sheetDialog.show();

    }
    return true;
}
}

```

activity_update_notes.xml

```

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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="#E6E6FA"→
    android:orientation="vertical"→
    tools:context=".Activity.insertNotesActivity">

    <LinearLayout

        android:layout_width="match_parent"→
        android:layout_height="match_parent"→
        android:orientation="vertical">

        <EditText

            android:layout_width="match_parent"→
            android:layout_height="wrap_content"→
            android:layout_marginStart="16dp"→
            android:layout_marginRight="16dp"→
            android:hint="Title...."
            android:id="@+id/updateTitle"→
            android:background="@drawable/edit_txt_background"→
            android:padding="15dp"→
            android:fontFamily="@font/bookman_old_style"→

```



```
android:layout_marginEnd="16dp→  
android:layout_marginLeft="16dp"/>
```

<EditText

```
android:id="@+id/updateSubtitle→  
android:layout_width="match_parent→  
android:layout_height="wrap_content→  
android:layout_marginStart="16dp→  
android:layout_marginRight="16dp→  
android:hint="Subtitle..."  
android:background="@drawable/edit_txt_background→  
android:padding="15dp→  
android:fontFamily="@font/bookman_old_style→  
android:layout_marginEnd="16dp→  
android:layout_marginLeft="16dp"/>
```

<LinearLayout

```
android:layout_width="match_parent→  
android:layout_height="50dp→  
android:orientation="horizontal→  
android:gravity="center_vertical→  
android:layout_marginStart="16dp→  
android:layout_marginRight="16dp→  
android:layout_marginEnd="16dp→  
android:layout_marginLeft="16dp">
```

<TextView

```
android:layout_width="wrap_content→  
android:layout_height="wrap_content→  
android:layout_marginLeft="10dp→  
android:textColor="@color/black→  
android:fontFamily="@font/bookman_old_style→  
android:text="Priority"/>
```

<ImageView

```
android:layout_width="25dp→  
android:layout_height="25dp→  
android:layout_margin="10dp→  
android:id="@+id/orchidPriority→  
android:background="@drawable/orchid_shape→
```

```
android:src="@drawable/ic_baseline_check_24"/>
```

<ImageView

```
android:layout_width="25dp→  
android:layout_height="25dp→  
android:layout_margin="10dp→  
android:id="@+id/tealPriority→  
android:background="@drawable/teal_shape"/>
```

<ImageView

```
android:layout_width="25dp→  
android:layout_height="25dp→  
android:layout_margin="10dp→  
android:id="@+id/salmonPriority→  
android:background="@drawable/salmon_shape"/>
```

<ImageView

```
android:layout_width="25dp→  
android:layout_height="25dp→  
android:layout_margin="10dp→  
android:id="@+id/olivePriority→  
android:background="@drawable/olive_shape"/>
```

</LinearLayout>

<EditText

```
android:layout_width="match_parent→  
android:layout_height="300dp→  
android:layout_marginStart="16dp→  
android:layout_marginRight="16dp→  
android:hint="Notes...."  
android:id="@+id/updateNotes→  
android:background="@drawable/edit_txt_background→  
android:padding="15dp→  
android:gravity="start→  
android:fontFamily="@font/bookman_old_style→  
android:layout_marginEnd="16dp→  
android:layout_marginLeft="16dp"/>
```

```
</LinearLayout>
```

```
<com.google.android.material.floatingactionbutton.FloatingActionButton
```

```
    android:layout_width="256dp→  
    android:layout_height="65dp→  
    android:layout_alignParentRight="true→  
    android:layout_alignParentBottom="true→  
    android:layout_margin="26dp→  
    android:id="@+id/updateBtn→  
    android:src="@drawable/ic_baseline_check_24"  
    android:backgroundTint="@color/light_purple→  
    app:layout_constraintBottom_toBottomOf="parent→  
    app:layout_constraintEnd_toEndOf="parent→  
    tools:ignore="MissingConstraints → />
```

```
</RelativeLayout>
```

NotesAdapter.java

```
package com.example.project_notes.Adapter;  
  
import android.content.Intent;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.ListView;  
import android.widget.TextView;  
  
import androidx.annotation.NonNull;  
import androidx.recyclerview.widget.RecyclerView;
```

```
import com.example.project_notes.Activity.updateNotesActivity;
import com.example.project_notes.MainActivity;
import com.example.project_notes.Model.Notes;
import com.example.project_notes.R;

import java.util.List;

public class NotesAdapter extends
RecyclerView.Adapter<NotesAdapter.notesViewHolder>{

    MainActivity mainActivity;
    List<Notes> notes;

    public NotesAdapter(MainActivity mainActivity, List<Notes> notes) {
        this.mainActivity=mainActivity;
        this.notes=notes;
    }

    @Override
    public notesViewHolder onCreateViewHolder(ViewGroup parent, int viewType) {
        return new
notesViewHolder(LayoutInflater.from(mainActivity).inflate(R.layout.item_notes,
parent,false));
    }

    @Override
    public void onBindViewHolder(NotesAdapter.notesViewHolder holder, int position)
{
```

