

Start Your New Android Project with Java. But Why?



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Splash screens

How the splash screen works

When a user launches an app while the app's process is not running (a cold start) or the Activity has not been created, the following events occur. (The splash screen is never shown during a hot start)

1. The system shows the splash screen using themes and any animations that you've defined.
2. When the app is ready, the splash screen is dismissed and the app is displayed.

```
Thread background = new Thread() {
    public void run() {
        try {
            // Thread will sleep for 5 seconds
            sleep(5*1000);

            // After 5 seconds redirect to another intent
            Intent i=new Intent(getApplicationContext(),MainActivity.class);
            startActivity(i);

            //Remove activity
            finish();
        } catch (Exception e) {
```

```
    }  
  }  
};  
// start thread  
background.start();
```

Action Bar In Android

```
ActionBar ab = getSupportActionBar();  
getSupportActionBar().hide();  
getSupportActionBar().setTitle("home screen");  
getSupportActionBar().setTitle("hello world");  
getSupportActionBar().setLogo(R.drawable.ic_launcher_background);  
ab.setSubtitle("this is my app");  
ab.setDisplayShowCustomEnabled(true);  
ab.setElevation(0.34f);  
ab.setHideOnContentScrollEnabled(false);  
ab.setHomeButtonEnabled(true);  
getSupportActionBar().setHomeAsUpIndicator(R.drawable.ic_launcher_background);  
;  
getSupportActionBar().setDisplayHomeAsUpEnabled(true);
```

Toast in Android app

```
Toast.makeText(MainActivity.this, "button was click", Toast.LENGTH_SHORT);  
Toast.makeText(MainActivity.this, "button was click", Toast.LENGTH_LONG);
```

snackbar in android

Snackbar in android is a new widget introduced with the Material Design library as a replacement of a Toast. Android Snackbar is light-weight widget and they are used to show

messages in the bottom of the application with swiping enabled. Snackbar android widget may contain an optional action button.

```
mySnackbar = Snackbar.make(binding.calculate,error,Snackbar.LENGTH_SHORT);
mySnackbar.setAction("undo", new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        mySnackbar.dismiss();
    }
});
mySnackbar.show();
```

ProgressDialog in android

```
ProgressDialog progressDialog;
progressDialog = new ProgressDialog(this);
// progressDialog.setContentView(R.layout.progress_dialog);
progressDialog.setTitle("Loading");
progressDialog.show();

if(progressDialog != null){
    progressDialog.dismiss();
}
```

How to add Onclick Listener on button in android

```
text = findViewById(R.id.textView4);
btn = findViewById(R.id.button8);

btn.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        text.setText("hello world");
        showAlert();
        Toast.makeText(MainActivity.this, "button was click",
Toast.LENGTH_SHORT).show();
        Snackbar mySnackbar = Snackbar.make(text, "hello world",
Snackbar.LENGTH_SHORT);
        mySnackbar.setAction("undo", new View.OnClickListener() {
```

```

        @Override
        public void onClick(View view) {
            mySnackbar.dismiss();
        }
    });
    mySnackbar.show();
}
});

```

Alert Dialog in android with onBackPressed using function

```

public void showAlert(String title){
    new
AlertDialog.Builder(this).setIcon(R.drawable.ic_launcher_background).setTitle("Error")

        .setMessage(title)
        .setPositiveButton("yes", new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialogInterface, int i) {
                finish();
            }
        }).setNegativeButton("No", new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialogInterface, int i) {
                dialogInterface.dismiss();
            }
        }).setNeutralButton("Help", new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialogInterface, int i) {
                Toast.makeText(notesactivity.this, "Help",
Toast.LENGTH_SHORT).show();
            }
        }).show();
}

@Override
public void onBackPressed() {
    showAlert("Are you sure you want to Exit");
}

```

Intent

moving from one screen to another using intent

```
Intent intent = new Intent(MainActivity.this,ShareIntent.class);
startActivity(intent);
```

share text on social media

```
Intent shareIntent = new Intent();
shareIntent.setAction(Intent.ACTION_SEND);
shareIntent.putExtra(Intent.EXTRA_TEXT, "Text to share.");
shareIntent.setType("text/plain");
startActivity(shareIntent);
```

Open phone dial after click button

```
// open phone

Intent intent = new Intent();

intent.setAction(Intent.ACTION_DIAL);

context.startActivity(intent);
```

Open url,website, youtube using Intent

```
startActivity(new Intent(Intent.ACTION_VIEW,
Uri.parse("https://www.youtube.com/watch?v=gtYpdKZjxx0"))));
```

send text in whatsapp using intent

```
Intent intent = new Intent(Intent.ACTION_SEND);
intent.setType("text/plain");
intent.setPackage("com.whatsapp");
intent.putExtra(Intent.EXTRA_TEXT, models.getTitle());
context.startActivity(intent);
```

Copy text using clipManager

```
ClipboardManager cbManager =
(ClipboardManager) (context.getSystemService(Context.CLIPBOARD_SERVICE));
ClipData clipData;
clipData = ClipData.newPlainText("text", "Hello world");
cbManager.setPrimaryClip(clipData);
```

Send data from one screen to other screen using intent

You Can pass along data as text in the intent that start the second activity

```
Intent myIntent = new Intent(this, NextActivity.class);
myIntent.putExtra("text", "hello world");
startActivity(myIntent);
```

In the onCreate method of your profile activity you can access the text:

```
Intent intent = getIntent();
String text = intent.getStringExtra("text");
getSupportActionBar().setTitle("Share intent"+text);
```

Android ListView and Adapter

```
listView = findViewById(R.id.listview);
String [] city = {"Nepal", "india"};

ArrayAdapter<String> adapter = new ArrayAdapter<String>(
    ListView_items.this, android.R.layout.simple_dropdown_item_1line, city);
listView.setAdapter(adapter);

listView.setOnItemClickListener(new AdapterView.OnItemClickListener() {
    @Override
```

```

        public void onItemClick(AdapterView<?> adapterView, View view, int i,
long l) {
            Toast.makeText(ListView_items.this, ""+city[i],
Toast.LENGTH_SHORT).show();
        }
    });

```

Android RecycleView

first create a folder models on package folder to create models right click in package and click on package for create a folder. inside folder create a modal inside modal create a constructor, Geter, setter etc

```

package com.example.firstapp.Models;

public class BookModals {
    int Bookimage;
    String Bookname;

    public BookModals(int bookimage, String bookname) {
        Bookimage = bookimage;
        Bookname = bookname;
    }

    public int getBookimage() {
        return Bookimage;
    }

    public void setBookimage(int image) {
        Bookimage = image;
    }

    public String getBookname() {
        return Bookname;
    }

    public void setBookname(String bookname) {
        Bookname = bookname;
    }
}

```

Create A adapter folder and inside adapter create file.
how to add onclick listener inside adapter

```
package com.example.bestnoteapp.Adapters;

import android.content.Context;
import android.content.Intent;
import android.net.Uri;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.TextView;
import android.widget.Toast;

import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;

import com.example.bestnoteapp.Modals.UserProfileModals;
import com.example.bestnoteapp.PdfViews;
import com.example.bestnoteapp.R;
import com.example.bestnoteapp.ScrollingDetails;
import com.squareup.picasso.Picasso;

import java.util.ArrayList;

public class UserProfileAdapter extends
RecyclerView.Adapter<UserProfileAdapter.ViewHolder> {
    ArrayList<UserProfileModals>list;
    Context context;

    public UserProfileAdapter(ArrayList<UserProfileModals> list, Context context)
    {
        this.list = list;
        this.context = context;
    }

    @NonNull
    @Override

    public ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType)
    {
```



```

        View view =
LayoutInflater.from(context).inflate(R.layout.sample_userprofile,parent,false);
        return new ViewHolder(view);
    }

    @Override
    public void onBindViewHolder(@NonNull ViewHolder holder, int position) {
        final UserProfileModals modals = list.get(position);
        holder.profile.setImageResource(modals.getImage());
        holder.name.setText(modals.getName());
        holder.desc.setText(modals.getDesc());
        holder.date.setText(modals.getDate());

        holder.profile.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
//                Intent intent = new Intent(context, ScrollingDetails.class);
//                context.startActivity(intent);
                Intent intent = new Intent(context, PdfViews.class);
                context.startActivity(intent);

//                share to social media
//                Intent intent = new Intent();
//                intent.setAction(Intent.ACTION_SEND);
//                intent.setType("text/plain");
//                context.startActivity(intent);

//                open phone
//                Intent intent = new Intent();
//                intent.setAction(Intent.ACTION_DIAL);
//                context.startActivity(intent);

//                open youtube channel
                context.startActivity(new Intent(Intent.ACTION_VIEW,
Uri.parse("https://www.youtube.com/watch?v=gtYpdKZjxx0"))));
            }
        });
    }

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

    public class ViewHolder extends RecyclerView.ViewHolder {

