import java.awt.BorderLayout;

import java.awt.Color;

import java.awt.Dimension;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import javax.swing.JButton;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JPanel;

import javax.swing.JTextField;

public class newwindow extends JFrame implements ActionListener {

JFrame frame = new JFrame();

JTextField textField;

JTextField textField\_1;

JTextField textField\_2;

JTextField textField\_3;

JTextField textField\_4;

JTextField textField\_5;

JTextField textField\_6;

JTextField textField\_7;

JTextField textField\_8;

JTextField textField\_9;

JTextField textField\_10;

JTextField textField\_11;

JTextField textField\_12;

JTextField textField\_13;

JTextField textField\_14;

JTextField textField\_15;

JTextField textField\_16;

JTextField textField\_17;

JTextField textField\_18;

JTextField textField\_19;

JLabel lblNewLabel;

JTextField textField\_20;

JLabel lblNewLabel\_2;

JTextField textField\_21;

JTextField textField\_22;

JTextField textField\_23;

JTextField textField\_24;

JTextField textField\_25;

JTextField textField\_26;

JTextField textField\_27;

JTextField textField\_28;

JTextField textField\_29;

JTextField textField\_30;

JTextField textField\_31;

JLabel lblNewLabel\_5;

JTextField sgpa= new JTextField();

newwindow(String USN, String Name){

String stud = Name;

String roll = USN;

JLabel sent = new JLabel();

sent.setText(stud+" with USN"+roll+" has obtained SGPA= ");

sent.setBounds(60,400,1000,50);

sent.setForeground(Color.WHITE);

sent.setVisible(true);

frame.add(sent);

sgpa.setBounds(400,400,100,50);

sgpa.setColumns(10);

sgpa.setVisible(true);

frame.add(sgpa);

JLabel labelg = new JLabel();

labelg.setText("Grades");

labelg.setForeground(Color.WHITE);

labelg.setVisible(true);

frame.add(labelg);

labelg.setBounds(247,19,41,20);

JLabel lblNewLabel\_1\_9 = new JLabel("Subject 1");

lblNewLabel\_1\_9.setBounds(10, 52, 64, 14);

lblNewLabel\_1\_9.setForeground(Color.WHITE);

frame.add(lblNewLabel\_1\_9);

JLabel lblNewLabel\_1 = new JLabel("Subject 2");

lblNewLabel\_1.setBounds(10, 77, 64, 14);

lblNewLabel\_1.setForeground(Color.WHITE);

frame.add(lblNewLabel\_1);

JLabel lblNewLabel\_1\_1 = new JLabel("Subject 3");

lblNewLabel\_1\_1.setBounds(10, 100, 64, 14);

lblNewLabel\_1\_1.setForeground(Color.WHITE);

frame.add(lblNewLabel\_1\_1);

JLabel lblNewLabel\_1\_2 = new JLabel("Subject 4");

lblNewLabel\_1\_2.setBounds(10, 125, 76, 14);

lblNewLabel\_1\_2.setForeground(Color.WHITE);

frame.add(lblNewLabel\_1\_2);

JLabel lblNewLabel\_1\_3 = new JLabel("Subject 5");

lblNewLabel\_1\_3.setBounds(10, 150, 76, 14);

lblNewLabel\_1\_3.setForeground(Color.WHITE);

frame.add(lblNewLabel\_1\_3);

JLabel lblNewLabel\_1\_4 = new JLabel("Subject 6");

lblNewLabel\_1\_4.setBounds(10, 175, 64, 14);

lblNewLabel\_1\_4.setForeground(Color.WHITE);

frame.add(lblNewLabel\_1\_4);

JLabel lblNewLabel\_1\_5 = new JLabel("Subject 7");

lblNewLabel\_1\_5.setBounds(10, 200, 64, 14);

lblNewLabel\_1\_5.setForeground(Color.WHITE);

frame.add(lblNewLabel\_1\_5);

JLabel lblNewLabel\_1\_6 = new JLabel("Subject 8");

lblNewLabel\_1\_6.setBounds(10, 225, 64, 14);

lblNewLabel\_1\_6.setForeground(Color.WHITE);

frame.add(lblNewLabel\_1\_6);

JLabel lblNewLabel\_1\_7 = new JLabel("Subject 9");

lblNewLabel\_1\_7.setBounds(10, 250, 64, 14);

lblNewLabel\_1\_7.setForeground(Color.WHITE);

frame.add(lblNewLabel\_1\_7);

