GROUP MEMBERS
BATCH C31

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Mini Project Report (JAVA OOPM) PIL CANTEEN MANAGEMENT SYSTEM

1. Introduction

This canteen management system discards the old billing system of writing everything down and taking orders to an advanced application.Where an authenticated user can order his/her meal and can have his/her account to debt balance on thus, can pay the total bill after the specified time, without worrying about the book account.

2. Motivation

Having to stand in long queues, sometimes errors in account balance lead us to think of making a software which is capable of ordering items and can hold all the data of orders and transactions

3. CODE-

Cart.java

```
import java.awt.Color;
import java.awt.Font;
import java.awt.event.ActionEvent;
```

```java
import
java.awt.event.ActionListener;
```

```java
import java.sql.Connection;
import
java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;

import
javax.swing.BorderFactory;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
import
javax.swing.JOptionPane;
import javax.swing.JPanel;
import javax.swing.JTextArea;
import javax.swing.JTextField;
import javax.swing.border.Border;
import
javax.swing.border.EmptyBorder;

public class Cart extends JFrame implements
    ActionListener { private static final long
    serialVersionUID = 1L;
    private JPanel contentPane;
    private JTextArea itemList, quantity, amt,rate;
    private JButton Customize, calculate, debit ,paynow,
    Finish; private JTextField tftotal;
    private String username;
    private int amtsum=0,
    paid=0;

    Cart(String Username) {
        username=Usernam
```

```
        e;

setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```

```java
setTitle("Canteen-MS-
Cart"); setBounds(60, 10,
1200, 700);
setResizable(false);

contentPane = new JPanel();
contentPane.setBorder(new EmptyBorder(5, 5,
5, 5)); setContentPane(contentPane);
contentPane.setLayout(null);
contentPane.setBackground(new Color(52, 46,
45));

Color blue = new Color(74, 143, 255);
Font menuFont = new Font("Tahoma", Font.PLAIN, 20);

JPanel
pitemlist,prate,pquan,pamt;
JPanel panel = new JPanel();
panel.setLayout(null);
panel.setBounds(200, 100, 390,
430);
panel.setBackground(new Color(92, 85, 84));

Border blackborder =
BorderFactory.createLineBorder(Color.black,2); int
py=36,pos=-19;

itemList = new JTextArea();
itemList.setBounds(5, 5, 170, 300);
itemList.setLineWrap(true);
itemList.setEditable(false);
itemList.setBorder(new EmptyBorder(5, 5, 5,
5));
itemList.setFont(new Font("Tahoma", Font.PLAIN,
```

```
17)); pitemlist = new JPanel();
```

```java
pitemlist.setLayout(null);
pitemlist.setBounds(40+pos, py, 180,
310); pitemlist.setBorder(blackborder);
pitemlist.add(itemList);

rate = new JTextArea();
rate.setBounds(05,05, 50,
300); rate.setLineWrap(true);
rate.setEditable(false);
rate.setBorder(new EmptyBorder(5, 5, 5, 5));
rate.setFont(new Font("Tahoma", Font.PLAIN,
17)); rate.setBorder(new EmptyBorder(5, 5, 5,
5));
prate = new JPanel();
prate.setLayout(null);
prate.setBounds(218+pos, py, 60,
310); prate.setBorder(blackborder);
prate.add(rate);

quantity = new JTextArea();
quantity.setBounds(05, 05, 40, 300);
quantity.setLineWrap(true);
quantity.setCaretColor(Color.WHITE);
quantity.setBorder(new EmptyBorder(5, 5, 5,
5));
quantity.setFont(new Font("Tahoma", Font.PLAIN,
17)); pquan = new JPanel();
pquan.setLayout(null);
pquan.setBounds(276+pos, py, 50,
310); pquan.setBorder(blackborder);
pquan.add(quantity);
```

```java
amt = new JTextArea();
amt.setBounds(05, 05, 50,
300); amt.setLineWrap(true);
amt.setEditable(false);
amt.setBorder(new EmptyBorder(5, 5, 5, 5));
amt.setFont(new Font("Tahoma", Font.PLAIN,
17)); pamt = new JPanel();
pamt.setLayout(null);
pamt.setBounds(324+pos, py, 60,
310); pamt.setBorder(blackborder);
pamt.add(amt);


panel.add(pitemlist
); panel.add(prate);
panel.add(pquan);
panel.add(pamt);