```

```

    ImageView profile;
    TextView name;
    TextView desc;
    TextView date;

    public ViewHolder(@NonNull View itemView) {
        super(itemView);
        profile = itemView.findViewById(R.id.profile);
        name = itemView.findViewById(R.id.name);
        desc = itemView.findViewById(R.id.desc);
        date = itemView.findViewById(R.id.date);
    }
}

```

View binding in android

View binding is a feature that allows you to more easily write code that interacts with views. Once view binding is enabled in a module, it generates a binding class for each XML layout file present in that module. An instance of a binding class contains direct references to all views that have an ID in the corresponding layout

In most cases, view binding replaces **findViewById**

Setup instructions

View binding is enabled on a module by module basis. To enable view binding in a module, set the viewBinding build option to true in the module-level build.gradle file, as shown in the following example:

```

android {
    ...
    buildFeatures {
        viewBinding true
    }
}

```

```

ActivityNotesactivityBinding binding = ActivityNotesactivityBinding.
inflate(getLayoutInflater());
setContentView(binding.getRoot());

```

```
setSupportActionBar(binding.toolbar);
```

Inside main activity now we have to add the data to the list show we create a **arraylist, Adapter, and show data using LinearLayout,GridLayout,Staggered Layour**

```
ArrayList<UserProfileModals>list = new ArrayList<>();

list.add(new UserProfileModals(R.drawable.img,"krishna kharal",
"Hello everyone","343"));

UserProfileAdapter adapter = new UserProfileAdapter(list,this);
binding.recycler.setAdapter(adapter);

LinearLayoutManager linearLayoutManager = new LinearLayoutManager(this);
binding.recycler.setLayoutManager(linearLayoutManager);
```

How to create Custom toolbar.

Choose View } Customize. ...

Click the Toolbars tab.

Click New. ...

Type a name for the new toolbar, and click OK. ...

Click the Commands tab.

In the Categories list, click a menu.

From the Commands list, drag command icons to the new toolbar.

When you are finished adding commands, click Close.

```
Toolbar toolbar = binding.toolbar;
setSupportActionBar(toolbar);
CollapsingToolbarLayout toolBarLayout = binding.toolbarLayout;
toolBarLayout.setTitle(getTitle());
```

How to create toolbar menu.

This is going to be in res/menu/main_menu .

Right click the res folder and choose New > Android Resource File.

Type main_menu for the File name.

Choose Menu for the Resource type.

How to set toolbar menu items to the different screen and click

listener to the different menuitems.

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

@Override
public boolean onOptionsItemSelected(@NonNull MenuItem item) {
    switch(item.getItemId()){
        case R.id.item1:
            Toast.makeText(this, "Home page", Toast.LENGTH_SHORT).show();
            break;
    }
    return true;
}
```

CountDown Timer with Runnable and Handler in android.

```
final Handler handler = new Handler();
Runnable runnable = new Runnable() {
    @Override
    public void run() {
        // code to execute
        number++;
        Toast.makeText(TaskSheduling.this, "Item count "+number,
        Toast.LENGTH_SHORT).show();
        handler.postDelayed(this,1000);
    }
};

handler.post(runnable);

new CountDownTimer(300,500){
```

```

@Override
public void onTick(long l) {
    Log.d("start", "start timer");
}

@Override
public void onFinish() {
    Log.d("finish", "finish timer");
}
}.start();

```

Button sheet Fragement

This example demonstrates how do I implement android button sheet widget.

Step 1 – Create a new project in Android Studio, go to File ⇒ New Project and fill all required details to create a new project.

Step 2 – Create a sample layout resource file for ButtonSheet.

Step 3 - right click in package and create Blank fragment.

Step 4 - Go to Activity and create object of BottomsheetFragment same as the Fragment name.

```

BottomSheetFragment bottomSheetFragment = new BottomSheetFragment();

bottomSheetFragment.show(getSupportFragmentManager(), bottomSheetFragment.getTag());

```

BottomSheetFragment is the Name of Fragment we have Created.

How to add Youtube video in Your android app.

```

binding.youtubePlayerView.addYouTubePlayerListener(new
AbstractYouTubePlayerListener() {
    @Override
    public void onReady(@NonNull YouTubePlayer youTubePlayer) {
        String videoId = "7jN0-57G0vw";
        youTubePlayer.loadVideo(videoId, 0);
    }
});

```

Demo app

Embedding Video with media Controles

Steps to embed video in your Android Application

Open your Android project and create a new Android project.

Create a new folder named "raw" in your Android project's "res" folder and place your video file inside the "raw" folder. ...

To add a video player in the activity_main. ...

Write code to attach video to the VideoView.

```
binding.videoView.setVideoPath("android.resource://" + getPackageName() + "/" +
R.raw.video);
binding.videoView.start();
MediaController mediaController = new MediaController(this);
mediaController.setAnchorView(binding.videoView);
binding.videoView.setMediaController(mediaController);
```

MediaPlayer & Handling Audio in Android

```
MediaPlayer mediaPlayer = MediaPlayer.create(this,R.raw.video);
```

```
private void Playbtn(){
    play.setOnClickListener(v->{
//        toggle play or pause btn
//        if(video.isPlaying()) {
//            video.pause();
//            play.setText("Pause");
//        }else{
//            video.start();
//            play.setText("Play");
//        }
        mediaPlayer.start();
    });
}

private void stopbtn(){
//    stop.setOnClickListener(v->{
//        mediaPlayer.stop();
//    });
}

private void Pausebtn(){
    pause.setOnClickListener(v -> {
        mediaPlayer.pause();
    });
}
```

How to set different View Background Color

```
play = findViewById(R.id.play);  
play.setBackgroundColor(Color.GREEN);
```

Change Volume with Seekbar in android

```
private void Seekbarchange() {  
    mediaPlayer = MediaPlayer.create(this, R.raw.video);  
    setVolumeControlStream(AudioManager.STREAM_MUSIC);  
    AudioManager audioManager = (AudioManager)  
getSystemService(Context.AUDIO_SERVICE);  
    seekBar.setMax(audioManager  
        .getStreamMaxVolume(AudioManager.STREAM_MUSIC));  
    seekBar.setProgress(audioManager  
        .getStreamVolume(AudioManager.STREAM_MUSIC));  
  
    seekBar.setOnSeekBarChangeListener(new  
SeekBar.OnSeekBarChangeListener() {  
        @Override  
        public void onProgressChanged(SearchBar seekBar, int progress,  
boolean fromUser) {  
audioManager.setStreamVolume(AudioManager.STREAM_MUSIC, progress, 0);  
        }  
  
        @Override  
        public void onStartTrackingTouch(SearchBar seekBar) {  
        }  
  
        @Override  
        public void onStopTrackingTouch(SearchBar seekBar) {  
        }  
    });  
};
```

```

        seekBar1.setMax(mediaPlayer.getDuration());

//        new Timer().scheduleAtFixedRate(new TimerTask() {
//            @Override
//            public void run() {
//                seekBar.setProgress(mediaPlayer.getCurrentPosition());
//            }
//        }, 0, 900);

        seekBar1.setOnSeekBarChangeListener(new
SeekBar.OnSeekBarChangeListener() {
            @Override
            public void onProgressChanged(SearchBar seekBar, int progress,
boolean fromUser) {

                // Update the progress depending on seek bar
                mediaPlayer.seekTo(progress);

            }

            @Override
            public void onStartTrackingTouch(SearchBar seekBar) {

            }

            @Override
            public void onStopTrackingTouch(SearchBar seekBar) {

            }

        });
    }
}

```

App Demo

fetch data from Firebase and show data in listview

```

firebaseDatabase = FirebaseDatabase.getInstance();
databaseReference = firebaseDatabase.getReference().child("student");
city = new ArrayList<String>();

databaseReference.addChildEventListener(new ChildEventListener() {
    @Override
    public void onChildAdded(@NonNull DataSnapshot snapshot, @Nullable String
previousChildName) {
        city = new ArrayList<String>();
    }
}

```



```

        for(DataSnapshot snapshot1:snapshot.getChildren()){
            String data = snapshot1.getValue().toString();
            city.add(data);
        }
        adapter = new ArrayAdapter(getApplicationContext(),
android.R.layout.simple_list_item_1,city);
        listView.setAdapter(adapter);
        adapter.notifyDataSetChanged();
    }

    @Override
    public void onChildChanged(@NonNull DataSnapshot snapshot, @Nullable
String previousChildName) {
        city = new ArrayList<String>();
        for(DataSnapshot snapshot1:snapshot.getChildren()){
            String data = snapshot1.getValue().toString();
            city.add(data);
        }
        adapter = new ArrayAdapter(getApplicationContext(),
android.R.layout.simple_list_item_1,city);
        listView.setAdapter(adapter);
        adapter.notifyDataSetChanged();
    }

    @Override
    public void onChildRemoved(@NonNull DataSnapshot snapshot) {

    }

    @Override
    public void onChildMoved(@NonNull DataSnapshot snapshot, @Nullable String
previousChildName) {

    }

    @Override
    public void onCancelled(@NonNull DatabaseError error) {

    }
});
listView.setOnItemClickListener(new AdapterView.OnItemClickListener() {
    @Override
    public void onItemClick(AdapterView<?> adapterView, View view, int i,
long l) {
        Toast.makeText(ListViewAdapters.this, city.get(i),
Toast.LENGTH_SHORT).show();
    }
});

```

Capture Image from Camera and set the image in ImageView.

