

DIET PLANNER

JAVA ASSIGNMENT (SWING APPLICATION)



BHUVAN P.S

(124003061)

SHREYA SHRAVANTHI B

(124015092)

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import javax.swing.*;
import java.awt.event.*;
import java .awt.*;

class project{
    project(){
        JFrame f= new JFrame("Diet Recommender");
        JLabel l,l1,l2,l3,l4,l5,l6,l7,l8,l9,l10,l11;
        JTextField t1,t2,t3,t4;

        l = new JLabel("DIET PLANNER");    //title label
        l.setFont(new Font("Algerian",Font.BOLD,37));
        l.setForeground(Color.WHITE);
        l.setBounds(475,0,400,70);
        f.add(l);

        Font font1 = new Font("SansSerif", Font.PLAIN, 20);
        Font font2 = new Font("Berlin Sans FB Demi",Font.PLAIN,25);

        l1 = new JLabel("NAME: ");
        l1.setFont(font2);
        l1.setForeground(Color.WHITE);
        l1.setBounds(30,80,120,30);
        f.add(l1);
        t1 = new JTextField();
        t1.setBounds(145,80,240,30);
        t1.setFont(font1);
        f.add(t1);

        l2 = new JLabel("AGE: ");
        l2.setFont(font2);
        l2.setForeground(Color.WHITE);
        l2.setBounds(30,140,120,30);
        f.add(l2);
        t2 = new JTextField();
        t2.setBounds(145,140,240,30);
        t2.setFont(font1);
        f.add(t2);

        l3 = new JLabel("GENDER: ");
        l3.setFont(font2);
        l3.setForeground(Color.WHITE);
        l3.setBounds(30,200,140,30);
        f.add(l3);
        JRadioButton r1,r2;
        r1 = new JRadioButton("Male");
        r2 = new JRadioButton("Female");
        r1.setFont(font1);
        r2.setFont(font1);
        r1.setBounds(145,200,110,30);
        r2.setBounds(256,200,120,30);
        ButtonGroup bg= new ButtonGroup();
        f.add(r1);f.add(r2);    //this is also needed for display purpose
    }
}

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bg.add(r1);    //to ensure only one option is selected
bg.add(r2);

l4 = new JLabel("HEIGHT: ");
l4.setFont(font2);
l4.setForeground(Color.WHITE);
l4.setBounds(30,260,120,30);
f.add(l4);
t3 = new JTextField();
t3.setBounds(145,260,240,30);
t3.setFont(font1);
f.add(t3);
l9 = new JLabel(" 'Height in cms' ");
l9.setForeground(Color.WHITE);
l9.setBounds(180,290,100,20);
f.add(l9);

l6 = new JLabel("WEIGHT: ");
l6.setFont(font2);
l6.setForeground(Color.WHITE);
l6.setBounds(30,340,120,30);
f.add(l6);
t4 = new JTextField();
t4.setBounds(145,340,240,30);
t4.setFont(font1);
f.add(t4);

l8 = new JLabel("FOOD CHOICE :");
l8.setForeground(Color.WHITE);
l8.setFont(font2);
l8.setBounds(30,410,180,30);
f.add(l8);
String ch[]={ "Vegetarian", "Non-Vegetarian"};
JComboBox cb1 = new JComboBox(ch);
cb1.setBounds(145,450,250,30);
f.add(cb1);

JMenuBar mb = new JMenuBar();
JMenu menu = new JMenu("Menu");
JMenuItem a1 = new JMenuItem("AboutUs");
JMenuItem a2 = new JMenuItem("Concepts Used");
menu.add(a1);
menu.add(a2);
mb.add(menu);
f.setJMenuBar(mb);
a1.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent ae){
        if (ae.getSource()==a1)
            JOptionPane.showMessageDialog(f, "We Bhuvan and Shreya has worked on various
fields\n" + " to give you an Excellant Diet planner",
            "AboutUs",JOptionPane.INFORMATION_MESSAGE);
    });
a2.addActionListener(new ActionListener(){

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        public void actionPerformed(ActionEvent ae1){
            if (ae1.getSource()==a2)
                JOptionPane.showMessageDialog(f,"We have made use of the following
concepts\n"+"1.JFrame 2.JLabel 3.JTextField\n"+"4.JRadioButton 5.JScrollPane 6.JMenuBar\n"+"
                "7.JButton 8.JComboBox
                9.JOptionPane\n"+"10.MultiThreading","Concepts Used",JOptionPane.INFORMATION_MESSAGE);
        });

        JButton b= new JButton("Submit");
        b.setBounds(200,540,100,30);
        f.add(b);