//      itemList.append("Lorem asfkjshf\nDosv npav\nAfsfn dflfid\nAfsjfn qwrew");
//      rate.append("30\n135\n80\n230");
//      quantity.append("3\n1\n5\n1\n");
//amt.append("450\n912\n1015\n10");


int ly = 8;
JLabel litems, lquantity, user, lrate;
Font lblfont = new Font("Times New Roman", Font.PLAIN, 20);


litems = new JLabel("Items in
cart"); litems.setFont(lblfont);
```

```java
litems.setForeground(Color.white);
litems.setBounds(70+pos, ly, 200,
32); panel.add(litems);


lrate = new JLabel("Rate");
lrate.setFont(lblfont);
lrate.setForeground(Color.white);
lrate.setBounds(230+pos, ly, 130,
32); panel.add(lrate);


lquantity = new JLabel("Qty");
lquantity.setFont(lblfont);
lquantity.setForeground(Color.white);
lquantity.setBounds(289+pos, ly, 130,
32); panel.add(lquantity);


user = new JLabel("Amt");
user.setFont(lblfont);
user.setForeground(Color.white);
user.setBounds(338+pos, ly, 100,
32); panel.add(user);


tftotal = new JTextField(" Total :
"); tftotal.setBounds(242, 350,
123, 32); tftotal.setEditable(false);
tftotal.setFont(new Font("Tahoma", Font.PLAIN,
19)); tftotal.setBorder(blackborder);
panel.add(tftotal);
```

```java
user = new JLabel("Dear "+username+", confirm your
order"); user.setFont(new Font("Tahoma", Font.PLAIN,
21)); user.setForeground(Color.white);
user.setBounds(70, 30, 600,
32); add(user);


Customize = new JButton("Edit
Cart"); Customize.setBounds(900,
130, 170, 40);
Customize.setFont(menuFont);
Customize.setBackground(blue);
Customize.addActionListener(this);
Customize.setFocusPainted(false);
add(Customize);


calculate = new JButton("Calculate
Bill"); calculate.setBounds(900, 210,
170, 40);
calculate.setFont(menuFont);
calculate.setBackground(blue);
calculate.addActionListener(this);
calculate.setFocusPainted(false);
add(calculate);


debit = new JButton("Pay
Later"); debit.setBounds(900,
320, 170, 40);
debit.setFont(menuFont);
debit.setBackground(blue);
debit.addActionListener(this);
debit.setFocusPainted(false);
add(debit);
```

```java
        paynow = new JButton("Pay
        Now"); paynow.setBounds(900,
        370, 170, 40);
        paynow.setFont(menuFont);
        paynow.setBackground(blue);
        paynow.addActionListener(this);
        paynow.setFocusPainted(false);
        add(paynow);


        Finish = new JButton("Place Order");
        Finish.setBounds(900, 420, 170, 40);
        Finish.setFont(menuFont);
        Finish.setBackground(new Color(0, 20,
        153)); Finish.setEnabled(false);
        Finish.addActionListener(this);
        Finish.setFocusPainted(false);
        add(Finish);


        add(panel);
    }

int count=0;
public void addToCart(String inp) {

    switch (inp)
      { case
      "1":
       count++;
         itemList.append(count+".
         Samosa\n"); rate.append("25\n");
```

```
              break
            ; case
                "2":
count++;
    itemList.append(count+". Vada
    Pav\n"); rate.append("20\n");
     break
            ; case
                "3":
count++;
    itemList.append(count+". Misal
    Pav\n"); rate.append("30\n");
     break
            ; case
                "4":
count++;
    itemList.append(count+". Pav
    Bhaji\n"); rate.append("30\n");
     break
            ; case
                "5":
count++;
    itemList.append(count+". Chicken
    Biryani\n"); rate.append("150\n");
     break
            ; case
                "6":
count++;
    itemList.append(count+". Idli
    Sambar\n"); rate.append("160\n");
     break
            ; case
                "7":
count++;
```

```
itemList.append(count+". Chole Bature\n");
```

```java
            rate.append("130\n"
            ); break;
        case "8":
         count++;
            itemList.append(count+". Veg
            Biryani\n"); rate.append("140\n");
            break;
    }
}


public void
    setVisible() {
    setVisible(true);
}


public void actionPerformed(ActionEvent e) {

    if (e.getSource() ==
        Customize) {
        setVisible(false);

    }

    else if (e.getSource() == calculate)
        { amt.setText(null);
        tftotal.setText(null);
        tftotal.replaceSelection(" Total :
        ");

        String sQuan =
        quantity.getText(); String sItem
        = rate.getText();
```