```
Notes note =notes.get(position);

switch (note.notesPriority) {

    case "1":

        holder.notesPriority.setBackgroundResource(R.drawable.orchid_shape);

        break;

    case "2":

        holder.notesPriority.setBackgroundResource(R.drawable.teal_shape);

        break;

    case "3":

        holder.notesPriority.setBackgroundResource(R.drawable.salmon_shape);

        break;

    case "4":

        holder.notesPriority.setBackgroundResource(R.drawable.olive_shape);

        break;

}

holder.title.setText(note.notesTitle);
holder.subtitle.setText(note.notesSubtitle);
holder.notes.setText(note.notes);

holder.itemView.setOnClickListener(v->{

    Intent intent=new Intent(mainActivity, updateNotesActivity.class);

    intent.putExtra("id",note.id);
    intent.putExtra("title",note.notesTitle);
    intent.putExtra("subtitle",note.notesSubtitle);
    intent.putExtra("priority",note.notesPriority);
```

```

        intent.putExtra("note",note.notes);

        MainActivity.startActivity(intent);
    });
}

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

class notesViewHolder extends RecyclerView.ViewHolder{

    TextView title,subtitle,notes;
    View notesPriority;

    public notesViewHolder(View itemView){
        super(itemView);

        title=itemView.findViewById(R.id.notesTitle);
        subtitle=itemView.findViewById(R.id.notesSubtitle);
        notesPriority=itemView.findViewById(R.id.notesPriority);
        notes=itemView.findViewById(R.id.notes);

    }
}
}

```

NotesDao.java

```

package com.example.project_notes.Dao;

import androidx.lifecycle.LiveData;
import androidx.room.Delete;
import androidx.room.Insert;
import androidx.room.Query;
import androidx.room.Update;

import com.example.project_notes.Model.Notes;

import java.util.List;

@androidx.room.Dao //Dao - data access object
public interface NotesDao {

    @Query("SELECT * FROM Notes_Database")
    LiveData<List<Notes>> getAllNotes();

    @Insert
    void insertNotes(Notes... notes);

    @Query("DELETE from Notes_Database WHERE id= :id")
    void deleteNotes(int id);

    @Update
    void updateNotes(Notes notes);

}

```

NotesDatabase.java

```

package com.example.project_notes.Database;

import android.content.Context;

import androidx.room.Database;
import androidx.room.Room;
import androidx.room.RoomDatabase;

import com.example.project_notes.Model.Notes;
import com.example.project_notes.Dao.NotesDao;

@Database(entities={Notes.class},version = 1)
public abstract class NotesDatabase extends RoomDatabase {

    public abstract NotesDao notesDao();

    public static NotesDatabase INSTANCE;

    public static NotesDatabase getInstance(Context context)
    {
        if(INSTANCE==null)
        {
            INSTANCE= Room.databaseBuilder(context.getApplicationContext(),
                NotesDatabase.class,
                →Notes_Database").allowMainThreadQueries().build();
        }
        return INSTANCE;
    }
}

```

Notes.java


```
package com.example.project_notes.Model;

import androidx.room.ColumnInfo;
import androidx.room.Entity;
import androidx.room.PrimaryKey;

@Entity(tableName="Notes_Database")
public class Notes {

    @PrimaryKey(autoGenerate = true)
    public int id;

    @ColumnInfo(name="notes_title")
    public String notesTitle;

    @ColumnInfo(name="notes_subtitle")
    public String notesSubtitle;

    @ColumnInfo(name="notes")
    public String notes;

    @ColumnInfo(name="notes_priority")
    public String notesPriority;

}
```

NotesRepository.java

```
package com.example.project_notes.Repository;

import android.app.Application;

import androidx.lifecycle.LiveData;

import com.example.project_notes.Dao.NotesDao;
import com.example.project_notes.Database.NotesDatabase;
import com.example.project_notes.Model.Notes;

import java.util.List;

public class NotesRepository {

    public NotesDao notesDao;

    public LiveData<List<Notes>>getAllNotes;

    public NotesRepository(Application application){
        NotesDatabase database=NotesDatabase.getDatabaseInstance(application);
        notesDao=database.notesDao(); //to get database
        getAllNotes=notesDao.getAllNotes(); //getAllNotes fn in notesDao is in database
    }

    //INSERT
    public void insertNotes(Notes notes){
        notesDao.insertNotes(notes);
    }
}
```

```

//DELETE
public void deleteNotes(int id){
    notesDao.deleteNotes(id);
}

//UPDATE
public void updateNotes(Notes notes){
    notesDao.updateNotes(notes);
}
}

```

NotesViewModel.java

```

package com.example.project_notes.viewModel;

import android.app.Application;

import androidx.lifecycle.AndroidViewModel;
import androidx.lifecycle.LiveData;

import com.example.project_notes.Model.Notes;
import com.example.project_notes.Repository.NotesRepository;

import java.util.List;

public class NotesViewModel extends AndroidViewModel{

    public NotesRepository repository;

    public LiveData<List<Notes>>getAllNotes;
}

```

```
public NotesViewModel(Application application)
{
    super(application);

    repository=new NotesRepository(application);
    getAllNotes=repository.getAllNotes;