JLabel lblNewLabel\_1\_8 = new JLabel("Subject 10");

lblNewLabel\_1\_8.setBounds(10, 275, 64, 14);

lblNewLabel\_1\_8.setForeground(Color.WHITE);

frame.add(lblNewLabel\_1\_8);

textField = new JTextField();

textField.setBounds(101, 49, 41, 20);

frame.add(textField);

textField.setColumns(10);

textField\_1 = new JTextField();

textField\_1.setColumns(10);

textField\_1.setBounds(101, 74, 41, 20);

frame.add(textField\_1);

textField\_2 = new JTextField();

textField\_2.setColumns(10);

textField\_2.setBounds(101, 97, 41, 20);

frame.add(textField\_2);

textField\_3 = new JTextField();

textField\_3.setColumns(10);

textField\_3.setBounds(101, 122, 41, 20);

frame.add(textField\_3);

textField\_4 = new JTextField();

textField\_4.setColumns(10);

textField\_4.setBounds(101, 147, 41, 20);

frame.add(textField\_4);

textField\_5 = new JTextField();

textField\_5.setColumns(10);

textField\_5.setBounds(101, 172, 41, 20);

frame.add(textField\_5);

textField\_6 = new JTextField();

textField\_6.setColumns(10);

textField\_6.setBounds(101, 197, 41, 20);

frame.add(textField\_6);

textField\_7 = new JTextField();

textField\_7.setColumns(10);

textField\_7.setBounds(101, 222, 41, 20);

frame.add(textField\_7);

textField\_8 = new JTextField();

textField\_8.setColumns(10);

textField\_8.setBounds(101, 247, 41, 20);

frame.add(textField\_8);

textField\_9 = new JTextField();

textField\_9.setColumns(10);

textField\_9.setBounds(101, 272, 41, 20);

frame.add(textField\_9);

textField\_10 = new JTextField();

textField\_10.setColumns(10);

textField\_10.setBounds(174, 49, 41, 20);

frame.add(textField\_10);

textField\_11 = new JTextField();

textField\_11.setColumns(10);

textField\_11.setBounds(174, 74, 41, 20);

frame.add(textField\_11);

textField\_12 = new JTextField();

textField\_12.setColumns(10);

textField\_12.setBounds(174, 97, 41, 20);

frame.add(textField\_12);

textField\_13 = new JTextField();

textField\_13.setColumns(10);

textField\_13.setBounds(174, 122, 41, 20);

frame.add(textField\_13);

textField\_14 = new JTextField();

textField\_14.setColumns(10);

textField\_14.setBounds(174, 147, 41, 20);

frame.add(textField\_14);

textField\_15 = new JTextField();

textField\_15.setColumns(10);

textField\_15.setBounds(174, 172, 41, 20);

frame.add(textField\_15);

textField\_16 = new JTextField();

textField\_16.setColumns(10);

textField\_16.setBounds(174, 197, 41, 20);

frame.add(textField\_16);

textField\_17 = new JTextField();

textField\_17.setColumns(10);

textField\_17.setBounds(174, 222, 41, 20);

frame.add(textField\_17);

textField\_18 = new JTextField();

textField\_18.setColumns(10);

textField\_18.setBounds(174, 247, 41, 20);

frame.add(textField\_18);

textField\_19 = new JTextField();

textField\_19.setColumns(10);

textField\_19.setBounds(174, 272, 41, 20);

frame.add(textField\_19);

lblNewLabel = new JLabel("Total");

lblNewLabel.setBounds(392, 27, 49, 14);

lblNewLabel.setForeground(Color.WHITE);

frame.add(lblNewLabel);

textField\_20 = new JTextField();

textField\_20.setBounds(392, 52, 96, 20);

frame.add(textField\_20);

textField\_20.setColumns(10);

lblNewLabel\_2 = new JLabel("SGPA");

lblNewLabel\_2.setBounds(392, 225, 49, 14);

lblNewLabel\_2.setForeground(Color.WHITE);

frame.add(lblNewLabel\_2);

textField\_21 = new JTextField();

textField\_21.setBounds(392, 247, 96, 20);

frame.add(textField\_21);

textField\_21.setColumns(10);

JButton btnNewButton = new JButton("Calculate");

btnNewButton.addActionListener(this);

btnNewButton.setFocusable(false);

btnNewButton.setBounds(392, 135, 89, 23);

frame.add(btnNewButton);

