Package com.suven.consultancy;

Import javax.swing.\*;

Import java.awt.\*;

Import java.awt.event.\*;

Public class Consumer\_Loan\_Assistant extends JFrame implements ActionListener {

JLabel l1,l2,l3,l4,la;

JTextField tf1,tf2,tf3,tf4;

JButton b1,b2,x1,x2,exit;

JTextArea ta;

Font flabel,fbutton;

Boolean tf3enabled=false,tf4enabled=true;

Consumer\_Loan\_Assistant(){

Super(“ Consumer Loan Assistant”);

Ta=new JTextArea(“”);

Ta.setBounds(400,40,300,150);

Ta.setFont(new Font(“Segoe Script”,Font.PLAIN,14));

// ta.setBackground(Color.YELLOW);

Ta.setForeground(Color.BLACK);

Ta.setEditable(false);

Ta.setBorder(BorderFactory.createLineBorder(Color.BLACK));

Add(ta);

Flabel =new Font(“Arial”, Font.PLAIN,16);

Fbutton=new Font(“SANS\_SERIF”,Font.BOLD,13);

La = new JLabel(“Loan Analysis: “);

L1=new JLabel(“Loan Balance”);

L2=new JLabel(“Interest Rate”);

L3=new JLabel(“Number of Payments”);

L4=new JLabel(“Monthly Payment”);

Tf1=new JTextField();

Tf2=new JTextField();

Tf3=new JTextField();

Tf4=new JTextField();

B1=new JButton(“Compute Monthly Payment”);

B2=new JButton(“New Loan Analysis”);

setLayout(null);

setSize(800,300);

// getContentPane().setBackground(Color.RED);

setVisible(true);

setDefaultCloseOperation(EXIT\_ON\_CLOSE);

la.setBounds(400,0,150,50);

la.setFont(flabel);

add(la);

l1.setBounds(20,0,100,50);

l1.setFont(flabel);

add(l1);

l2.setBounds(20,30,150,50);

l2.setFont(flabel);

add(l2);

l3.setBounds(20,60,150,50);

l3.setFont(flabel);

add(l3);

l4.setBounds(20,90,150,50);

l4.setFont(flabel);

add(l4);

b1.setBounds(50,140,250,30);

b1.setFont(fbutton);

add(b1);

b2.setBounds(75,190,200,30);

b2.setFont(fbutton);

b2.setEnabled(false);

add(b2);

b1.addActionListener(this);

b2.addActionListener(this);

tf1.setBounds(170,15,100,20);

tf1.setFont(flabel);

tf1.setHorizontalAlignment(JTextField.RIGHT);

add(tf1);

tf2.setBounds(170,45,100,20);

tf2.setHorizontalAlignment(JTextField.RIGHT);

tf2.setFont(flabel);

add(tf2);

tf3.setBounds(170,80,100,20);

tf3.setHorizontalAlignment(JTextField.RIGHT);

tf3.setFont(flabel);

add(tf3);

tf4.setBounds(170,110,100,20);

tf4.setHorizontalAlignment(JTextField.RIGHT);

tf4.setFont(flabel);

tf4.setEditable(false);

tf4.setForeground(Color.BLACK);

tf4.setBackground(Color.YELLOW);

add(tf4);

x1=new JButton(“X”);

x1.setBounds(300,70,50,25);

x1.setFont(fbutton);

add(x1);

x2=new JButton(“X”);

x2.setBounds(300,110,50,25);

x2.setFont(fbutton);

add(x2);

x2.setVisible(false);

x1.addActionListener(this);

x2.addActionListener(this);

exit= new JButton(“Exit”);

exit.setBounds(500,220,100,30);

exit.setFont(fbutton);

add(exit);

exit.addActionListener(this);

}

Public void actionPerformed(ActionEvent e) {

If(e.getSource()==b1) {

Try {

If(tf2.getText().equals(“”) || tf2.getText().equals(“0”)) {

JOptionPane.showMessageDialog(null,”Interest Rate cannot be 0%”);

}

If ((tf1.getText().equals(“”) || tf2.getText().equals(“”) || tf3.getText().equals(“”)) && (tf1.getText().equals(“”) || tf2.getText().equals(“”) || tf4.getText().equals(“”))) {

JOptionPane.showMessageDialog(null, “Fill All The Required Details”);

}

If (tf4.getText().equals(“”)) {

Float A = Float.parseFloat(tf1.getText());

Float I = Float.parseFloat(tf2.getText());

Float n = Float.parseFloat(tf3.getText());

Float I = I / 1200;

Float P = (float) (I \* A / (1 – Math.pow((1 + I), -n)));

Tf4.setText(P + “”);

String str=”Loan Amount : $”+A+”\n”;

Str+=”Interest Rate : “+I\*1200+”%\n\n”;

Str+=n+” Payments of : $”+P;

Ta.setText(str);

}

If (tf3.getText().equals(“”)) {

Float A = Float.parseFloat(tf1.getText());

Float I = Float.parseFloat(tf2.getText());

Float P = Float.parseFloat(tf4.getText());

Float I = I / 1200;

Float n = (float) (-(Math.log10(1 – I \* A / P)) / Math.log10(1 + I));

Tf3.setText(n + “”);

String str=”Loan Amount : $”+A+”\n”;

Str+=”Interest Rate : “+I\*1200+”%\n\n”;

Str+=n+” Payments of : $”+P;

Ta.setText(str);

}

// String As = “”+A;

B1.setEnabled(false);

B2.setEnabled(true);

}catch (Exception ex){

System.out.println(ex);

}

}

If(e.getSource()==b2) {

If (tf4enabled) {

Tf4.setText(null);

// tf3.setText(null);

}

If(tf3enabled){

Tf3.setText(null);

}

B1.setEnabled(true);

B2.setEnabled(false);

}

If(e.getSource()==x1){

X1.setVisible(false);

X2.setVisible(true);

Tf4.setEditable(true);

Tf3.setEditable(false);

Tf3.setBackground(Color.YELLOW);

Tf4.setBackground(Color.white);

Tf3enabled=true;

Tf4enabled=false;

Tf3.setText(null);

B1.setEnabled(true);

B2.setEnabled(false);

}

If(e.getSource()==x2){

X1.setVisible(true);

X2.setVisible(false);

Tf4.setEditable(false);

Tf3.setEditable(true);

Tf3.setBackground(Color.white);

Tf4.setBackground(Color.yellow);

Tf3enabled=false;

Tf4enabled=true;

Tf4.setText(null);

B1.setEnabled(true);

B2.setEnabled(false);

}

If(e.getSource()==exit){

System.exit(0);

}

}

Public static void main(String[] args) {

// write your code here

New Consumer\_Loan\_Assistant();

}

}