**Q.1) Create a notification in android studio.**

**Code:**

**MainActivity.java**

package com.example.trail2o;

import android.app.Notification;

import android.app.NotificationChannel;

import android.app.NotificationManager;

import android.app.PendingIntent;

import android.content.Intent;

import android.os.Build;

import android.os.Bundle;

import android.view.View;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.app.NotificationBuilderWithBuilderAccessor;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {

private static final String CHANNEL\_ID = "channel";

private static final int NOTIFICATION\_ID = 1;

private NotificationManager notificationManager;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {

Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());

v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);

return insets;

});

notificationManager = (NotificationManager) getSystemService(NOTIFICATION\_SERVICE);

createNotificationChannel();

}

public void showNotification(View view) {

Intent i = new Intent(this, MainActivity.class);

PendingIntent pdi = PendingIntent.getActivity(this, 0, i, PendingIntent.FLAG\_IMMUTABLE);

Notification.Builder builder = null;

if(Build.VERSION.SDK\_INT >= Build.VERSION\_CODES.Q) {

builder = new Notification.Builder(this, CHANNEL\_ID)

.setSmallIcon(R.drawable.ghanta)

.setContentTitle("SUBSCRIBE")

.setContentText("MOBILE APP DEVELOPERS")

.setPriority(Notification.PRIORITY\_DEFAULT)

.setAutoCancel(true);

}

Notification notification;

notification = builder.build();

notificationManager.notify(NOTIFICATION\_ID, notification);

}

private void createNotificationChannel() {

if(Build.VERSION.SDK\_INT >= Build.VERSION\_CODES.Q) {

CharSequence channelName = "Chanel";

String channelDesc = "Luxury Brand";

int importance = NotificationManager.IMPORTANCE\_DEFAULT;

NotificationChannel channel = new NotificationChannel(CHANNEL\_ID, channelName, importance);

channel.setDescription(channelDesc);

notificationManager.createNotificationChannel(channel);

}

}

}

**activity\_main.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:id="@+id/main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<Button

android:onClick="showNotification"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Create Notification"

android:padding="50dp"

android:layout\_centerInParent="true"

/>

</RelativeLayout>

**AndroidManifest.xml**

xmlns:tools="http://schemas.android.com/tools">

<uses-permission android:name="android.permission.POST\_NOTIFICATIONS"/>

<uses-permission android:name="android.permission.VIBRATE"/>

<uses-permission android:name="android.permission.ACCESS\_NOTIFICATION\_POLICY"/>

<application

android:allowBackup="true"

**Output:**

**A screen shot of a cell phone

Description automatically generated A blue and white rectangular frame with black text

Description automatically generated**