package java作业;

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.\*;

public class CalTest extends JFrame implements ActionListener{

//声明在窗体中的所有控件

JTextField text;

JPanel panel1;

ButtonGroup group;

JPanel panel2;//面板2,上面有5个按钮

JPanel panel3;//面板3，上面有30个按钮

JPanel panel4;//面板4，上面有8个按钮

JPanel panel5;//面板5，上面有5个按钮

JButton[] bts2;//包含5个按钮的数组

JButton[] bts3;//包含30个按钮的数组

JButton[] bts4;//包含8个按钮的数组

JButton[] bts5;//包含5个按钮的数组

JButton bt6;

JButton bt7;

JButton bt8;

JButton bt9;

public CalTest()

{

this.setSize(680,360);

this.setTitle("科学型计算器");

this.setLayout(null);

text=new JTextField();

text.setSize(640, 70);

text.setLocation(10, 10);

this.add(text);

panel1=new JPanel();

panel1.setSize(318,33);

panel1.setLocation(10, 90);

group = new ButtonGroup();

addRadioButton("度");

addRadioButton("弧度");

addRadioButton("梯度");

panel1.setLayout(new GridLayout(1,3,3,3));

this.add(panel1);

/\*panel1=new JPanel();

ButtonGroup group=new ButtonGroup();

this.setSize(318, 33);

this.setLocation(10,90);

JRadioButton a=new JRadioButton("度");

JRadioButton b=new JRadioButton("弧度");

JRadioButton c=new JRadioButton("梯度");

group.add(a);

group.add(b);

group.add(c);

this.add(panel1);

\*/

panel2=new JPanel();

panel2.setSize(320,33);

panel2.setLocation(330, 90);

//panel1.setBackground(Color.red);

bts2=new JButton[5];

String[] strs1={"MC","MR","MS","M+","M-"};

panel2.setLayout(new GridLayout(1,5,3,3));

for(int i=0;i<bts2.length;i++)

{

bts2[i]=new JButton(strs1[i]);

panel2.add(bts2[i]);

}

this.add(panel2);

panel3=new JPanel();

panel3.setSize(640,100);

panel3.setLocation(10, 130);

//panel1.setBackground(Color.red);

bts3=new JButton[30];

String[] strs2={" ","INV","IN","（","）","<-","CE","C","±","√","Int","sinh","sin","x^2","n!","7","8","9","/","%","dms","cosh","cos","x^y","y√x","4","5","6","\*","1/x"};

panel3.setLayout(new GridLayout(3,10,3,3));

for(int i=0;i<bts3.length;i++)

{

bts3[i]=new JButton(strs2[i]);

panel3.add(bts3[i]);

}

this.add(panel3);

panel4=new JPanel();

panel4.setSize(576,33);

panel4.setLocation(10, 235);

//panel1.setBackground(Color.red);

bts4=new JButton[9];

String[] strs3={"π","tanh","tan","x^3","3√x","1","2","3","-"};

panel4.setLayout(new GridLayout(1,9,3,3));

for(int i=0;i<bts4.length;i++)

{

bts4[i]=new JButton(strs3[i]);

panel4.add(bts4[i]);

}

this.add(panel4);

panel5=new JPanel();

panel5.setSize(320,33);

panel5.setLocation(10, 273);

//panel1.setBackground(Color.red);

bts5=new JButton[5];

String[] strs4={"F-E","Exp","Mod","log","10^x"};

panel5.setLayout(new GridLayout(1,5,3,3));

for(int i=0;i<bts5.length;i++)

{

bts5[i]=new JButton(strs4[i]);

panel5.add(bts5[i]);

}

this.add(panel5);

bt6=new JButton("0");

bt6.setSize(125, 33);

bt6.setLocation(332, 273);

this.add(bt6);

bt7=new JButton(".");

bt7.setSize(60, 33);

bt7.setLocation(460, 273);

this.add(bt7);

bt8=new JButton("+");

bt8.setSize(60, 33);

bt8.setLocation(523, 273);

this.add(bt8);

bt9=new JButton("=");

bt9.setSize(60, 70);

bt9.setLocation(587, 235);

this.add(bt9);

this.add(panel2);

this.setVisible(true);

}

private void addRadioButton(final String text)

{

JRadioButton radioButton=new JRadioButton(text);

group.add(radioButton);

panel1.add(radioButton);

}

public void actionPerformed(ActionEvent e)

{

JButton bt=(JButton)e.getSource();

text.setText(text.getText()+bt.getText());

}

}