```
floatingactionbtn.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        Intent cameraIntent = new
Intent(MediaStore.ACTION_IMAGE_CAPTURE);
        startActivityForResult(cameraIntent, Camera_request_code);
    }
});
@Override
protected void onActivityResult(int requestCode, int resultCode, @Nullable
Intent data) {
    super.onActivityResult(requestCode, resultCode, data);
    if (requestCode == Camera_request_code && resultCode == RESULT_OK)
    {
        Bitmap photo = (Bitmap) data.getExtras().get("data");
        image.setImageBitmap(photo);
    }
}
```

select image from Gallery and set image in ImageView and also insert image in storage and real time database

```
        FirebaseStorage storage;
        FirebaseDatabase database;

        database = FirebaseDatabase.getInstance();
        storage = FirebaseStorage.getInstance();

//        fetch image from firebase
        database.getReference().child("image").addValueEventListener(new
ValueEventListener() {
            @Override
            public void onDataChange(@NonNull DataSnapshot snapshot) {
                String img = snapshot.getValue(String.class);
                Picasso.get().load(img).into(binding.topimage);
            }

            @Override
            public void onCancelled(@NonNull DatabaseError error) {
                Toast.makeText(ImagePickers.this, error.getMessage(),
Toast.LENGTH_SHORT).show();
            }
        });

//        binding.floatingActionButton.setOnClickListener(new
```

```

View.OnClickListener() {
//      @Override
//      public void onClick(View view) {
//          Intent mycamera = new
Intent(MediaStore.ACTION_IMAGE_CAPTURE);
//          startActivityForResult(mycamera, Camera_request_code);
//      }
//  });

    launcher = registerForActivityResult(new
ActivityResultContracts.GetContent(), new ActivityResultCallback<Uri>() {
        @Override
        public void onActivityResult(Uri uri) {
//            set image into the imageView
            binding.topimage.setImageURI(uri);

//            upload image to the firebase storage
            final StorageReference reference =
storage.getReference().child("image");
            reference.putFile(uri).addOnSuccessListener(new
OnSuccessListener<UploadTask.TaskSnapshot>() {
                @Override
                public void onSuccess(UploadTask.TaskSnapshot
taskSnapshot) {
                    Toast.makeText(ImagePickers.this, "Image Upload
Successfully", Toast.LENGTH_SHORT).show();
                }
            });
        }
    });

    binding.upload.setOnClickListener(v -> {
        launcher.launch("image/*");
    });
}

```

Steps to Implement Navigation Drawer in Android

1. Step 1: Create an Android Studio Project.
2. Step 2: Adding a dependency to the project.
3. Step 3: Creating a menu in the menu folder.
4. Step 4: Working with the activity_main.xml file.
5. Output UI:
6. Step 5: Include the Open Close strings in the string.xml.

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.drawerlayout.widget.DrawerLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/drawer"
    android:layout_width="match_parent"
    android:layout_height="match_parent"

```

```

tools:context=".DrawerActivity">

<androidx.constraintlayout.widget.ConstraintLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content">
    <androidx.appcompat.widget.Toolbar
        android:id="@+id/toolbars"
        android:layout_width="match_parent"
        android:layout_height="50dp"
        android:background="@color/colorPrimary"
        android:minHeight="?attr/actionBarSize"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        android:theme="?attr/actionBarTheme">
        <TextView
            android:id="@+id/toggle"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="toggle"
        />
    </androidx.appcompat.widget.Toolbar>
</androidx.constraintlayout.widget.ConstraintLayout>

    <com.google.android.material.navigation.NavigationView
        android:id="@+id/navigation"
        android:layout_width="wrap_content"
        android:layout_height="match_parent"
        app:headerLayout="@layout/header"
        android:background="@color/colorPrimary"
        app:menu="@menu/main_menu"
        android:textAlignment="textStart"
        android:layout_gravity="start"
    >

    </com.google.android.material.navigation.NavigationView>

</androidx.drawerlayout.widget.DrawerLayout>

```

insider MainActivity

```

private ActionBarDrawerToggle toggle;
setSupportActionBar(binding.toolbars);
toggle = new
ActionBarDrawerToggle(this,binding.drawer,binding.toolbars,R.string.open,R.st
ring.close);
binding.drawer.addDrawerListener(toggle);
toggle.syncState();

```

onclick in Navigation drawer

```

binding.navigation.setNavigationItemSelectedListener(new
NavigationView.OnNavigationItemSelectedListener() {

```

```

@Override
public boolean onNavigationItemSelected(@NonNull MenuItem item) {
    binding.drawer.closeDrawer(GravityCompat.START);
    switch (item.getItemId()) {
        case R.id.share:
            Toast.makeText(DrawerActivity.this, "share btn click",
                Toast.LENGTH_SHORT).show();
            break;
    }
    return false;
}
});
@Override
public void onBackPressed() {
    if (binding.drawer.isDrawerOpen(GravityCompat.START)) {
        binding.drawer.closeDrawer(GravityCompat.START);
    } else {
        super.onBackPressed();
    }
}
}

```

Drawer Navigation app demo



[How to add ImageSlider in android](#)

```

allprojects {
    repositories {

```

```

        ...
        maven { url 'https://jitpack.io' }
    }
}

dependencies {
    implementation 'com.github.denzcoskun:ImageSlideshow:0.1.0'
}

```

Add this code in xml layout

```

<com.denzcoskun.imageslider.ImageSlider
    android:id="@+id/image_slider"
    android:layout_width="match_parent"
    android:layout_height="300dp"
    app:iss_auto_cycle="true"
    app:iss_period="2000"
    app:iss_delay="2"/>

```

add this code in MainPage

```

List<SlideModel> imagelist = new ArrayList<>();
imagelist.add(new SlideModel(R.drawable.ctevt,null));
imagelist.add(new SlideModel(R.drawable.ctevt,null));
imagelist.add(new SlideModel(R.drawable.ctevt,null));
binding.imageSlider.setImageList(imagelist, ScaleTypes.FIT);

```

[How to add pdf in android app](#)

1) Create a assets folder and add pdf to the assets folder.

2) [add library to the android studio](#)

```
implementation 'com.github.barteksc:android-pdf-viewer:2.8.2'
```

3) add these code in gradle.properties.

```
android.enableJetifier=true
```

4) add these code in setting.gradle

```
maven { url ("https://jcenter.bintray.com") }
```

webview in android convert website to app in android

1) first add webview widget in xml layout.

2) create a java class WebViewController

inside main page

```

WebView myWebView = root.findViewById(R.id.webview);
myWebView.loadUrl("https://coderkharal.blogspot.com/");
myWebView.setWebViewClient(new WebViewController());

```

inside webViewController

```

package com.example.mylibrary.Fragments;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;
import android.view.View;

```

```

import android.view.ViewGroup;
import android.webkit.WebView;

import com.example.mylibrary.R;
import com.example.mylibrary.WebViewController;

public class AboutFragment extends Fragment {

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        // Inflate the layout for this fragment
        View root = inflater.inflate(R.layout.fragment_about, container,
false);
        WebView myWebView = root.findViewById(R.id.webview);
        myWebView.loadUrl("https://coderkharal.blogspot.com/");
        myWebView.setWebViewClient(new WebViewController());
        return root;
    }
}

```

How to load image using Picasso library

```

Picasso.get()
    .load(modals.getBookimage())
    .into(holder.Bookimage);

```

BitMap in android

```

Bitmap bitmap = ((BitmapDrawable)image.getDrawable()).getBitmap();
WallpaperManager wallpaperManager =
WallpaperManager.getInstance(getApplicationContext());
try {
    wallpaperManager.setBitmap(bitmap);
} catch (IOException e) {
    e.printStackTrace();
}

```

How to create Bottom Navigation

- 1) Add BottomNavigation widgets to the Activity.
- 2) create menu folder and add items.
- 3) set menu to the BottomNavigation to set menu in BottomNavigation used menu to the xml BottomNavigation.

```

BottomNavigation.setOnNavigationItemSelectedListener(new
BottomNavigationView.OnNavigationItemSelectedListener() {
    @Override
    public void onNavigationItemSelectedListener(@NonNull MenuItem item) {
        FragmentTransaction transaction =