```java
int[][] arrQuan = new int[10][3];

StringBuffer tempQuan = new StringBuffer();
StringBuffer tempItem = new StringBuffer();

int lengthQuan=0;
for(int i=0;i<sQuan.length();i++){
  while(i<sQuan.length() &&
  sQuan.charAt(i)!='\n'){
    tempQuan.append(Character.toString(sQuan.charA
    t(i))); i++;
  }
  arrQuan[lengthQuan][0]=Integer.parseInt(tempQuan.toStrin
  g()); lengthQuan++;
  tempQuan.delete(0, tempQuan.length());
}

lengthQuan=0;
for(int i=0;i<sItem.length();i++){
  while(i<sItem.length() &&
  sItem.charAt(i)!='\n'){
    tempItem.append(Character.toString(sItem.charAt
    (i))); i++;
  }
  arrQuan[lengthQuan][1]=Integer.parseInt(tempItem.toStrin
  g()); lengthQuan++;
  tempItem.delete(0, tempItem.length());
}

for(int i=0;i<lengthQuan;i++){
  //System.out.println(arrQuan[i][0]+" - "+arrQuan[i][1]);
```

```java
        amtsum = amtsum + arrQuan[i][0]*arrQuan[i][1];

        amt.append(Integer.toString(arrQuan[i][0]*arrQuan[i][1])+"\

        n");

    }

    tftotal.replaceSelection(Integer.toString(amtsum));




}
else if (e.getSource() == debit) {


    quantity.setEditable(false);

    String query1 = "select debt from account where user_name =

    \""+username+"\""; try {

    Class.forName("com.mysql.cj.jdbc.Driver");

        Connection connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/canteen_db", "root",
"1234");

        Statement sta = connection.createStatement();


        ResultSet rs =

            sta.executeQuery(query1);

            rs.next();

            int prevDebt = rs.getInt("debt");


            String query2 = "UPDATE account SET debt="+ (amtsum+prevDebt) +"
WHERE user_name = \""+username+"\"";

        sta.executeUpdate(query2);

            //System.out.println();



        connection.close();

    } catch (Exception exception) {
```

```java
        //exception.printStackTrace

        ();

        System.out.println(exception

        );

        }

        JOptionPane.showMessageDialog(debit, "Dear "+username+", Rs.
"+amtsum+" have been\n added to your balance");

        Finish.setEnabled(true);

        Finish.setBackground(new Color(74, 143,

        255));

    }

    else if (e.getSource() ==

        paynow) {

        quantity.setEditable(false);

        paid=1;

        Finish.setEnabled(true);

        Finish.setBackground(new Color(74, 143, 255));

        JOptionPane.showMessageDialog(Finish, "Dear "+username+", pay Rs.
"+amtsum+" to counter");

    }

    else if(e.getSource() == Finish) {


        try {

        Class.forName("com.mysql.cj.jdbc.Driv

        er");

        Connection connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/canteen_db", "root",
"1234");

        Statement sta = connection.createStatement();


        String sit =

        itemList.getText(); String

        squ = quantity.getText();

        String sam = amt.getText();

        StringBuffer tempIt = new StringBuffer();
```

```java
StringBuffer tempqu = new StringBuffer();
StringBuffer tempam = new StringBuffer();
```

```java
int k=0,l=0,m=0;
//============================================
for(int j=0;j<count;j++){

    while(k<sit.length() && sit.charAt(k)!='\n'){
        templt.append(Character.toString(sit.charAt(
        k))); k++;
    }
    String itemname=templt.toString()+" ";
    templt.delete(0, templt.length());
    k++;

    while(l<squ.length() && squ.charAt(l)!='\n'){
        tempqu.append(Character.toString(squ.charAt
        (l))); l++;
    }
    int quanno
    =Integer.parseInt(tempqu.toString());
    tempqu.delete(0, tempqu.length());
    l++;

    while(m<sam.length() && sam.charAt(m)!='\n'){
        tempam.append(Character.toString(sam.charAt(
        m))); m++;
    }
    int amount
    =Integer.parseInt(tempam.toString());
    tempam.delete(0, tempam.length());
    m++;
    //System.out.println(itemname+"-"+quanno+amount);
    String query = "INSERT INTO order_record values(now(),'" + username
+ "','" + itemname + "'," + quanno + "," + amount + "," + paid + ")";
```