JLabel lblNewLabel\_3 = new JLabel(" Marks");

lblNewLabel\_3.setBounds(101, 24, 49, 14);

lblNewLabel\_3.setForeground(Color.WHITE);

frame.add(lblNewLabel\_3);

JLabel lblNewLabel\_4 = new JLabel("Credits");

lblNewLabel\_4.setBounds(174, 24, 49, 14);

lblNewLabel\_4.setForeground(Color.WHITE);

frame.add(lblNewLabel\_4);

textField\_22 = new JTextField();

textField\_22.setColumns(10);

textField\_22.setBounds(245, 49, 41, 20);

frame.add(textField\_22);

textField\_23 = new JTextField();

textField\_23.setColumns(10);

textField\_23.setBounds(245, 74, 41, 20);

frame.add(textField\_23);

textField\_24 = new JTextField();

textField\_24.setColumns(10);

textField\_24.setBounds(245, 97, 41, 20);

frame.add(textField\_24);

textField\_25 = new JTextField();

textField\_25.setColumns(10);

textField\_25.setBounds(245, 122, 41, 20);

frame.add(textField\_25);

textField\_26 = new JTextField();

textField\_26.setColumns(10);

textField\_26.setBounds(245, 147, 41, 20);

frame.add(textField\_26);

textField\_27 = new JTextField();

textField\_27.setColumns(10);

textField\_27.setBounds(245, 172, 41, 20);

frame.add(textField\_27);

textField\_28 = new JTextField();

textField\_28.setColumns(10);

textField\_28.setBounds(245, 197, 41, 20);

frame.add(textField\_28);

textField\_29 = new JTextField();

textField\_29.setColumns(10);

textField\_29.setBounds(245, 222, 41, 20);

frame.add(textField\_29);

textField\_30 = new JTextField();

textField\_30.setColumns(10);

textField\_30.setBounds(245, 247, 41, 20);

frame.add(textField\_30);

textField\_31 = new JTextField();

textField\_31.setColumns(10);

textField\_31.setBounds(245, 272, 41, 20);

frame.add(textField\_31);

JLabel label5 = new JLabel("Grades");

label5.setBounds(100,200,100,50);

label5.setForeground(Color.WHITE);

label5.setVisible(false);

frame.add(label5);

JPanel panel1 = new JPanel();

JPanel panel2 = new JPanel();

JPanel panel3 = new JPanel();

JPanel panel4 = new JPanel();

panel1.setBackground(new Color(0, 102, 151));

panel2.setBackground(new Color(0, 102, 151));

panel3.setBackground(new Color(0, 102, 151));

panel4.setBackground(new Color(0, 102, 151));

panel1.setPreferredSize(new Dimension(10,10));

panel2.setPreferredSize(new Dimension(10,10));

panel3.setPreferredSize(new Dimension(10,10));

panel4.setPreferredSize(new Dimension(10,10));

frame.add(panel1,BorderLayout.NORTH);

frame.add(panel2,BorderLayout.SOUTH);

frame.add(panel3,BorderLayout.EAST);

frame.add(panel4,BorderLayout.WEST);

//frame.setLayout(null);

frame.setSize(530,500);

frame.setVisible(true);

frame.setTitle("SGPA Calculator");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setResizable(true);

frame.getContentPane().setForeground(Color.WHITE);

frame.getContentPane().setBackground(new Color(76,76,76));

}

public void actionPerformed(ActionEvent e) {

String s0,s1,s2,s3,s4,s5,s6,s7,s8,s9;

String c0,c1,c2,c3,c4,c5,c6,c7,c8,c9;

String letter = null;

double grade = 0;

double sum=0;

double crd;

double calc=0;

s0=textField.getText();

s1=textField\_1.getText();

s2=textField\_2.getText();

s3=textField\_3.getText();

s4=textField\_4.getText();

s5=textField\_5.getText();

s6=textField\_6.getText();

s7=textField\_7.getText();

s8=textField\_8.getText();

s9=textField\_9.getText();

c0=textField\_10.getText();

c1=textField\_11.getText();

c2=textField\_12.getText();

c3=textField\_13.getText();

c4=textField\_14.getText();

c5=textField\_15.getText();

c6=textField\_16.getText();

c7=textField\_17.getText();