        String uvm[][] = {"Milk","250
ml"}, {"Banana","1"}, {"Idli/Chappathi","3"}, {"",""}, {"",""};
        String uvl[][] = {"Chappathi","4"}, {"Vegetable","1 cup"}, {"Rice","1 bowl"}, {"Dal","1
cup"}, {"",""};
        String uvs[][] = {"Pulses/sprouts","1 bowl"}, {"raisens","15
grams"}, {"",""}, {"",""}, {"",""};
        String uvd[][] = {"Poori/Chapathi","4"}, {"Soya beans","30 grams"}, {"Salad","1
bowl"}, {"",""}, {"",""};

        String unvm[][] = {"Milk","250 ml"}, {"Eggs","2"}, {"Banana","1"}, {"Avacado
toast/idly","3"}, {"Raspberry shake","1 Glass"};
        String unvl[][] = {"Rice","1 Bowl"}, {"Fish/Meat","2 Piece"}, {"Yoghurt","1 Cup"}, {"",""};
        String unvs[][] = {"Pulses/Sprouts","1 Bowl"}, {"Raisens","25 grams"}, {"",""}, {"",""};
        String unvd[][] = {"Chapathi","3 /4"}, {"Meat/Soya chunks","1 Bowl"}, {"Salad","1
Bowl"}, {"",""};

        String ovm[][] = {"Hot Water With Honey","1 Glass"}, {"Vegetable Soup","1
Bowl"}, {"Broccoli With Wheat Bread Toast","2"}, {"",""}, {"",""};
        String ovl[][] = {"Dhal","1 Bowl"}, {"Rice Along With Green Vegetables","1
Bowl"}, {"",""}, {"",""}, {"",""};
        String ovs[][] = {"Apple","1"}, {"Corn","1 Cup"}, {"Whole Grains","25
Grams"}, {"",""}, {"",""};
        String ovd[][] = {"Chapathi","2"}, {"Tofu/Soya Beans","1 Bowl"}, {"Green Tea","1
Cup"}, {"",""}, {"",""};

        String onvm[][] = {"Hot Water With Honey","1 Glass"}, {"omelete/Bread
Toast","2"}, {"Nuts","25 Grams"}, {"",""}, {"",""};
        String onvl[][] = {"Rice","1 Bowl"}, {"Dhal","1 Bowl"}, {"Salmon Fish","1
Piece"}, {"",""}, {"",""}, {"",""};
        String onvs[][] = {"Hard Boiled Eggs","2"}, {"Apple","1"}, {"Almonds & Grains","15
Grams"}, {"",""}, {"",""};
        String onvd[][] = {"Meat Soup","1 Bowl"}, {"Chapathi/Vegetable Sandwich","2"}, {"Green
Tea","1 Cup"}, {"",""}, {"",""};

        b.addActionListener(new ActionListener (){
            public void actionPerformed(ActionEvent e){
                String s1 = t3.getText();
                String s2 = t4.getText();
                String s3 = cb1.getSelectedItem().toString();
                String s4 = "Vegetarian";
                String s5 = t1.getText();

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String s6 = s5.toUpperCase();
float i1,i2,i3,i4;
i1 = Float.parseFloat(s1);
i2 = Float.parseFloat(s2);
i3 = (i1*i1)/10000;
i4 = i2/i3;
String s7 = "Hi! "+s6+" Your BMI is "+i4;
    JLabel b1 = new JLabel("Breakfast");
    b1.setFont(font2);
    b1.setBounds(250,60,200,35);
    JLabel b2 = new JLabel("Lunch");
    b2.setFont(font2);
    b2.setBounds(750,60,200,35);
    JLabel b3 = new JLabel("Snacks");
    b3.setFont(font2);
    b3.setBounds(250,250,200,35);
    JLabel b4 = new JLabel("Dinner");
    b4.setFont(font2);
    b4.setBounds(750,250,200,35);
    JLabel b5 = new JLabel();
    b5.setFont(font1);
    b5.setBounds(150,500,800,40);
    JLabel b6 = new JLabel();
    b6.setFont(font1);
    b6.setBounds(150,550,900,40);
if(i4<18){
    JFrame f1 = new JFrame("Underweight");
    if(s3.equals(s4)){
        String column[]={"Item","Quantity"};

        f1.add(b1);
        JTable jt1=new JTable(uvm,column);
        JScrollPane sp1 = new JScrollPane(jt1);
        sp1.setBounds(100,100,400,100);
        f1.add(sp1);

        f1.add(b2);
        JTable jt2=new JTable(uv1,column);
        JScrollPane sp2 = new JScrollPane(jt2);
        sp2.setBounds(580,100,400,100);
        f1.add(sp2);

        f1.add(b3);
        JTable jt3=new JTable(uvs,column);
        JScrollPane sp3 = new JScrollPane(jt3);
        sp3.setBounds(100,300,400,100);
        f1.add(sp3);

        f1.add(b4);
        JTable jt4=new JTable(uvd,column);
        JScrollPane sp4 = new JScrollPane(jt4);
        sp4.setBounds(580,300,400,100);
        f1.add(sp4);
    }
}