```java
            sta.executeUpdate(query);
        }


        connection.close();
    } catch (Exception exception) {
        //exception.printStackTrace
    ();
    System.out.println(exception
    );
    }
    dispose();
    Order o = new
    Order(username);
    o.setVisible();
    }


 }
}
```

Order.java-

```java
import
java.awt.Color;
import
java.awt.Font;
import java.awt.*;
import java.awt.event.ActionEvent;
import
java.awt.event.ActionListener;
//import java.sql.*;


import
javax.swing.BorderFactory;
import javax.swing.ImageIcon;
```

```java
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
```

```java
import javax.swing.JPanel;
import javax.swing.JScrollPane;
import javax.swing.JTextArea;
import javax.swing.border.BevelBorder;
import javax.swing.border.Border;
import javax.swing.border.EmptyBorder;

public class Order extends JFrame implements
        ActionListener{ private static final long
        serialVersionUID = 1L;
    private JPanel
    contentPane; JTextArea
    bill1,bill2; JButton cart;

        Cart c ;

    public Order(String
        username) { c = new
        Cart(username);
        setDefaultCloseOperation(JFrame.EXIT_ON_C
        LOSE); setTitle("Canteen-MS-Place Order");
    setBounds(60, 10, 1200,
    700); setResizable(false);
    setIconImage(Toolkit.getDefaultToolkit().getImage("img/bg.png"));

    contentPane = new JPanel();
    contentPane.setBorder(new EmptyBorder(5, 5,
    5, 5)); setContentPane(contentPane);
    contentPane.setLayout(null);
    getContentPane().setBackground(new Color(52, 46, 45)); //black
```

```java
JLabel lblorder = new JLabel("Place your Order");
lblorder.setFont(new Font("Times New Roman", Font.PLAIN,
35)); lblorder.setBounds(110, 19, 500, 50);
lblorder.setForeground(Color.white); //red
contentPane.add(lblorder);


JPanel panel = new
JPanel();
panel.setLayout(null);
panel.setPreferredSize(new Dimension(115, 1000));


//System.out.println(new File("img/item1.jpg").getCanonicalPath());


JLabel lrow1 = new JLabel("Snacks");
lrow1.setFont(new Font("Times New Roman", Font.PLAIN,
32)); lrow1.setBounds(525,11,100,32);
lrow1.setForeground(Color.white);
panel.add(lrow1);


JLabel lrow2 = new JLabel("Meals");
lrow2.setFont(new Font("Times New Roman", Font.PLAIN,
32)); lrow2.setBounds(525,350,100,32);
lrow2.setForeground(Color.white);
panel.add(lrow2);

//    int yrow1=52 ,yrow2=360,  pheight=246,pwidth=262;
//    int xcol1=16 ,xcol2=295 ,xcol3=574 ,xcol4=853;
//    int lx=100,ly=218,lwid=250,lhei=20,by=4,bxy=4,bwid=254,bhei=210;

int yrow1=52 ,yrow2=390, pheight=270,pwidth=262;
```

```java
int xcol1=16 ,xcol2=295 ,xcol3=574 ,xcol4=853;
int lx=100,ly=243,lwid=250,lhei=20,by=30,bxy=5,bwid=252,bhei=210;

JButton
bitem1,bitem2,bitem3,bitem4,bitem5,bitem6,bitem7,bitem8;
JLabel litem1,litem2,litem3,litem4,litem5,litem6,litem7,litem8;
JLabel
lname1,lname2,lname3,lname4,lname5,lname6,lname7,lname8;
JPanel
pitem1,pitem2,pitem3,pitem4,pitem5,pitem6,pitem7,pitem8;

Color blue =new Color(138, 241, 255); //greenish
Font menuFont= new Font("Tahoma", Font.PLAIN, 20);

Border blackline =
BorderFactory.createLineBorder(Color.black,2); Font
lblname = new Font("Times New Roman", Font.PLAIN, 22);

pitem1 = new JPanel();
pitem1.setBounds(xcol1,yrow1,pwidth,pheig
ht); pitem1.setBackground(blue);
litem1 = new JLabel("Rs.25");
litem1.setFont(menuFont);
litem1.setBounds(lx,ly,lwid,lhei)
; lname1 = new
JLabel("Samosa");
lname1.setFont(lblname);
lname1.setBounds(90,6,lwid,lh
ei);
    bitem1 = new JButton(new
ImageIcon("img/samosa.jpg"));
bitem1.setBounds(bxy,by,bwid,bhei);

pitem2 = new JPanel();
```

```
pitem2.setBounds(xcol2,yrow1,pwidth,pheig
ht); pitem2.setBackground(blue);
```