```

```

getSupportFragmentManager().beginTransaction();
    switch (item.getItemId()) {
        case R.id.home:
            transaction.replace(R.id.containers, new HomeFragment());
            break;
        case R.id.search:
            transaction.replace(R.id.containers, new SearchFragment());
            break;
        case R.id.cart:
            transaction.replace(R.id.containers, new CartFragment());
            break;
        case R.id.settings:
            Toast.makeText(MainActivity.this, "Settings Fragments",
Toast.LENGTH_SHORT).show();
            break;
    }
    transaction.commit();
}
});
}

```

How to used DialogPush in android

```

holder.edit.setOnClickListener(v->{
    Toast.makeText(context, "Edit item is "+position,
Toast.LENGTH_SHORT).show();
    DialogPlus dialog = DialogPlus.newDialog(context)
        .setContextHolder(new
com.orhanobut.dialogplus.ViewHolder(R.layout.update_popup))
        .setExpanded(true) // This will enable the expand feature,
(similar to android L share dialog)
        .create();
    dialog.show();

    View view = dialog.getHolderView();
    EditText updatecourse = view.findViewById(R.id.updatename);
    Button update = view.findViewById(R.id.update);

    updatecourse.setText(models.getTitle());
});

```

Firestore Authentication



create email and password and send Verification mail to the user

email with firebase.

```
package com.example.bestnoteapp;

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

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

import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.android.material.snackbar.Snackbar;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;
```

```

public class signup extends AppCompatActivity {
    EditText email,password;
    Button signupbtn,loginbtn;
    TextView Logintext;
    private FirebaseAuth mAuth;

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

        setContentView(R.layout.activity_signup);

        email = findViewById(R.id.signupemail);
        password = findViewById(R.id.signuppasword);
        loginbtn = findViewById(R.id.Login);
        signupbtn = findViewById(R.id.signup);
        Logintext = findViewById(R.id.Loginbtn);
        mAuth = FirebaseAuth.getInstance();

        loginbtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(signup.this,MainActivity.class);
                startActivity(intent);
            }
        });

        Logintext.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(signup.this,MainActivity.class);
                startActivity(intent);
            }
        });

        signupbtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String mail = email.getText().toString().trim();
                String pass = password.getText().toString().trim();

                if(mail.isEmpty()){
                    Toast.makeText(getApplicationContext(), "Email is not
Blank please enter email", Toast.LENGTH_SHORT).show();
                    Snackbar mysackbar = Snackbar.make(loginbtn,"Email is
not Blank",Snackbar.LENGTH_SHORT);
                    mysackbar.setAction("undo", new View.OnClickListener() {
                        @Override
                        public void onClick(View view) {
                            mysackbar.dismiss();
                        }
                    });
                    mysackbar.show();
                }
            }
        });
    }
}

```

```

        }else if(pass.isEmpty()){
            Toast.makeText(getApplicationContext(), "Password is not
Blank", Toast.LENGTH_SHORT).show();
        }else if(pass.length() < 5){
            Toast.makeText(signup.this, "Password char must be
greater then 5", Toast.LENGTH_SHORT).show();
        }else{
            // Intent intent = new
Intent(signup.this,MainActivity.class);
            // startActivity(intent);

mAuth.createUserWithEmailAndPassword(mail,pass).addOnCompleteListener(new
OnCompleteListener<AuthResult>() {
            @Override
            public void onComplete(@NonNull Task<AuthResult>
task) {
                if(task.isSuccessful()){
                    Toast.makeText(getApplicationContext(),
"successfully register", Toast.LENGTH_SHORT).show();
                    sendEmailVerification();
                }else{
                    Toast.makeText(getApplicationContext(),
"Failed to register", Toast.LENGTH_SHORT).show();
                }
            }
        });
    }
}

});

}

//send email verification
private void sendEmailVerification() {
    FirebaseUser firebaseUser = mAuth.getCurrentUser();

    if(firebaseUser != null){
        firebaseUser.sendEmailVerification().addOnCompleteListener(new
OnCompleteListener<Void>() {
            @Override
            public void onComplete(@NonNull Task<Void> task) {
                Toast.makeText(getApplicationContext(), "verification
email is send and Login again", Toast.LENGTH_SHORT).show();
                mAuth.signOut();
                finish();
                startActivity(new
Intent(signup.this,MainActivity.class));
            }
        });
    }
}

}
}

```

SignIn with Email and Password

```
package com.example.bestnoteapp;

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

import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import android.view.Menu;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

public class MainActivity extends AppCompatActivity {
    EditText email,password;
    Button logins,signup;
    TextView forgotpassword;
    FirebaseAuth firebaseAuth;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        firebaseAuth = FirebaseAuth.getInstance();
        FirebaseUser firebaseUser = firebaseAuth.getCurrentUser();

        if(firebaseUser != null){
            startActivity(new
Intent(getApplicationContext(),notesactivity.class));
        }

        // Write a message to the database
        //      insert data into realtime database
        //      FirebaseDatabase firebaseDatabase = FirebaseDatabase.getInstance();
        //      DatabaseReference databaseReference =
firebaseDatabase.getReference();
        //      databaseReference.child("user").child("userId").setValue(1);
        //      databaseReference.child("user").child("name").setValue("krishna");
```

```

        FirebaseDatabase firebaseDatabase =
FirebaseDatabase.getInstance();
        DatabaseReference databaseReference =
firebaseDatabase.getReference().child("Books");
//
databaseReference.child("user").child("email").setValue(email.getText().toString());
//
databaseReference.child("user").child("password").setValue(password.getText().toString());

email = findViewById(R.id.login_email);
password = findViewById(R.id.login_password);
logins = findViewById(R.id.login_button);
signup = findViewById(R.id.signupbtns);
forgotpassword = findViewById(R.id.forgot_password);

logins.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        String emails = email.getText().toString().toString();
        String passwords = password.getText().toString().toString();
        if(emails.isEmpty() || passwords.isEmpty()){
            Toast.makeText(MainActivity.this, "Email and password
most be field", Toast.LENGTH_SHORT).show();
        }else{
            Intent intent = new
Intent(MainActivity.this, forgot_password.class);
            startActivity(intent);

firebaseAuth.signInWithEmailAndPassword(emails, passwords).addOnCompleteListener(new OnCompleteListener<AuthResult>() {
            @Override
            public void onComplete(@NonNull Task<AuthResult>
task) {
                if(task.isSuccessful()){
                    CheckMailVerified();
//                    Toast.makeText(MainActivity.this, "you are
Login", Toast.LENGTH_SHORT).show();
                }else{
                    Toast.makeText(MainActivity.this, "Please
Enter a correct details", Toast.LENGTH_SHORT).show();
                }
            }
        });
    }
});

signup.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        Intent intent = new Intent(MainActivity.this, signup.class);
        startActivity(intent);
    }
});

```

```

    });

    forgotpassword.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            Intent intent = new
Intent(MainActivity.this, forgot_password.class);
            startActivity(intent);
        }
    });
}

private void CheckMailVerified(){
    FirebaseUser currentUser = firebaseAuth.getCurrentUser();
    if(currentUser.isEmailVerified() == true){
        Toast.makeText(getApplicationContext(), "Logged In",
Toast.LENGTH_SHORT).show();
        finish();
        startActivity(new Intent(MainActivity.this, signup.class));
    }else{
        Toast.makeText(getApplicationContext(), "Verified your mail
first", Toast.LENGTH_SHORT).show();
        firebaseAuth.signOut();
        startActivity(new Intent(MainActivity.this, notesactivity.class));
    }
}
}
}

```

Forgot Password

```

package com.example.bestnoteapp;

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

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

import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.FirebaseAuth;

public class forgot_password extends AppCompatActivity {

    EditText email;
    Button recover;
    TextView gobacktoLogin;
    FirebaseAuth firebaseAuth;
}

```

```

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_forgot_password);
    email = findViewById(R.id.email);
    recover = findViewById(R.id.recover);
    gobacktoLogin = findViewById(R.id.gobacktoLogin);
    firebaseAuth = FirebaseAuth.getInstance();

    recover.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            String emailtext = email.getText().toString().trim();
            if (emailtext.isEmpty()) {
                Toast.makeText(forgot_password.this, "Email Can't be blank",
                    Toast.LENGTH_SHORT).show();
            } else {
                FirebaseAuth.getInstance().sendPasswordResetEmail(emailtext)
                    .addOnCompleteListener(new
                        OnCompleteListener<Void>() {
                            @Override
                            public void onComplete(@NonNull Task<Void>
                                task) {
                                if (task.isSuccessful()) {
                                    Toast.makeText(forgot_password.this,
                                        "your password is Forgot successfully", Toast.LENGTH_SHORT).show();
                                    finish();
                                    Intent intent = new
                                        Intent(forgot_password.this, signup.class);
                                    startActivity(intent);
                                } else {
                                    Toast.makeText(forgot_password.this,
                                        "Email is wrong, Account doesn't Exist", Toast.LENGTH_SHORT).show();
                                }
                            }
                        })
                    );
            }
        }
    });

    gobacktoLogin.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            Intent intent = new Intent(forgot_password.this,
                MainActivity.class);
            startActivity(intent);
        }
    });
}
}

