package hi;

import java.awt.Color;

import java.awt.Font;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import javax.swing.JButton;

import javax.swing.JFrame;

import javax.swing.JTextField;

import javax.swing.SwingConstants;

public class Calculator implements ActionListener {

boolean isOperatorClicked=false;

String first;

String symbol;

float result;

JFrame jf;

JTextField jt;

JButton jb0,jb1,jb2,jb3,jb4,jb5,jb6,jb7,jb8,jb9,jbDiv,jbDot,jbDiff,jbMul,jbAdd,jbEq,jbCl;

public Calculator() {

jf=new JFrame("CALCULATOR");

jf.setLayout(null);

jf.setSize(300,500);

jf.setLocation(1000,200);

jf.getContentPane().setBackground(Color.black);

jt=new JTextField();

jt.setBounds(10, 80, 270, 40);

jt.setHorizontalAlignment(SwingConstants.RIGHT);

jf.add(jt);

jb7=new JButton("7");

jb7.setBounds(10, 230, 60, 40);

jb7.setFont(new Font("arial",Font.BOLD, 20));

jb7.addActionListener(this);

jf.add(jb7);

jb8=new JButton("8");

jb8.setBounds(80, 230, 60, 40);

jb8.setFont(new Font("arial",Font.BOLD, 20));

jb8.addActionListener(this);

jf.add(jb8);

jb9=new JButton("9");

jb9.setBounds(150, 230, 60, 40);

jb9.setFont(new Font("arial",Font.BOLD, 20));

jb9.addActionListener(this);

jf.add(jb9);

jb4=new JButton("4");

jb4.setBounds(10, 290, 60, 40);

jb4.setFont(new Font("arial",Font.BOLD, 20));

jb4.addActionListener(this);

jf.add(jb4);

jb5=new JButton("5");

jb5.setBounds(80, 290, 60, 40);

jb5.setFont(new Font("arial",Font.BOLD, 20));

jb5.addActionListener(this);

jf.add(jb5);

jb6=new JButton("6");

jb6.setBounds(150, 290, 60, 40);

jb6.setFont(new Font("arial",Font.BOLD, 20));

jb6.addActionListener(this);

jf.add(jb6);

jb1=new JButton("1");

jb1.setBounds(10, 350, 60, 40);

jb1.setFont(new Font("arial",Font.BOLD, 20));

jb1.addActionListener(this);

jf.add(jb1);

jb2=new JButton("2");

jb2.setBounds(80, 350, 60, 40);

jb2.setFont(new Font("arial",Font.BOLD, 20));

jb2.addActionListener(this);

jf.add(jb2);

jb3=new JButton("3");

jb3.setBounds(150, 350, 60, 40);

jb3.setFont(new Font("arial",Font.BOLD, 20));

jb3.addActionListener(this);

jf.add(jb3);

jb0=new JButton("0");

jb0.setBounds(10, 410, 130, 40);

jb0.setFont(new Font("arial",Font.BOLD, 20));

jb0.addActionListener(this);

jf.add(jb0);

jbDot=new JButton(".");

jbDot.setBounds(150, 410, 60, 40);

jbDot.setFont(new Font("arial",Font.BOLD, 20));

jbDot.addActionListener(this);

jf.add(jbDot);

jbEq=new JButton("=");

jbEq.setBounds(220, 350, 60, 100);

jbEq.setFont(new Font("arial",Font.BOLD, 20));

jbEq.addActionListener(this);

jf.add(jbEq);

jbDiv=new JButton("/");

jbDiv.setBounds(150, 170, 60, 40);

jbDiv.setFont(new Font("arial",Font.BOLD, 20));

jbDiv.addActionListener(this);

jf.add(jbDiv);

jbMul=new JButton("x");

jbMul.setBounds(220, 230, 60, 40);

jbMul.setFont(new Font("arial",Font.BOLD, 20));

jbMul.addActionListener(this);

jf.add(jbMul);