c8=textField\_18.getText();

c9=textField\_19.getText();

double sub0 = Double.parseDouble(s0);

double sub1 = Double.parseDouble(s1);

double sub2 = Double.parseDouble(s2);

double sub3 = Double.parseDouble(s3);

double sub4 = Double.parseDouble(s4);

double sub5 = Double.parseDouble(s5);

double sub6 = Double.parseDouble(s6);

double sub7 = Double.parseDouble(s7);

double sub8 = Double.parseDouble(s8);

double sub9 = Double.parseDouble(s9);

double cred0 = Double.parseDouble(c0);

double cred1 = Double.parseDouble(c1);

double cred2 = Double.parseDouble(c2);

double cred3 = Double.parseDouble(c3);

double cred4 = Double.parseDouble(c4);

double cred5 = Double.parseDouble(c5);

double cred6 = Double.parseDouble(c6);

double cred7 = Double.parseDouble(c7);

double cred8 = Double.parseDouble(c8);

double cred9 = Double.parseDouble(c9);

crd=cred0+cred1+cred2+cred3+cred4+cred5+cred6+cred7+cred8+cred9;

if (sub0>=90&& sub0<=100)

{

grade=10;

letter="O";

}

if(sub0>80&& sub0<90)

{

grade=9;

letter="S";

}

if(sub0>=70&&sub0<80)

{

grade=8;

letter="A";

}

if(sub0>=60&&sub0<70)

{

grade=7;

letter="B";

}

if(sub0>=50&&sub0<60)

{

grade=6;

letter="C";

}

if(sub0>=45&&sub0<50)

{

grade=5;

letter="D";

}

if(sub0<=40&&sub0<45)

{

grade=4;

letter="E";

}

if(sub0<40)

{

grade=0;

letter="F";

}

textField\_22.setText(letter);

calc= grade\*cred0;

sum=sum+calc;

if (sub1>=90&& sub1<=100)

{

grade=10;

letter="O";

}

if(sub1>80&& sub1<90)

{

grade=9;

letter="S";

}

if(sub1>=70&&sub1<80)

{

grade=8;

letter="A";

}

if(sub1>=60&&sub1<70)

{

grade=7;

letter="B";

}

if(sub1>=50&&sub1<60)

{

grade=6;

letter="C";

}

if(sub1>=45&&sub1<50)

{

grade=5;

letter="D";

}

if(sub1<=40&&sub1<45)

{

grade=4;

letter="E";

}

if(sub1<40)

{

grade=0;

letter="F";

}

textField\_23.setText(letter);

calc= grade\*cred1;

sum=sum+calc;

if (sub2>=90&& sub2<=100)

{

grade=10;

letter="O";

}

if(sub2>80&& sub2<90)

{

grade=9;

letter="S";

}

if(sub2>=70&&sub2<80)

{

grade=8;

letter="A";

}

if(sub2>=60&&sub2<70)

{

grade=7;

letter="B";

}

if(sub2>=50&&sub2<60)

{

grade=6;

letter="C";

}

if(sub2>=45&&sub2<50)

{

grade=5;

letter="D";

}

if(sub2<=40&&sub2<45)

{

grade=4;

letter="E";

}

if(sub2<40)

{

grade=0;

letter="F";

}

textField\_24.setText(letter);

grade= grade\*cred2;

sum=sum+grade;

if (sub3>=90&& sub3<=100)

{

grade=10;

letter="O";

}

if(sub3>80&& sub3<90)

{

grade=9;

letter="S";

}

if(sub3>=70&&sub3<80)

{

grade=8;

letter="A";

}

if(sub3>=60&&sub3<70)

{

grade=7;

letter="B";

}

if(sub3>=50&&sub3<60)

{

grade=6;

letter="C";

}

if(sub3>=45&&sub3<50)

{

grade=5;

letter="D";

}

if(sub3<=40&&sub3<45)

{

grade=4;

letter="E";

}

if(sub3<40)

{

grade=0;

letter="F";

}

textField\_25.setText(letter);

calc= grade\*cred3;

sum=sum+calc;

if (sub4>=90&& sub4<=100)

{

grade=10;

letter="O";

}

if(sub4>80&& sub4<90)

{

grade=9;

letter="S";

}

if(sub4>=70&&sub4<80)

{

grade=8;

letter="A";

}

if(sub4>=60&&sub4<70)

{

grade=7;

letter="B";