```java
litem2 = new JLabel("Rs.20");
litem2.setFont(menuFont);
litem2.setBounds(lx,ly,lwid,lhei)
; lname2 = new JLabel("Vada
Pav");
lname2.setFont(lblname);
lname2.setBounds(90,6,lwid,lh
ei);
    bitem2 = new JButton(new
ImageIcon("img/vadapav.jpg"));
bitem2.setBounds(bxy,by,bwid,bhei);


pitem3 = new JPanel();
pitem3.setBounds(xcol3,yrow1,pwidth,pheig
ht); pitem3.setBackground(blue);
litem3 = new JLabel("Rs.30");
litem3.setFont(menuFont);
litem3.setBounds(lx,ly,lwid,lhei)
; lname3 = new JLabel("Misal
Pav");
lname3.setFont(lblname);
lname3.setBounds(90,6,lwid,lh
ei);
    bitem3 = new JButton(new
ImageIcon("img/misal.jpg"));
bitem3.setBounds(bxy,by,bwid,bhei);
main
pitem4 = new JPanel();
pitem4.setBounds(xcol4,yrow1,pwidth,pheig
ht); pitem4.setBackground(blue);
litem4 = new JLabel("Rs.30");
litem4.setFont(menuFont);
litem4.setBounds(lx,ly,lwid,lhei
); lname4 = new JLabel("Pav
```

Bhaji");

lname4.setFont(lblname);

```java
lname4.setBounds(90,6,lwid,lhei);
    bitem4 = new JButton(new
ImageIcon("img/pavbhaji.jpg"));
bitem4.setBounds(bxy,by,bwid,bhei);

pitem5 = new JPanel();
pitem5.setBounds(xcol1,yrow2,pwidth,pheig
ht); pitem5.setBackground(blue);
litem5 = new JLabel("Rs.120");
litem5.setFont(menuFont);
litem5.setBounds(lx,ly,lwid,lhei);
lname5 = new JLabel("Chicken
Biryani"); lname5.setFont(lblname);
lname5.setBounds(66,6,lwid,lhei);
    bitem5 = new JButton(new
ImageIcon("img/chikenbiryani.jpg"));
bitem5.setBounds(bxy,by,bwid,bhei);

pitem6 = new JPanel();
pitem6.setBounds(xcol2,yrow2,pwidth,pheig
ht); pitem6.setBackground(blue);
litem6 = new JLabel("Rs.160");
litem6.setFont(menuFont);
litem6.setBounds(lx,ly,lwid,lhei);
lname6 = new JLabel("Idli
Sambar");
lname6.setFont(lblname);
lname6.setBounds(90,6,lwid,lhei)
;
    bitem6 = new JButton(new
ImageIcon("img/idli.jpg"));
bitem6.setBounds(bxy,by,bwid,bhei);

pitem7 = new JPanel();
```

```java
pitem7.setBounds(xcol3,yrow2,pwidth,pheight); pitem7.setBackground(blue);
litem7 = new JLabel("Rs.130");
litem7.setFont(menuFont);
litem7.setBounds(lx,ly,lwid,lhei);
lname7 = new JLabel("Chole
Bature");
lname7.setFont(lblname);
lname7.setBounds(80,6,lwid,lhei);
    bitem7 = new JButton(new
ImageIcon("img/cholebhature.jpg"));
bitem7.setBounds(bxy,by,bwid,bhei);

pitem8 = new JPanel();
pitem8.setBounds(xcol4,yrow2,pwidth,pheight); pitem8.setBackground(blue);
litem8 = new JLabel("Rs.140");
litem8.setFont(menuFont);
litem8.setBounds(lx,ly,lwid,lhei);
lname8 = new JLabel("Veg
Biryani");
lname8.setFont(lblname);
lname8.setBounds(82,6,lwid,lhei)
;
    bitem8 = new JButton(new
ImageIcon("img/vegbiryani.jpg"));
bitem8.setBounds(bxy,by,bwid,bhei);

pitem1.setLayout(null
);
pitem2.setLayout(null
);
pitem3.setLayout(null
);
```

```
pitem4.setLayout(null
);
pitem5.setLayout(null
);
pitem6.setLayout(null
);
```