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        String s8 = "Since you are an Underweighed Vegetarian,"+" We recommend you to
take on the above diet...";
        b5.setText(s7);
        f1.add(b5);
        b6.setText(s8);
        f1.add(b6);
    }
    else{
        String column[]={"Item","Quantity"};
        f1.add(b1);
        JTable jt1=new JTable(unvm,column);
        JScrollPane sp1 = new JScrollPane(jt1);
        sp1.setBounds(100,100,400,100);
        f1.add(sp1);

        f1.add(b2);
        JTable jt2=new JTable(unv1,column);
        JScrollPane sp2 = new JScrollPane(jt2);
        sp2.setBounds(580,100,400,100);
        f1.add(sp2);

        f1.add(b3);
        JTable jt3=new JTable(unvs,column);
        JScrollPane sp3 = new JScrollPane(jt3);
        sp3.setBounds(100,300,400,100);
        f1.add(sp3);

        f1.add(b4);
        JTable jt4=new JTable(unvd,column);
        JScrollPane sp4 = new JScrollPane(jt4);
        sp4.setBounds(580,300,400,100);
        f1.add(sp4);

        String s8 = "Since you are an Underweighed Non-Vegetarian,"+" We recommend you
to take on the above diet...";
        b5.setText(s7);
        f1.add(b5);
        b6.setText(s8);
        f1.add(b6);
    }
    f1.setSize(1200,800);
    f1.setLayout(null);
    f1.setVisible(true);
    Color c1 = new Color(204,204,204);
    f1.getContentPane().setBackground(c1);
}
else if(i4>22){
    JFrame f1 = new JFrame("Obesity");
    if(s3.equals(s4)){
        String column[]={"Item","Quantity"};
        f1.add(b1);
        JTable jt1=new JTable(ovm,column);

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JScrollPane sp1 = new JScrollPane(jt1);
sp1.setBounds(100,100,400,100);
f1.add(sp1);
```

```
f1.add(b2);
JTable jt2=new JTable(ov1,column);
JScrollPane sp2 = new JScrollPane(jt2);
sp2.setBounds(580,100,400,100);
f1.add(sp2);
```

```
f1.add(b3);
JTable jt3=new JTable(ovs,column);
JScrollPane sp3 = new JScrollPane(jt3);
sp3.setBounds(100,300,400,100);
f1.add(sp3);
```

```
f1.add(b4);
JTable jt4=new JTable(ovd,column);
JScrollPane sp4 = new JScrollPane(jt4);
sp4.setBounds(580,300,400,100);
f1.add(sp4);
```

```
String s8 = "Since you are an Overweighed Vegetarian, "+" We recommend you to
take on the above diet...";
```

```
b5.setText(s7);
f1.add(b5);
b6.setText(s8);
f1.add(b6);
}
else{
String column[]={"Item","Quantity"};
```

```
f1.add(b1);
JTable jt1=new JTable(onvm,column);
JScrollPane sp1 = new JScrollPane(jt1);
sp1.setBounds(100,100,400,100);
f1.add(sp1);
```

```
f1.add(b2);
JTable jt2=new JTable(onv1,column);
JScrollPane sp2 = new JScrollPane(jt2);
sp2.setBounds(580,100,400,100);
f1.add(sp2);
```

```
f1.add(b3);
JTable jt3=new JTable(onvs,column);
JScrollPane sp3 = new JScrollPane(jt3);
sp3.setBounds(100,300,400,100);
f1.add(sp3);
```

```
f1.add(b4);
JTable jt4=new JTable(onvd,column);
JScrollPane sp4 = new JScrollPane(jt4);
```

```

        sp4.setBounds(580,300,400,100);
        f1.add(sp4);

        String s8 = "Since you are an Overweighed Non-Vegetarian, "+" We recommend you
to take on the above diet...";
        b5.setText(s7);
        f1.add(b5);
        b6.setText(s8);
        f1.add(b6);
    }
    f1.setSize(1200,800);
    f1.setLayout(null);
    f1.setVisible(true);
    Color c1 = new Color(204,204,204);
    f1.getContentPane().setBackground(c1);
    }
    else{
        JOptionPane.showMessageDialog(f, "Your BMI is : "+i4 + "\n You are Physically
fit");
    }
    });

    f.setLayout(new BorderLayout());
    JLabel background=new JLabel(new ImageIcon("veg.jpg"));
    f.add(background);
    background.setLayout(new FlowLayout());
    f.setSize(1200,750);
    f.setVisible(true);
    f.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);


