DIET PLANNER

JAVA ASSIGNMENT (SWING APPLICATION)



BHUVAN P.S (124003061) SHREYA SHRAVANTHI B (124015092)

```
import javax.swing.*;
import java.awt.event.*;
import java .awt.*;
class project{
   project(){
       JFrame f= new JFrame("Diet Recommender");
       JLabel 1,11,12,13,14,15,16,17,18,19,110,111;
       JTextField t1,t2,t3,t4;
       1 = new JLabel("DIET PLANNER");
                                            //title label
       1.setFont(new Font("Algerian",Font.BOLD,37));
       1.setForeground(Color.WHITE);
       1.setBounds(475,0,400,70);
       f.add(1);
       Font font1 = new Font("SansSerif", Font.PLAIN, 20);
       Font font2 = new Font("Berlin Sans FB Demi", Font.PLAIN, 25);
       11 = new JLabel("NAME: ");
       11.setFont(font2);
       11.setForeground(Color.WHITE);
       11.setBounds(30,80,120,30);
       f.add(l1);
       t1 = new JTextField();
       t1.setBounds(145,80,240,30);
       t1.setFont(font1);
       f.add(t1);
       12 = new JLabel("AGE: ");
       12.setFont(font2);
       12.setForeground(Color.WHITE);
       12.setBounds(30,140,120,30);
       f.add(12);
       t2 = new JTextField();
       t2.setBounds(145,140,240,30);
       t2.setFont(font1);
       f.add(t2);
       13 = new JLabel("GENDER: ");
       13.setFont(font2);
       13.setForeground(Color.WHITE);
       13.setBounds(30,200,140,30);
       f.add(13);
       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);
       14 = new JLabel("HEIGHT: ");
       14.setFont(font2);
       14.setForeground(Color.WHITE);
       14.setBounds(30,260,120,30);
       f.add(14);
       t3 = new JTextField();
       t3.setBounds(145,260,240,30);
       t3.setFont(font1);
       f.add(t3);
       19 = new JLabel(" 'Height in cms' ");
       19.setForeground(Color.WHITE);
       19.setBounds(180,290,100,20);
       f.add(19);
       16 = new JLabel("WEIGHT: ");
       16.setFont(font2);
       16.setForeground(Color.WHITE);
       16.setBounds(30,340,120,30);
       f.add(16);
       t4 = new JTextField();
       t4.setBounds(145,340,240,30);
       t4.setFont(font1);
       f.add(t4);
       18 = new JLabel("FOOD CHOICE :");
       18.setForeground(Color.WHITE);
       18.setFont(font2);
       18.setBounds(30,410,180,30);
       f.add(18);
       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 Sandwitch","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(unvl,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);
```



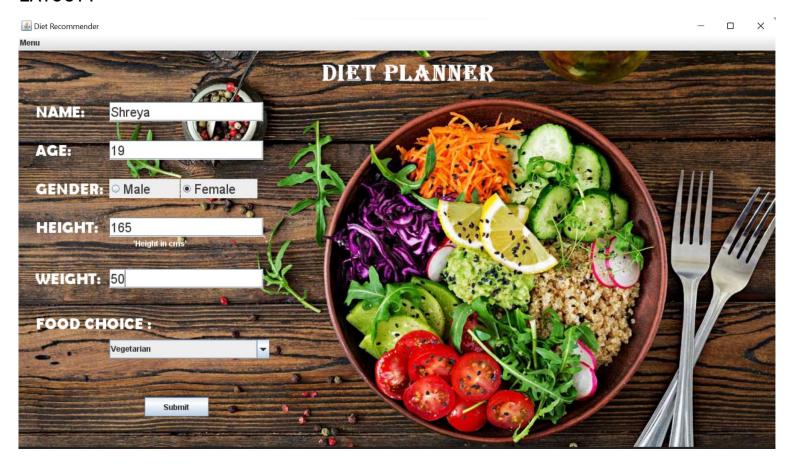
```
JScrollPane sp1 = new JScrollPane(jt1);
                    sp1.setBounds(100,100,400,100);
                    f1.add(sp1);
                    f1.add(b2);
                    JTable jt2=new JTable(ov1,column);
                    JScrollPane sp2 = new JScrollPane(jt2);
                    sp2.setBounds(580,100,400,100);
                    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(onvl,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();
            }});
```