```

How to insert data into firebase database:

First create a java class file inside the class create constructor, Geter and setter.

```
package com.example.androidtutorial;

public class student {
    String name;
    String desc;
    String Address;

    public student(String name, String desc, String address) {
        this.name = name;
        this.desc = desc;
        this.Address = address;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getDesc() {
        return desc;
    }

    public void setDesc(String desc) {
        this.desc = desc;
    }

    public String getAddress() {
        return Address;
    }

    public void setAddress(String address) {
        this.Address = address;
    }
}
```

inside mainpage: call the constructor

```
private void Submitdata() {
    submit.setOnClickListener(v->{
        String yname = name.getText().toString();
        String yaddress = address.getText().toString();
        String ydesc = desc.getText().toString();
    });
}
```



```

        if(yname.isEmpty() || yaddress.isEmpty() || ydesc.isEmpty()){
            Toast.makeText(this, "All Field are available",
Toast.LENGTH_SHORT).show();
        }else{
            Intent intent = new Intent(this,GetuserDataIntent.class);
            intent.putExtra("name",yname);
            intent.putExtra("address",yaddress);
            intent.putExtra("desc",ydesc);
            intent.putExtra("image",R.drawable.ic_launcher_background);

            startActivity(intent);
            Toast.makeText(this, "submit data", Toast.LENGTH_SHORT).show();

            student = firebaseDatabase.getReference().child("student");
            // creating a constructor and set value
            student data = new student(yname,ydesc,yaddress);
            student.push().setValue(data);
        }
    });
}

```

Insert only one data in firbase Realtime database

```

private void insertdata() {
    DatabaseReference name =
firebaseDatabase.getReference("UserData").child("UserId").child("name");
    DatabaseReference desc =
firebaseDatabase.getReference("UserData").child("UserId").child("desc");
    DatabaseReference address =
firebaseDatabase.getReference("UserData").child("UserId").child("address");
    name.setValue("Krishna");
    desc.setValue("Hello world");
    address.setValue("Walling 13");
}

```

How to add Lottie animation in android app

To add lottie animation in android app

- 1) download image as a json file.
- 3) add lottie animation dependency.
- 2) create raw folder in res folder in android.
- 3) Add this code in xml layout.

```

<com.airbnb.lottie.LottieAnimationView
    android:id="@+id/animation_view"
    android:layout_width="0dp"
    android:layout_height="0dp"

```

```

app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:lottie_autoPlay="true"
app:lottie_loop="true"
app:lottie_rawRes="@raw/splashscreens" />

```

**How to set animation image after moving from one activity
or click view.add this code in layout.xml and set
visible="gone" after click button the visibility is set to
visible**

```

<com.airbnb.lottie.LottieAnimationView
    android:id="@+id/imagesanimation"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:lottie_autoPlay="true"
    app:lottie_loop="true"
    android:visibility="gone"
    app:lottie_rawRes="@raw/splashscreens" />

```

In Backend

```

text.setOnClickListener(v->{ //set animation visible
    animationView.setVisibility(View.VISIBLE);
    Intent intent = new Intent(this, SplashScreen.class);
    startActivity(intent);
});

```

Demo app



How to set image using Glide

```
image = findViewById(R.id.imageView);  
Glide.with(this).load(R.drawable.splashimg).into(image);
```

How to create SplashScreen with IntroActivity

1) right click in package and create java class and setname as introActivity

```
SharedPreferences preferences =  
this.getSharedPreferences("splash",MODE_PRIVATE);  
SharedPreferences.Editor editor = preferences.edit();  
  
Thread thread = new Thread(){  
    @Override
```

```

        public void run() {
            try{
                sleep(4000);
                if (preferences.getBoolean("isMain", false)) {
                    Intent intent = new
Intent(SplashScreen.this,MainActivity.class);
                    startActivity(intent);
                    finish();
                }else{
                    editor.putBoolean("isMain",true);
                    editor.apply();

TaskStackBuilder.create(SplashScreen.this).addNextIntentWithParentStack(
                                new Intent(SplashScreen.this,MainActivity.class))
                    .addNextIntent(new
Intent(SplashScreen.this,IntroActivity.class))
                    .startActivities();
                }
            }catch(Exception e){

            }
        }
    };thread.start();

```

[How to create OnBoding Screen](#)

1) add dependency in build gradle

```
implementation 'io.github.dreierf:material-intro-screen:0.0.6'
```

2)Inside Intro activity

```

public class IntroActivity extends MaterialIntroActivity {
    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        addSlide(new SlideFragmentBuilder()
            .backgroundColor(R.color.colorPrimary)
            .buttonsColor(R.color.colorAccent)
            .image(R.drawable.splashimg)
            .title("Welcome to our app")
            .description("Hello Guyz I am krish kharal from
Bayatari i am a computer Engineer")
            .build());

        addSlide(new SlideFragmentBuilder()
            .backgroundColor(R.color.colorPrimary)
            .buttonsColor(R.color.colorAccent)
            .image(R.drawable.splashimg)
            .title("title 3")
            .description("Description 3")
            .build());
    }
}

```

```

        addSlide(new SlideFragmentBuilder()
            .backgroundColor(R.color.colorPrimary)
            .buttonsColor(R.color.colorAccent)
            .image(R.drawable.splashimg)
            .title("title 3")
            .description("Description 3")
            .build());
    }
}

```

onBoarding screen and Splashscreen app demo



Set Animation in Adapters

```

@Override
public void onBindViewHolder(@NonNull SharyViewHolder holder, int position) {
    final SharyModels models = list.get(position);
    holder.title.setText(models.getTitle());
    setAnimation(holder.itemView);
}

public void setAnimation(View v){
    Animation animation = AnimationUtils.loadAnimation(context,
        android.R.anim.slide_out_right);
    v.setAnimation(animation);
}

```

How to create Fragment

1) First create a Blank Fragment.

2) create object of Frament.

3) second step used FragmentTransaction.

4) replace fragment.

```
HomeFragment homefragment = new HomeFragment();
FragmentTransaction transaction =
getSupportFragmentManager().beginTransaction();
transaction.replace(R.id.container, homefragment);
transaction.commit();
```

```
package com.example.mylibrary.Fragments;
```

```
import static android.graphics.BlendMode.COLOR;

import android.content.Context;
import android.content.SharedPreferences;
import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;
import android.view.MotionEvent;
import android.view.View;
import android.view.ViewGroup;
import android.widget.Button;
import android.widget.EditText;
import android.widget.LinearLayout;
import android.widget.Switch;
import android.widget.TextView;
import android.widget.Toast;

import com.example.mylibrary.R;
import com.google.type.Color;

public class HomeFragment extends Fragment {
    Button BottomSheet, save, movetext;
    LinearLayout containers;
    TextView text;
    EditText inputtext;
    Switch switchs;
    String inputtext;
    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
        Bundle savedInstanceState) {

        // Inflate the layout for this fragment
        View root = inflater.inflate(R.layout.fragment_home, container,
false);

        BottomSheet = root.findViewById(R.id.bottomsheet);
```

```

        containers = root.findViewById(R.id.containers);
        save = root.findViewById(R.id.save);
        movetext = root.findViewById(R.id.settext);
        text = root.findViewById(R.id.savetext);
        inputtext = root.findViewById(R.id.inputtext);
        switchs = root.findViewById(R.id.switch1);

        save.setOnClickListener(v->{
            String text1 = inputtext.getText().toString();
            SharedPreferences preferences =
getContext().getSharedPreferences("name",Context.MODE_PRIVATE);
            SharedPreferences.Editor editor = preferences.edit();
            editor.putString("text",text1);
            editor.apply();
            editor.putBoolean("switch",switchs.isChecked());
        });

//        SharedPreferences preferences =
getActivity().getSharedPreferences("name",Context.MODE_PRIVATE);
//        String texts = preferences.getString("text","");
//        Boolean switchonoff = preferences.getBoolean("switch",false);
//        text.setText(texts);
//        switchs.setChecked(switchonoff);

        movetext.setOnClickListener(v->{
//            String text1 = inputtext.getText().toString();
//            text.setText(text1);
//            Toast.makeText(getApplicationContext(), "set text",
Toast.LENGTH_SHORT).show();
            SharedPreferences preferences1 =
getActivity().getSharedPreferences("names",Context.MODE_PRIVATE);
            SharedPreferences.Editor editor = preferences1.edit();
            editor.putString("textss","Hello world all the data will be store
in the app");
            editor.apply();
        });

        SharedPreferences preferences2 =
getActivity().getSharedPreferences("names",Context.MODE_PRIVATE);
        String text1 = preferences2.getString("textss","");
        text.setText(text1);

        BottomSheet.setOnClickListener(v->{
            BottomSheetFragment bottomSheetFragment = new
BottomSheetFragment();

bottomSheetFragment.show(getFragmentManager(),bottomSheetFragment.getTag());
        });

        return root;
    }
}

play.setOnClickListener(v->{
    String names = name.getText().toString();