    }
}

public class bhsh{
    public static void main(String[] args){
        SwingUtilities.invokeLater(new Runnable(){
            public void run(){
                project p1 = new project();
            }
        });
    }
}

```


OUTPUT :

LAYOUT :

Diet Recommender

Menu

NAME:

Shreya

AGE:

19

GENDER:

Male

Female

HEIGHT:

165

Weight in cms

WEIGHT:


50

FOOD CHOICE :


Vegetarian

Submit

DIET PLANNER



USAGE OF MENU :

Diet Recommender

Menu

AboutUs

Concepts Used

NAME:

Shreya

AGE:

19

GENDER:

Male

Female

HEIGHT:

165

Weight in cms

WEIGHT:


50

FOOD CHOICE :

Vegetarian

Submit

DIET PLANNER



ABOUT US :

AboutUs

We Bhuvan and Shreya has worked on various fields to give you an Excellant Diet planner

OK

CONCEPTS USED :

Concepts Used

We have made use of the following concepts

1.JFrame 2.JLabel 3.JTextField

4.JRadioButton 5.JScrollPane 6.JMenuBar

7.JButton 8.JComboBox 9.JOptionPane

10.MultiThreading

OK

DISPLAY OF DIET RECOMMENDATION :

CASE 1 : UNDERWEIGHT DIET FOR VEGETARIAN

Underweight

Breakfast

Item	Quantity
Milk	250 ml
Banana	1
Idli/Chappathi	3

Lunch

Item	Quantity
Chappathi	4
Vegetable	1 cup
Rice	1 bowl
Dal	1 cup

Snacks

Item	Quantity
Pulses/sprouts	1 bowl
raisens	15 grams

Dinner

Item	Quantity
Poori/Chapathi	4
Soya beans	30 grams
Salad	1 bowl

Hi! SHREYA Your BMI is 16.528925

Since you are an Underweighed Vegetarian, We recommend you to take on the above diet...

CASE 2 : UNDERWEIGHT DIET FOR NON-VEGETARIAN

Underweight

Breakfast

Item	Quantity
Milk	250 ml
Eggs	2
Banana	1
Avacado toast/idly	3
Raspberry shake	1 Glass

Lunch

Item	Quantity
Rice	1 Bowl
Fish/Meat	2 Piece
Yoghurt	1 Cup

Snacks

Item	Quantity
Pulses/Sprouts	1 Bowl
Raisens	25 grams

Dinner

Item	Quantity
Chapathi	3 /4
Meat/Soya chunks	1 Bowl
Salad	1 Bowl

Hi! BHUVAN Your BMI is 16.528925

Since you are an Underweighed Non-Vegetarian, We recommend you to take on the above diet...

CASE 3 : PHYSICALLY FIT


Message

Your BMI is : 20.202019

You are Physically fit

OK

CASE 4 : OVERWEIGHT DIET FOR VEGETARIAN

 Obesity

Breakfast

Item	Quantity
Hot Water With Honey	1 Glass
Vegetable Soup	1 Bowl
Broccoli With Wheat Bread Toast	2

Lunch

Item	Quantity
Dhal	1 Bowl
Rice Along With Green Vegetables	1 Bowl

Snacks

Item	Quantity
Apple	1
Corn	1 Cup
Whole Grains	25 Grams


Dinner

Item	Quantity
Chapathi	2
Tofu/Soya Beans	1 Bowl
Green Tea	1 Cup

Hi! SHREYA Your BMI is 27.548208

Since you are an Overweighed Vegetarian, We recommend you to take on the above diet...

CASE 5 : OVERWEIGHT DIET FOR NON-VEGETARIAN

 Obesity

Breakfast

Item	Quantity
Hot Water With Honey	1 Glass
omelete/Bread Toast	2
Nuts	25 Grams

Lunch

Item	Quantity
Rice	1 Bowl
Dhal	1 Bowl
Salmon Fish	1 Piece

Snacks

Item	Quantity
Hard Boiled Eggs	2
Apple	1
Almonds & Grains	15 Grams

Dinner

Item	Quantity
Meat Soup	1 Bowl
Chapathi/Vegetable Sandwich	2
Green Tea	1 Cup

Hi! BHUVAN Your BMI is 27.548208

Since you are an Overweighed Non-Vegetarian, We recommend you to take on the above diet...