}

if(sub4>=50&&sub4<60)

{

grade=6;

letter="C";

}

if(sub4>=45&&sub4<50)

{

grade=5;

letter="D";

}

if(sub4<=40&&sub4<45)

{

grade=4;

letter="E";

}

if(sub4<40)

{

grade=0;

letter="F";

}

textField\_26.setText(letter);

calc= grade\*cred4;

sum=sum+calc;

if (sub5>=90&& sub5<=100)

{

grade=10;

letter="O";

}

if(sub5>80&& sub5<90)

{

grade=9;

letter="S";

}

if(sub5>=70&&sub5<80)

{

grade=8;

letter="A";

}

if(sub5>=60&&sub5<70)

{

grade=7;

letter="B";

}

if(sub5>=50&&sub5<60)

{

grade=6;

letter="C";

}

if(sub5>=45&&sub5<50)

{

grade=5;

letter="D";

}

if(sub5<=40&&sub5<45)

{

grade=4;

letter="E";

}

if(sub5<40)

{

grade=0;

letter="F";

}

textField\_27.setText(letter);

calc= grade\*cred5;

sum=sum+calc;

if (sub6>=90&& sub6<=100)

{

grade=10;

letter="O";

}

if(sub6>80&& sub6<90)

{

grade=9;

letter="S";

}

if(sub6>=70&&sub6<80)

{

grade=8;

letter="A";

}

if(sub6>=60&&sub6<70)

{

grade=7;

letter="B";

}

if(sub6>=50&&sub6<60)

{

grade=6;

letter="C";

}

if(sub6>=45&&sub6<50)

{

grade=5;

letter="D";

}

if(sub6<=40&&sub6<45)

{

grade=4;

letter="E";

}

if(sub6<40)

{

grade=0;

letter="F";

}

textField\_28.setText(letter);

grade= grade\*cred6;

sum=sum+grade;

if (sub7>=90&& sub7<=100)

{

grade=10;

letter="O";

}

if(sub7>80&& sub7<90)

{

grade=9;

letter="S";

}

if(sub7>=70&&sub7<80)

{

grade=8;

letter="A";

}

if(sub7>=60&&sub7<70)

{

grade=7;

letter="B";

}

if(sub7>=50&&sub7<60)

{

grade=6;

letter="C";

}

if(sub7>=45&&sub7<50)

{

grade=5;

letter="D";

}

if(sub7<=40&&sub7<45)

{

grade=4;

letter="E";

}

if(sub7<40)

{

grade=0;

letter="F";

}

textField\_29.setText(letter);

calc= grade\*cred7;

sum=sum+calc;

if (sub8>=90&& sub8<=100)

{

grade=10;

letter="O";

}

if(sub8>80&& sub8<90)

{

grade=9;

letter="S";

}

if(sub8>=70&&sub8<80)

{

grade=8;

letter="A";

}

if(sub8>=60&&sub8<70)

{

grade=7;

letter="B";

}

if(sub8>=50&&sub8<60)

{

grade=6;

letter="C";

}

if(sub8>=45&&sub8<50)

{

grade=5;

letter="D";

}

if(sub8<=40&&sub8<45)

{

grade=4;

letter="E";

}

if(sub8<40)

{

grade=0;

letter="F";

}

textField\_30.setText(letter);

calc= grade\*cred8;

sum=sum+calc;

if (sub9>=90&& sub9<=100)

{

grade=10;

letter="O";

}

if(sub9>80&& sub9<90)

{

grade=9;

letter="S";

}

if(sub9>=70&&sub9<80)

{

grade=8;

letter="A";

}

if(sub9>=60&&sub9<70)

{

grade=7;

letter="B";

}

if(sub9>=50&&sub9<60)

{

grade=6;

letter="C";

}

if(sub9>=45&&sub9<50)

{

grade=5;

letter="D";

}

if(sub9<=40&&sub9<45)

{

grade=4;

letter="E";

}

if(sub9<40)

{

grade=0;

letter="F";

}

textField\_31.setText(letter);

calc= grade\*cred9;

sum=sum+calc;

double ans,total;

ans=sum/crd;

total=sub1+sub2+sub3+sub4+sub5+sub6+sub7+sub8+sub9+sub0;

textField\_20.setText(Double.toString(total));

textField\_21.setText(Double.toString(ans));

sgpa.setText(Double.toString(ans));

}

}