```

```

        SharedPreferences sharedPreferences =
getApplicationContext().getSharedPreferences("name",MODE_PRIVATE);
        SharedPreferences.Editor editor = sharedPreferences.edit();
        if(names.isEmpty()){
            Toast.makeText(this, "Enter text here to save your data in our app",
Toast.LENGTH_SHORT).show();
        }else{
            editor.putBoolean("isclick",true);
            editor.putString("name",names);
        }
        editor.apply();
    });

    SharedPreferences sharedPreferences =
getApplicationContext().getSharedPreferences("name",MODE_PRIVATE);
    String name = sharedPreferences.getString("name","helo");
    Boolean isclick = sharedPreferences.getBoolean("isclick",false);
    if(isclick){
        stop.setText(name);
    }else{
        stop.setText("Please save your data");
    }
}

```

How to used Banner Ads

```

//loading Google Adds on our app
private AdView adView;
private AdRequest adRequest;
private void BannerLoadAds(){
    MobileAds.initialize(this, new OnInitializationCompleteListener() {
        @Override
        public void onInitializationComplete(InitializationStatus
initializationStatus) {
        }
    });

    adView = findViewById(R.id.adView);
    adView.loadAd(adRequest);

    adView.setAdListener(new AdListener() {
        @Override
        public void onAdClicked() {
            // Code to be executed when the user clicks on an ad.
        }

        @Override
        public void onAdClosed() {
            // Code to be executed when the user is about to return
            // to the app after tapping on an ad.
        }

        @Override
        public void onAdFailedToLoad(LoadAdError adError) {
            // Code to be executed when an ad request fails.
        }
    });
}

```



```

        adView.loadAd(adRequest);
        Toast.makeText(MainActivity.this, adError.getMessage(),
Toast.LENGTH_SHORT).show();
    }

    @Override
    public void onAdImpression() {
        // Code to be executed when an impression is recorded
        // for an ad.
    }

    @Override
    public void onAdLoaded() {
        // Code to be executed when an ad finishes loading.
        super.onAdLoaded();
        Toast.makeText(MainActivity.this, "Loading ads",
Toast.LENGTH_SHORT).show();
    }

    @Override
    public void onAdOpened() {
        // Code to be executed when an ad opens an overlay that
        // covers the screen.
    }
}
});
}

```

How to used Interstitial Ads

```

//    load InterstitialAd
private AdView adView;
private AdRequest adRequest;
private InterstitialAd minterstitialAd;
private void InterstitialAdsLoad() {

    InterstitialAd.load(this, "ca-app-pub-3940256099942544/1033173712",
adRequest, new InterstitialAdLoadCallback() {
        @Override
        public void onAdFailedToLoad(@NonNull LoadAdError loadAdError) {
            super.onAdFailedToLoad(loadAdError);
            Log.d("Error", "failed to load error");
        }

        @Override
        public void onAdLoaded(@NonNull InterstitialAd interstitialAd) {
            super.onAdLoaded(interstitialAd);
            minterstitialAd = interstitialAd;
            minterstitialAd.setFullScreenContentCallback(new
FullScreenContentCallback() {
                @Override
                public void onAdClicked() {

```

```

        super.onAdClicked();
    }

    @Override
    public void onAdDismissedFullScreenContent() {
        super.onAdDismissedFullScreenContent();
    }

    @Override
    public void onAdFailedToShowFullScreenContent(@NonNull
AdError adError) {
        super.onAdFailedToShowFullScreenContent(adError);
    }

    @Override
    public void onAdImpression() {
        super.onAdImpression();
    }

    @Override
    public void onAdShowedFullScreenContent() {
        super.onAdShowedFullScreenContent();
        minterstitialAd = null;
    }
    });
}
});

final Handler handler = new Handler();
Runnable runnable = new Runnable() {
    @Override
    public void run() {
        if (minterstitialAd != null) {
            minterstitialAd.show(MainActivity.this);
        } else {
            Toast.makeText(MainActivity.this, "Load",
Toast.LENGTH_SHORT).show();
        }
        handler.postDelayed(this, 1000);
    }
};

handler.post(runnable);
}

```

How to used Rewarded insterstitial

```

btns.setOnClickListener(v->{
    if(rewardedInterstitialAd != null){
        rewardedInterstitialAd.show(/* Activity */
ActivityLoadAds.this,/*
    OnUserEarnedRewardListener */ ActivityLoadAds.this);
    }else{

```

```

        Toast.makeText(this, "adds not Loaded",
Toast.LENGTH_SHORT).show();
    }
    });
}

// after click button then show video the user watch video and can give a
coin
private void RewardedAdshow() {
    // Use the test ad unit ID to load an ad.
    RewardedInterstitialAd.load(ActivityLoadAds.this, "ca-app-pub-
3940256099942544/5354046379",
        new AdRequest.Builder().build(), new
RewardedInterstitialAdLoadCallback() {
            @Override
            public void onAdLoaded(RewardedInterstitialAd ad) {
                Log.d(TAG, "Ad was loaded.");
                rewardedInterstitialAd = ad;

rewardedInterstitialAd.setFullScreenContentCallback(new
FullScreenContentCallback() {
                    @Override
                    public void onAdClicked() {
                        // Called when a click is recorded for an
ad.

                        Log.d(TAG, "Ad was clicked.");
                    }

                    @Override
                    public void onAdDismissedFullScreenContent()
{
                        // Called when ad is dismissed.
                        // Set the ad reference to null so you
don't show the ad a second time.

                        Log.d(TAG, "Ad dismissed fullscreen
content.");

                        rewardedInterstitialAd = null;
                        RewardedAdshow();
                    }

                    @Override
                    public void
onAdFailedToShowFullScreenContent(AdError adError) {
                        // Called when ad fails to show.
                        Log.e(TAG, "Ad failed to show fullscreen
content.");

                        rewardedInterstitialAd = null;
                    }

                    @Override
                    public void onAdImpression() {
                        // Called when an impression is recorded
for an ad.

                        Log.d(TAG, "Ad recorded an impression.");
                    }

                    @Override

```

```

        public void onAdShowedFullScreenContent() {
            // Called when ad is shown.
            Log.d(TAG, "Ad showed fullscreen
content.");
        }
    });
}
@Override
public void onAdFailedToLoad(LoadAdError loadAdError)
{
    Log.d(TAG, loadAdError.toString());
    rewardedInterstitialAd = null;
}
});

}

@Override
public void onUserEarnedReward(@NonNull RewardItem rewardItem) {
    Toast.makeText(this, "User earned reward.",
Toast.LENGTH_SHORT).show();
    int i = Integer.parseInt(offertext.getText().toString());
    offertext.setText(String.valueOf(i+1));
    offerimage.setImageResource(R.drawable.ic_launcher_foreground);
}
}

```

what we learn

recyclerview in android: we can fetch data from android and show the data in recyclerview.

add this two library in build gradle

```

implementation 'com.android.volley:volley:1.2.1'
implementation 'org.jsoup:jsoup:1.13.1'
// Instantiate the RequestQueue.
RequestQueue queue = Volley.newRequestQueue(this);

JSONArrayRequest jsonArrayRequest = new
JSONArrayRequest(Request.Method.GET, URL, null, new
Response.Listener<JSONArray>() {
    @Override
    public void onResponse(JSONArray response) {
        for (int i = 0; i < response.length(); i++) {
            // creating a new json object and
            // getting each object from our json array.
            try {
                // we are getting each json object.
                JSONObject responseObj = response.getJSONObject(i);

                // now we get our response from API in json object
format.

                // in below line we are extracting a string with
                // its key value from our json object.
                // similarly we are extracting all the strings from our

```

```

json object.
        String courseName =
responseObj.getString("courseName");
        String courseTracks =
responseObj.getString("courseTracks");
        String courseMode =
responseObj.getString("courseMode");
        String courseImageUrl =
responseObj.getString("courseimg");

        list.add(new
dataModels(courseName,courseImageUrl,courseMode,courseTracks));

//        binding.text.setText(courseName);

        } catch (JSONException e) {
            e.printStackTrace();
        }
    }

    dataAdapters adapters = new
dataAdapters(list,getApplicationContext());
    binding.recyclerview.setAdapter(adapters);

    LinearLayoutManager layoutManager = new
LinearLayoutManager(getApplicationContext());
    binding.recyclerview.setLayoutManager(layoutManager);
}
}, new Response.ErrorListener() {
    @Override
    public void onErrorResponse(VolleyError error) {
        Toast.makeText(MainActivity.this, "Fail to get the data..",
Toast.LENGTH_SHORT).show();
    }
});
queue.add(jsonArrayRequest);