}

//INSERT
public void insertNotes(Notes notes){
    repository.insertNotes(notes);
}

//UPDATE
public void updateNotes(Notes notes){
    repository.updateNotes(notes);
}

//DELETE
public void deleteNotes(int id){
    repository.deleteNotes(id);
}
}
```

MainActivity.java

```
package com.example.project_notes;

import androidx.appcompat.app.AppCompatActivity;
import androidx.lifecycle.ViewModelProviders;
import androidx.recyclerview.widget.GridLayoutManager;
```

```
import androidx.recyclerview.widget.RecyclerView;

import android.content.Intent;
import android.os.Bundle;

import com.example.project_notes.Activity.insertNotesActivity;
import com.example.project_notes.Adapter.NotesAdapter;
import com.example.project_notes.viewModel.NotesViewModel;
import com.google.android.material.floatingactionbutton.FloatingActionButton;

public class MainActivity extends AppCompatActivity {

    FloatingActionButton newNotes;
    NotesViewModel notesViewModel;
    RecyclerView notesRecycler;
    NotesAdapter adapter;

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

        newNotes=findViewById(R.id.newNotes);
        notesRecycler=findViewById(R.id.notesRecycler);

        notesViewModel = ViewModelProviders.of(this).get(NotesViewModel.class);
        //notes is been updated, inserted and deleted and also show here

        newNotes.setOnClickListener(v ->{
```

```

        startActivity(new Intent(MainActivity.this,insertNotesActivity.class));

    });

    notesViewModel.getAllNotes.observe(this, notes -> {

        notesRecycler.setLayoutManager(new GridLayoutManager(this,2));

        adapter=new NotesAdapter(MainActivity.this,notes);
        notesRecycler.setAdapter(adapter);

    });
}
}

```

delete_bottom_sheet.xml

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:gravity="center"
    android:orientation="vertical"
    android:id="@+id/bottomSheet"
    android:layout_height="wrap_content">

    <View
        android:layout_width="100dp"
        android:background="@drawable/delete_indictor_shape"
        android:layout_height="5dp"
        android:layout_margin="10dp"/>

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Are you sure. You want to delete this Notes"
        android:gravity="center"
        android:layout_marginTop="10dp"
        android:layout_marginBottom="15dp"
        android:textColor="@color/black"
        android:textSize="18dp"
    >

```

```
android:fontFamily="@font/bookman_old_style"/>
```

<TextView

```
    android:id="@+id/delete_no→  
    android:layout_width="match_parent→  
    android:layout_height="wrap_content→  
    android:text="No→  
    android:gravity="center→  
    android:padding="7dp→  
    android:textSize="18dp→  
    android:layout_marginLeft="10dp→  
    android:layout_marginEnd="10dp→  
    android:layout_marginStart="10dp→  
    android:layout_marginBottom="20dp→  
    android:textColor="@color/black→  
    android:fontFamily="@font/bookman_old_style→  
    android:background="@drawable/no_delete"/>
```

<TextView

```
    android:id="@+id/delete_yes→  
    android:layout_width="match_parent→  
    android:layout_height="wrap_content→  
    android:layout_marginStart="10dp→  
    android:layout_marginLeft="10dp→  
    android:layout_marginEnd="10dp→  
    android:layout_marginBottom="20dp→  
    android:background="@drawable/yes_delete→  
    android:fontFamily="@font/bookman_old_style→  
    android:gravity="center→  
    android:padding="7dp→  
    android:text="Yes→  
    android:textColor="@color/black→  
  
    android:textSize="18dp→ />
```

```
</LinearLayout>
```

item_notes.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="wrap_content"
    xmlns:app="http://schemas.android.com/apk/res-auto">
```

```
    <androidx.cardview.widget.CardView
```

```
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="7dp"
        app:cardCornerRadius="10dp">
```

```
        <View
```

```
            android:id="@+id/notesPriority"
            android:layout_width="20dp"
            android:layout_height="20dp"
            android:layout_margin="10dp"
            android:layout_gravity="right"
            android:background="@drawable/orchid_shape"/>
```

```
        <LinearLayout
```

```
            android:layout_margin="7dp"
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:orientation="vertical">
```

```
            <TextView
```

```
                android:id="@+id/notesTitle"
                android:padding="5dp"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:fontFamily="@font/bookman_old_style"
                android:text="title"/>
```

```
            <TextView
```

```
                android:id="@+id/notesSubtitle"
                android:padding="5dp"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:fontFamily="@font/bookman_old_style"
                android:text="subtitle"/>
```



```
        </LinearLayout>

        </androidx.cardview.widget.CardView>

</LinearLayout>
```

AndroidManifest.xml

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

<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.project_notes">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.Project_Notes">

        <activity
            android:name=".Activity.updateNotesActivity"
            android:exported="false" />

        <activity
            android:name=".Activity.insertNotesActivity"
            android:exported="false" />

        <activity
            android:name=".Activity.SplashScreen"
            android:exported="true">

            <intent-filter>
```

```
<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />
</intent-filter>
</activity>
<activity android:name=".MainActivity" />
</application>

</manifest>
```