Semester V

FISAC-2 GROUP ASSIGNMENT

BTECH IN INFORMATION TECHNOLOGY:

PROGRAMME – B.TECH CLASS – IT B

SUBMITTED BY:

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PROBLEM STATEMENT

Source code of the functionalities in the User Interface Design with a screenshot of UI.

Source code should contain at least 1-2 functionalities

Make a java program to show Junit testing scripts

Output of Junit testing

Abstract

In this we have created a Currency Converter that converts currency by taking input from the user.

We have made two functionalities in our converter that is we can get output in decimal or in just whole number by choosing two option that is float or integer. if we select float the outputted value will be in decimal format and if we select integer than the value will be in whole number.

We can select countries like India, United States, United Kingdom, South Korea, Mexico, Japan. Output comes with sign or the name of that currency by which it is referred.

We have created to option first is ***from*** and other is ***to***

By selecting the right country in both from and in to field and pressing convert button we get the desire output.

Source code

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import java.awt.event.KeyAdapter;

import java.awt.event.KeyEvent;

import java.util.LinkedHashMap;

import java.util.Map;

import javax.swing.\*;

public class App implements ActionListener{

private static JTextField amount;

private static JRadioButton floate;

private static JRadioButton inte;

private static JComboBox<String> from;

private static JComboBox<String> to;

private static JButton conv;

private static Map<String,Float>map=new LinkedHashMap<String,Float>();

private static Map<String,String>cur=new LinkedHashMap<String,String>();

public String intoutput(String a,String b,String c){

String h;

try{

int enter=Integer.parseInt(a);

float w=Float.parseFloat(b);

int ans=(int)w;

ans=enter/ans;

float g=Float.parseFloat(c);

int give=(int)g;

ans=give\*ans;

h=String.valueOf(ans);}

catch(Exception e){

h="Error";

}

return h;

}

public String floatoutput(String a,String b,String c){

String h;

try{

float enter=Float.parseFloat(a);

float ans=Float.parseFloat(b);

ans=enter/ans;

float give=Float.parseFloat(c);

ans=give\*ans;

h=String.valueOf(ans);}

catch(Exception e){

h="Error";

}

return h;

}

public static void main(String[] args) {

map.put("United States",1.0f);

map.put("United Kingdom",0.87f);

map.put("South Korea",1414.03f);

map.put("Mexico",19.72f);

map.put("India",82.53f);

map.put("Japanese",147.46f);

cur.put("United States"," Dollar");

cur.put("United Kingdom"," Pound");

cur.put("South Korea"," Won");

cur.put("Mexico"," Peso");

cur.put("India"," Rupee");

cur.put("Japanese"," Yen");

JFrame frame = new JFrame("Currency Convertor");

frame.setLayout(null);

frame.setVisible(true);

JLabel Am = new JLabel("Amount:");

Am.setBounds(40,20,100,20);

JLabel Form = new JLabel("Format:");

Form.setBounds(40,60,100,20);

JLabel fromc = new JLabel("From:");

fromc.setBounds(40,100,100,20);

JLabel toc = new JLabel("To:");

toc.setBounds(40,140,100,20);

amount = new JTextField();

amount.addKeyListener(new KeyAdapter(){

public void keyTyped(KeyEvent e){

char c=e.getKeyChar();

if(!((c>='0') && (c<='9') ||(c==KeyEvent.VK\_BACK\_SPACE) || (c==KeyEvent.VK\_DELETE))){

e.consume();

}

}

});

amount.setBounds(160,20,120,20);

ButtonGroup G = new ButtonGroup();

floate = new JRadioButton("Float");

floate.setBounds(160,60,60,20);

inte = new JRadioButton("Int");

inte.setBounds(220,60,120,20);

G.add(floate);

G.add(inte);

String countries[] = {"United States","United Kingdom","South Korea","Mexico","India","Japanese"};

from = new JComboBox<>(countries);

from.setBounds(160,100,120,20);

to = new JComboBox<>(countries);

to.setBounds(160,140,120,20);

conv = new JButton("Convert");

conv.setBounds(130,180,80,20);

conv.addActionListener(new App());

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

frame.add(Am);

frame.add(Form);

frame.add(fromc);

frame.add(toc);

frame.add(amount);

frame.add(floate);

frame.add(inte);

frame.add(from);

frame.add(to);

frame.add(conv);

frame.setSize(400,300);

}

@Override

public void actionPerformed(ActionEvent e) {

String str = e.getActionCommand();

if(str.equals("Convert")){

String h;

if(floate.isSelected()==true){

h=floatoutput(amount.getText(),map.get(from.getSelectedItem().toString()).toString(),map.get(to.getSelectedItem().toString()).toString());

}

else{

h=intoutput(amount.getText(),map.get(from.getSelectedItem().toString()).toString(),map.get(to.getSelectedItem().toString()).toString());

}

h+=" "+cur.get(to.getSelectedItem().toString());

JOptionPane.showMessageDialog(null,h);

}

}

}

Graphical user interface, application

Description automatically generatedOutput of above code

In this we have created two function :

One is Float and other one is Int so float will give answer in decimal point whereas int gives answer only in whole number.

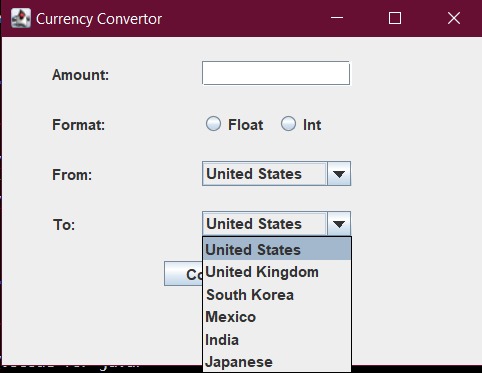
screenshot of different funtion

1. Graphical user interface

   Description automatically generatedFloat
2. Graphical user interface

   Description automatically generatedInt

screenshot of Frame:



Graphical user interface, application

Description automatically generated