package com.example.gpa\_ankita1\_calculator;

import android.graphics.Color;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

import androidx.constraintlayout.widget.ConstraintLayout;

public class MainActivity extends AppCompatActivity {

Button button, textview7 ;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

final EditText grade1 = findViewById(R.id.editTextNumber);

final EditText grade2 = findViewById(R.id.editTextNumber2);

final EditText grade3 = findViewById(R.id.editTextNumber3);

final EditText grade4 = findViewById(R.id.editTextNumber4);

final EditText grade5 = findViewById(R.id.editTextNumber5);

Button calculateButton = findViewById(R.id.button);

final TextView gpaResult = findViewById(R.id.textview7);

final ConstraintLayout backgroundLayout = findViewById(R.id.mainLayot); // Assuming your root layout has the id mainLayout

calculateButton.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

double gpa = calculateGPA(new EditText[]{grade1, grade2, grade3, grade4, grade5});

gpaResult.setText(String.format("Your GPA is: %.2f", gpa));

changeBackgroundColor(gpa, backgroundLayout);

calculateButton.setText("Clear Form");

}

});

}

private double calculateGPA(EditText[] grades) {

double sum = 0;

for (EditText grade : grades) {

double value = Double.parseDouble(grade.getText().toString());

sum += getGradePoint(value);

}

return sum / grades.length;

}

private double getGradePoint(double grade) {

if (grade >= 90) return grade;

if (grade >= 80) return grade;

if (grade >= 70) return grade;

if (grade >= 60) return grade;

return 0.0;

}

private void changeBackgroundColor(double gpa, ConstraintLayout layout) {

if (gpa >= 80.0) { // Equivalent to 80-100

layout.setBackgroundColor(Color.GREEN);

} else if (gpa >= 61.0 && gpa < 79.0) { // Equivalent to 61-79

layout.setBackgroundColor(Color.YELLOW);

} else { // Less than 60

layout.setBackgroundColor(Color.RED);

}

}

protected void onResume() {

super.onResume();

button.setText("Compute GPA");

textview7.setBackgroundColor(getResources().getColor(android.R.color.transparent));

}

}