```

```

//        load media from indexof soundeffect(Url)
MediaPlayer mediaPlayer = new MediaPlayer();
try {
    mediaPlayer.setDataSource("http://www.mbuisc.ac.th/media-
support/sound%20effect/03.BooDi-LimHyungJoo.MP3");
} catch (IOException e) {
    e.printStackTrace();
}

mediaPlayer.setOnPreparedListener(new
MediaPlayer.OnPreparedListener() {
    @Override
    public void onPrepared(MediaPlayer mediaPlayer) {
        Toast.makeText(MainActivity.this, "music play",
Toast.LENGTH_SHORT).show();
    }
});

```

```

        mediaPlayer.start();
    }
});

mediaPlayer.prepareAsync();
package com.example.musicapp;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Context;
import android.media.AudioManager;
import android.media.MediaPlayer;
import android.net.Uri;
import android.os.Bundle;
import android.widget.MediaController;
import android.widget.SeekBar;
import android.widget.TextView;
import android.widget.Toast;
import android.widget.VideoView;

import java.io.IOException;
import java.util.Timer;
import java.util.TimerTask;

public class MainActivity extends AppCompatActivity {
    TextView play, stop;
    VideoView videoview;
    SeekBar seek, seekbar;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        play = findViewById(R.id.play);
        stop = findViewById(R.id.stop);
        videoview = findViewById(R.id.videoView);
        seek = findViewById(R.id.seekBar);
        seekbar = findViewById(R.id.seekBar2);

        // MediaPlayer mediaPlayer = MediaPlayer.create(this, R.raw.song);

        // load media from index of soundeffect (URL)
        MediaPlayer mediaPlayer = new MediaPlayer();
        try {
            mediaPlayer.setDataSource("http://www.mbuisc.ac.th/media-support/sound%20effect/03.BooDi-LimHyungJoo.MP3");
        } catch (IOException e) {
            e.printStackTrace();
        }

        mediaPlayer.setOnPreparedListener(new
        MediaPlayer.OnPreparedListener() {
            @Override
            public void onPrepared(MediaPlayer mediaPlayer) {
                Toast.makeText(MainActivity.this, "music play",
                Toast.LENGTH_SHORT).show();
                mediaPlayer.start();
            }
        }
    }
}

```

```

    });

    mediaPlayer.prepareAsync();

    play.setOnClickListener(v->{
        if(mediaPlayer.isPlaying()){
            mediaPlayer.pause();
        }else{
            mediaPlayer.start();
        }
    });
    //    videoview.start();
});

stop.setOnClickListener(v->{
    mediaPlayer.pause();
});

setVolumeControlStream(AudioManager.STREAM_MUSIC);
AudioManager audioManager = (AudioManager)
getSystemService(Context.AUDIO_SERVICE);
seek.setMax(audioManager
    .getStreamMaxVolume(AudioManager.STREAM_MUSIC));
seek.setProgress(audioManager
    .getStreamVolume(AudioManager.STREAM_MUSIC));

seek.setOnSeekBarChangeListener(new SeekBar.OnSeekBarChangeListener()
{
    @Override
    public void onProgressChanged(SeekBar seekBar, int i, boolean b)
    {
        seek.setProgress(i);
        Toast.makeText(MainActivity.this, "index"+i,
Toast.LENGTH_SHORT).show();
        audioManager.setStreamVolume(AudioManager.STREAM_MUSIC,i, 0);
    }

    @Override
    public void onStartTrackingTouch(SeekBar seekBar) {

    }

    @Override
    public void onStopTrackingTouch(SeekBar seekBar) {

    }
});

seekbar.setMax(mediaPlayer.getDuration());

new Timer().scheduleAtFixedRate(new TimerTask() {
    @Override
    public void run() {
        seekbar.setProgress(mediaPlayer.getCurrentPosition());
    }
},0,900);

```

```

        seekbar.setOnSeekBarChangeListener(new
SeekBar.OnSeekBarChangeListener() {
            @Override
            public void onProgressChanged(SearchBar seekBar, int i, boolean b)
{
                mediaPlayer.seekTo(i);
            }

            @Override
            public void onStartTrackingTouch(SearchBar seekBar) {

            }

            @Override
            public void onStopTrackingTouch(SearchBar seekBar) {

            }
        });
    }
}

```

```
<LinearLayout
```

```

        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical"
    >
<androidx.gridlayout.widget.GridLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="10dp"
    android:scrollbarAlwaysDrawVerticalTrack="true"
    app:columnCount="2">

    <com.google.android.material.card.MaterialCardView
        android:id="@+id/card1"
        android:layout_width="170dp"
        android:layout_height="wrap_content"
        android:layout_margin="10dp"
        android:layout_marginBottom="20dp"
        android:background="@color/white"
        android:clickable="true"
        android:focusable="true"
        android:gravity="center"
        app:cardCornerRadius="2dp"
        app:cardElevation="2dp"
        app:layout_gravity="center">

        <LinearLayout
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"

```



```

        android:layout_gravity="center"
        android:orientation="vertical">

        <ImageView
            android:id="@+id/img1"
            android:layout_width="175dp"
            android:layout_height="175dp"
            android:scaleType="fitXY"
            android:src="@drawable/rose" />

        <TextView
            android:id="@+id/title1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:padding="10dp"
            android:text="Rose Day"
            android:textAlignment="center" />
    </LinearLayout>

</com.google.android.material.card.MaterialCardView>

<com.google.android.material.card.MaterialCardView
    android:id="@+id/card8"
    android:layout_width="170dp"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:layout_marginBottom="20dp"
    android:background="@color/white"
    android:clickable="true"
    android:focusable="true"
    android:gravity="center"
    app:cardCornerRadius="2dp"
    app:cardElevation="2dp"
    app:layout_gravity="center">

    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:orientation="vertical">

        <ImageView
            android:id="@+id/img80"
            android:layout_width="175dp"
            android:layout_height="175dp"
            android:scaleType="fitXY"
            android:src="@drawable/choca" />

        <TextView
            android:id="@+id/title80"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:padding="10dp"
            android:text="Choclate Day"
            android:textAlignment="center" />
    </LinearLayout>

```

```
</com.google.android.material.card.MaterialCardView>
```

```
<com.google.android.material.card.MaterialCardView  
    android:id="@+id/card7"  
    android:layout_width="170dp"  
    android:layout_height="wrap_content"  
    android:layout_margin="10dp"  
    android:layout_marginBottom="20dp"  
    android:background="@color/white"  
    android:clickable="true"  
    android:focusable="true"  
    app:cardCornerRadius="2dp"  
    app:cardElevation="2dp"  
    app:layout_gravity="center">
```

```
<LinearLayout  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:orientation="vertical">
```

```
<ImageView  
    android:id="@+id/img8"  
    android:layout_width="175dp"  
    android:layout_height="175dp"  
    android:scaleType="fitXY"  
    android:src="@drawable/teddy" />
```

```
<TextView  
    android:id="@+id/title8"  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:padding="10dp"  
    android:text="Teddy Day"  
    android:textAlignment="center" />
```

```
</LinearLayout>
```

```
</com.google.android.material.card.MaterialCardView>
```

```
<com.google.android.material.card.MaterialCardView  
    android:id="@+id/card4"  
    android:layout_width="170dp"  
    android:layout_height="wrap_content"  
    android:layout_margin="10dp"  
    android:layout_marginBottom="20dp"  
    android:background="@color/white"  
    android:clickable="true"  
    android:focusable="true"  
    app:cardCornerRadius="2dp"  
    app:cardElevation="2dp"  
    app:layout_gravity="center">
```

```
<LinearLayout  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:orientation="vertical">
```

```

        <ImageView
            android:id="@+id/img4"
            android:layout_width="175dp"
            android:layout_height="175dp"
            android:scaleType="fitXY"
            android:src="@drawable/purposed" />

        <TextView
            android:id="@+id/title4"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:padding="10dp"
            android:text="Purposed Day"
            android:textAlignment="center" />
    </LinearLayout>

</com.google.android.material.card.MaterialCardView>

</androidx.gridlayout.widget.GridLayout>

<!-- <com.airbnb.lottie.LottieAnimationView-->
<!--     android:id="@+id/imagesanimation"-->
<!--     android:layout_width="match_parent"-->
<!--     android:layout_height="wrap_content"-->
<!--     android:layout_weight="1"-->
<!--     app:layout_constraintTop_toTopOf="parent"-->
<!--     app:layout_constraintBottom_toBottomOf="parent"-->
<!--     app:layout_constraintEnd_toStartOf="parent"-->
<!--     app:layout_constraintEnd_toEndOf="parent"-->
<!--     app:lottie_autoPlay="true"-->
<!--     app:lottie_loop="true"-->
<!--     android:visibility="gone"-->
<!--     app:lottie_rawRes="@raw/splashscreens" />-->

</LinearLayout>