jbDiff=new JButton("-");

jbDiff.setBounds(220, 170, 60, 40);

jbDiff.setFont(new Font("arial",Font.BOLD, 20));

jbDiff.addActionListener(this);

jf.add(jbDiff);

jbAdd=new JButton("+");

jbAdd.setBounds(220, 290, 60, 40);

jbAdd.setFont(new Font("arial",Font.BOLD, 20));

jbAdd.addActionListener(this);

jf.add(jbAdd);

jbCl=new JButton("C");

jbCl.setBounds(80, 170, 60, 40);

jbCl.setFont(new Font("arial",Font.BOLD, 20));

jbCl.addActionListener(this);

jf.add(jbCl);

jf.setVisible(true);

}

public static void main(String arg[])

{

new Calculator();

}

@Override

public void actionPerformed(ActionEvent e) {

if(e.getSource()==jb0)

{

if(isOperatorClicked)

{

jt.setText("0");

isOperatorClicked=false;

}

else

{

jt.setText(jt.getText()+"0");

}

}

else if(e.getSource()==jb1)

{

if(isOperatorClicked)

{

jt.setText("1");

isOperatorClicked=false;

}

else

{

jt.setText(jt.getText()+"1");

}

}

else if(e.getSource()==jb2)

{

if(isOperatorClicked)

{

jt.setText("2");

isOperatorClicked=false;

}

else

{

jt.setText(jt.getText()+"2");

}

}

else if(e.getSource()==jb3)

{

if(isOperatorClicked)

{

jt.setText("3");

isOperatorClicked=false;

}

else

{

jt.setText(jt.getText()+"3");

}

}

else if(e.getSource()==jb4)

{

if(isOperatorClicked)

{

jt.setText("4");

isOperatorClicked=false;

}

else

{

jt.setText(jt.getText()+"4");

}

}

else if(e.getSource()==jb5)

{

if(isOperatorClicked)

{

jt.setText("5");

isOperatorClicked=false;

}

else

{

jt.setText(jt.getText()+"5");

}

}

else if(e.getSource()==jb6)

{

if(isOperatorClicked)

{

jt.setText("6");

isOperatorClicked=false;

}

else

{

jt.setText(jt.getText()+"6");

}

}

else if(e.getSource()==jb7)

{

if(isOperatorClicked)

{

jt.setText("7");

isOperatorClicked=false;

}

else

{

jt.setText(jt.getText()+"7");

}

}

else if(e.getSource()==jb8)

{

if(isOperatorClicked)

{

jt.setText("8");

isOperatorClicked=false;

}

else

{

jt.setText(jt.getText()+"8");

}

}

else if(e.getSource()==jb9)

{

if(isOperatorClicked)

{

jt.setText("9");

isOperatorClicked=false;

}

else

{

jt.setText(jt.getText()+"9");

}

}

else if(e.getSource()==jbAdd)

{

isOperatorClicked=true;

first=jt.getText();

symbol="+";

}

else if(e.getSource()==jbDiff)

{

isOperatorClicked=true;

first=jt.getText();

symbol="-";

}

else if(e.getSource()==jbMul)

{

isOperatorClicked=true;

first=jt.getText();

symbol="\*";

}

else if(e.getSource()==jbDiv)

{

isOperatorClicked=true;

first=jt.getText();

symbol="/";

}

else if(e.getSource()==jbDot)

{

jt.setText(jt.getText()+".");

}

else if(e.getSource()==jbEq)

{

String second=jt.getText();

float firstF=Float.parseFloat(first);

float secondF=Float.parseFloat(second);

switch(symbol)

{

case "+":

result=firstF+secondF;

break;

case "-":

result=firstF-secondF;

break;

case "\*":

result=firstF\*secondF;

break;

case "/":

result=firstF/secondF;

break;

}

jt.setText(result+"");

}

else if(e.getSource()==jbCl)

{

jt.setText("");

}

} }