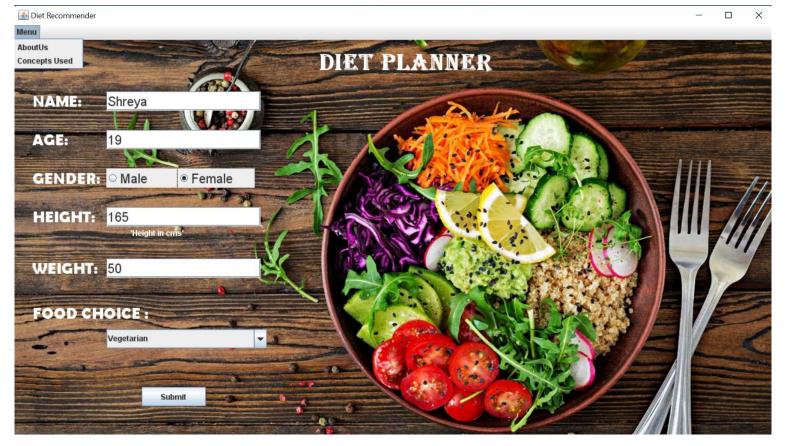


OUTPUT:

LAYOUT:

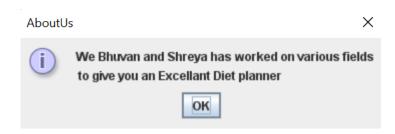


USAGE OF MENU:





ABOUT US:

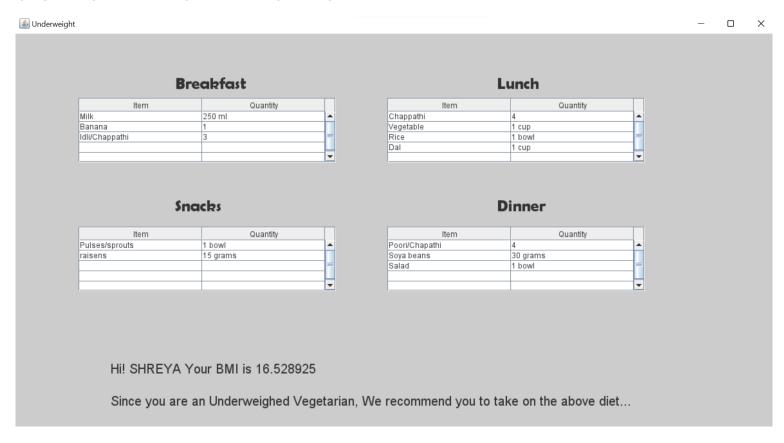


CONCEPTS USED:



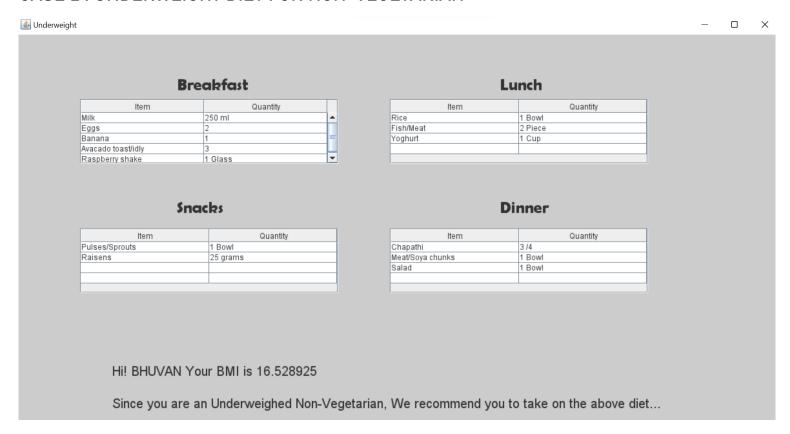
DISPLAY OF DIET RECOMMENDATION:

CASE 1: UNDERWEIGHT DIET FOR VEGETARIAN

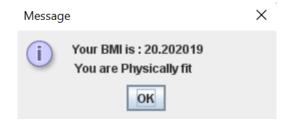




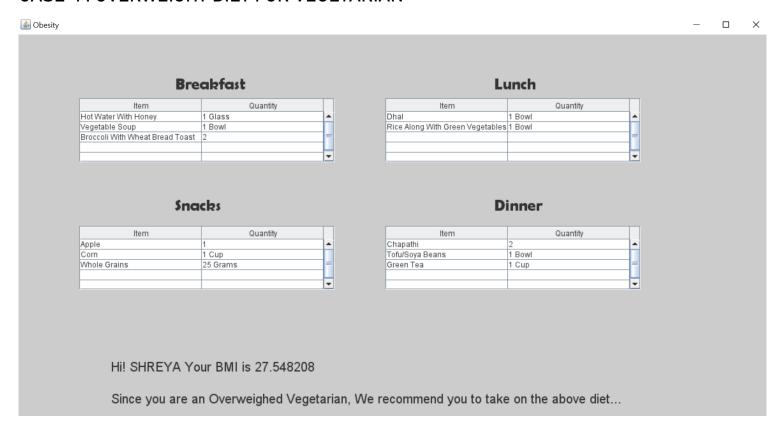
CASE 2: UNDERWEIGHT DIET FOR NON-VEGETARIAN



CASE 3: PHYSICALLY FIT



CASE 4: OVERWEIGHT DIET FOR VEGETARIAN



CASE 5: OVERWEIGHT DIET FOR NON-VEGETARIAN