```

Signup Form frontEnd

```

<?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"
    tools:context=".Signup">

    <ImageView
        android:layout_gravity="center"
        android:layout_marginTop="10dp"
        android:layout_marginBottom="10dp"

```

```
        android:layout_width="200dp"
        android:layout_height="200dp"
        android:scaleType="fitCenter"
        android:src="@drawable/welcome" />
```

```
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Welcome back!"
    android:textColor="@color/black"
    android:textAlignment="center"
    android:textSize="30dp"
    android:textStyle="bold"
/>
```

```
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Log in to your existant account of Q Allure"
    android:textColor="@color/textcolor"
    android:textAlignment="center"
    android:textSize="15dp"
    android:textStyle="normal"
/>
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:orientation="vertical"
    android:layout_margin="10dp"
    android:layout_height="wrap_content">
```

```
<EditText
    android:id="@+id/email"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:layout_marginBottom="30dp"
    android:drawableLeft="@drawable/user"
    android:background="@drawable/input_border"
    android:padding="20dp"
    android:textColor="#1C84FF"
    android:textStyle="bold"
    android:inputType="textPersonName"
    android:hint="krish@gmail.com"
/>
```

```
<EditText
    android:id="@+id/password"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:textColor="#1C84FF"
    android:textStyle="bold"
    android:drawableLeft="@drawable/user"
    android:background="@drawable/input_border"
```

```

        android:padding="20dp"
        android:inputType="numberPassword"
        android:hint="Password"
    />

    <TextView
        android:id="@+id/forgot_password"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Forgot Password"
        android:layout_marginTop="10dp"
        android:textColor="#DF000000"
        android:textSize="15dp"
        android:layout_gravity="right"
    />

    <Button
        android:id="@+id/signup"
        android:layout_width="200dp"
        android:layout_height="wrap_content"
        android:text="Signup"
        android:padding="15dp"
        android:background="@drawable/checkout_button"
        android:layout_marginTop="20dp"
        android:layout_gravity="center"
    />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Or Connect Using"
        android:layout_marginTop="10dp"
        android:textAlignment="center"
        android:textColor="@color/textcolor"
        android:textSize="20dp"
    />

    <LinearLayout
        android:layout_marginTop="10dp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:padding="5dp"
    >
        <Button
            android:id="@+id/signupwithGoogle"
            android:layout_width="200dp"
            android:layout_weight="1"
            android:layout_height="wrap_content"
            android:text="Google"
            android:padding="15dp"
            android:backgroundTint="@color/google"
            android:layout_gravity="center"
        />

        <Button
            android:id="@+id/signupwithfacebook"

```

```

        android:layout_width="200dp"
        android:layout_weight="1"
        android:layout_height="wrap_content"
        android:text="Login In"
        android:padding="15dp"
        android:backgroundTint="@color/facebook"
        android:layout_gravity="center"
    />

</LinearLayout>

<TextView
    android:id="@+id/signins"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Sign In"
    android:layout_gravity="right"
/>
</LinearLayout>

</LinearLayout>

```

Signup Form Backend

```

binding.signins.setOnClickListener(v->{
    startActivity(new Intent(signup.this, LoginActivity.class));
});

binding.signup.setOnClickListener(v->{
    Email = binding.email.getText().toString();
    Password = binding.password.getText().toString();
    if(Email.isEmpty()){
        Toast.makeText(this, "Email Can't be Blank",
Toast.LENGTH_SHORT).show();
    }else if(Password.isEmpty()){
        Toast.makeText(this, "Password Can't be Blank",
Toast.LENGTH_SHORT).show();
    }else{
        mAuth.createUserWithEmailAndPassword(Email, Password)
            .addOnCompleteListener(this, new
OnCompleteListener<AuthResult>() {
            @Override
            public void onComplete(@NonNull Task<AuthResult>
task) {
                if (task.isSuccessful()) {
                    Toast.makeText(Signup.this, "Successfully
Register", Toast.LENGTH_SHORT).show();
                    startActivity(new
Intent(Signup.this, LoginActivity.class));
                } else {
                    // If sign in fails, display a message to
the user.

```

```

Toast.makeText(Signup.this,
"Authentication failed.",
                Toast.LENGTH_SHORT).show();
//                updateUI(null);
            }
        }
    }
}
});
});

```

Login Form Frontend

```

<?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"
    tools:context=".LoginActivity">

    <ImageView
        android:layout_gravity="center"
        android:layout_marginTop="10dp"
        android:layout_marginBottom="10dp"
        android:layout_width="200dp"
        android:layout_height="200dp"
        android:scaleType="fitCenter"
        android:src="@drawable/welcome" />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Welcome back!"
        android:textColor="@color/black"
        android:textAlignment="center"
        android:textSize="30dp"
        android:textStyle="bold"
        />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Log in to your existant account of Q Allure"
        android:textColor="@color/textcolor"
        android:textAlignment="center"
        android:textSize="15dp"
        android:textStyle="normal"
        />

    <LinearLayout
        android:layout_width="match_parent"

```

```
android:orientation="vertical"
android:layout_margin="10dp"
android:layout_height="wrap_content">
```

```
<EditText
    android:id="@+id/Loginemail"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:layout_marginBottom="30dp"
    android:drawableLeft="@drawable/user"
    android:background="@drawable/input_border"
    android:padding="20dp"
    android:textColor="#1C84FF"
    android:textStyle="bold"
    android:inputType="textPersonName"
    android:hint="krish@gmail.com"
/>
```

```
<EditText
    android:id="@+id/Loginpassword"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:textColor="#1C84FF"
    android:textStyle="bold"
    android:drawableLeft="@drawable/user"
    android:background="@drawable/input_border"
    android:padding="20dp"
    android:inputType="numberPassword"
    android:hint="Password"
/>
```

```
<TextView
    android:id="@+id/forgot_password"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Forgot Password"
    android:layout_marginTop="10dp"
    android:textColor="#DF000000"
    android:textSize="15dp"
    android:layout_gravity="right"
/>
```

```
<Button
    android:id="@+id/Login"
    android:layout_width="200dp"
    android:layout_height="wrap_content"
    android:text="Login In"
    android:padding="15dp"
    android:background="@drawable/checkout_button"
    android:layout_marginTop="20dp"
    android:layout_gravity="center"
/>
```

```
<TextView
```



```

        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Or Connect Using"
        android:layout_marginTop="10dp"
        android:textAlignment="center"
        android:textColor="@color/textcolor"
        android:textSize="20dp"
    />

    <LinearLayout
        android:layout_marginTop="10dp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:padding="10dp"
    >
        <Button
            android:id="@+id/LoginwithGoogle"
            android:layout_width="200dp"
            android:layout_weight="1"
            android:layout_height="wrap_content"
            android:text="Google"
            android:layout_margin="10dp"
            android:padding="15dp"
            android:backgroundTint="@color/google"
            android:layout_gravity="center"
        />

        <Button
            android:id="@+id/Loginwithfacebook"
            android:layout_width="200dp"
            android:layout_weight="1"
            android:layout_margin="10dp"
            android:layout_height="wrap_content"
            android:text="Login In"
            android:padding="15dp"
            android:backgroundTint="@color/facebook"
            android:layout_gravity="center"
        />

    </LinearLayout>

</LinearLayout>

</LinearLayout>

```

Login Form Backend

```

mAuth = FirebaseAuth.getInstance();

binding.Login.setOnClickListener(v->{
    email = binding.Loginemail.getText().toString();
    password = binding.Loginpassword.getText().toString();
    if(email.isEmpty()){

```

```

        Toast.makeText(this, "Email Can't be Blank",
Toast.LENGTH_SHORT).show();
    }else if(password.isEmpty()){
        Toast.makeText(this, "Password Can't be Blank",
Toast.LENGTH_SHORT).show();
    }else{
        mAuth.signInWithEmailAndPassword(email, password)
            .addOnCompleteListener(this, new
OnCompleteListener<AuthResult>() {
            @Override
            public void onComplete(@NonNull Task<AuthResult> task) {
                if (task.isSuccessful()) {
                    Toast.makeText(LoginActivity.this, "Successfully
Login", Toast.LENGTH_SHORT).show();
                    startActivity(new
Intent(LoginActivity.this,MainActivity.class));
                } else {
                    // If sign in fails, display a message to the
user.
                    Toast.makeText(LoginActivity.this, "Please Enter
a correct email and password.",
                        Toast.LENGTH_SHORT).show();
                }
            }
        });
    }
}
});

```