```java
pitem7.setLayout(null
);
pitem8.setLayout(null
);

pitem1.add(litem1
);
pitem2.add(litem2
);
pitem3.add(litem3
);
pitem4.add(litem4
);
pitem5.add(litem5
);
pitem6.add(litem6
);
pitem7.add(litem7
);
pitem8.add(litem8
);

pitem1.add(lname1
);
pitem2.add(lname2
);
pitem3.add(lname3
);
pitem4.add(lname4
);
pitem5.add(lname5
);
pitem6.add(lname6
);
```

```
pitem7.add(lname7
);
pitem8.add(lname8
);


pitem1.add(bitem1
);
pitem2.add(bitem2
);
pitem3.add(bitem3
);
pitem4.add(bitem4
);
pitem5.add(bitem5
);
pitem6.add(bitem6
);
pitem7.add(bitem7
);
pitem8.add(bitem8
);
```

```java
pitem1.setBorder(blacklin
e);
pitem2.setBorder(blacklin
e);
pitem3.setBorder(blacklin
e);
pitem4.setBorder(blacklin
e);
pitem5.setBorder(blacklin
e);
pitem6.setBorder(blacklin
e);
pitem7.setBorder(blacklin
e);
pitem8.setBorder(blacklin
e);

bitem1.addActionListener(thi
s);
bitem2.addActionListener(thi
s);
bitem3.addActionListener(thi
s);
bitem4.addActionListener(thi
s);
bitem5.addActionListener(thi
s);
bitem6.addActionListener(thi
s);
bitem7.addActionListener(thi
s);
bitem8.addActionListener(thi
s);
```

```
bitem1.setActionCommand("1
");
bitem2.setActionCommand("2
");
bitem3.setActionCommand("3
");
bitem4.setActionCommand("4
");
bitem5.setActionCommand("5
");
bitem6.setActionCommand("6
");
bitem7.setActionCommand("7
");
bitem8.setActionCommand("8
");

panel.add(pitem1);
```

```java
panel.add(pitem2
);
panel.add(pitem3
);
panel.add(pitem4
);
panel.add(pitem5
);
panel.add(pitem6
);
panel.add(pitem7
);
panel.add(pitem8
);


cart= new JButton("Cart");
cart.setBounds(1000,25,100,40);
cart.setFont(menuFont);
cart.setBackground(new Color(92, 85,
84)); cart.addActionListener(this);
cart.setFocusPainted(false);
cart.setForeground(Color.white);
cart.setBorder(BorderFactory.createLineBorder(Color.whit
e,2)); contentPane.add(cart);


panel.setBackground(new Color(92, 85,
84)); JScrollPane scrollPane = new
JScrollPane(panel,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HO
RIZONTAL_SCR OLLBAR_AS_NEEDED);
scrollPane.setBounds(20,90,1150,500);
scrollPane.getVerticalScrollBar().setUnitIncrement
(16); add(scrollPane);
}
```

```java
public void actionPerformed(ActionEvent
    e){ switch(e.getActionCommand()) {
    case "1":
```

```java
                    c.addToCart("1"
            ); break;
        case "2":
            c.addToCart("2"
            ); break;
        case "3":
            c.addToCart("3"
            ); break;
        case "4":
            c.addToCart("4"
            ); break;
        case "5":
            c.addToCart("5"
            ); break;
        case "6":
            c.addToCart("6"
            ); break;
        case "7":
            c.addToCart("7"
            ); break;
        case "8":
            c.addToCart("8"
            ); break;
        }

        if(e.getSource()==cart) {
                c.setVisible(true);
        }
    }
```

```java
    public void
      setVisible() {
      setVisible(true);
          }


}
```

Signin.java

```java
import java.awt.Color;

import java.awt.Font;

import

java.awt.Toolkit;

import java.awt.event.ActionEvent;

import

java.awt.event.ActionListener;

import java.sql.*;


import javax.swing.JButton;

import javax.swing.JFrame;

import javax.swing.JLabel;

import

javax.swing.JOptionPane;

import javax.swing.JPanel;

import

javax.swing.JPasswordField;

import javax.swing.JTextField;

import javax.swing.border.EmptyBorder;


public class Signin extends JFrame {
        private static final long serialVersionUID
    = 1L; private JPanel contentPane;
    private JTextField username;
    private JPasswordField passwordField;
```

```java
private JButton
loginButton,newUserButton;
```

```java
public Signin() {

    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    setIconImage(Toolkit.getDefaultToolkit().getImage("img/bg.p
    ng")); setTitle("PIL CANTEEN");
    setBounds(200, 100, 400, 500);
    setResizable(false);
    setVisible(true);
    contentPane = new
    JPanel();
    contentPane.setBorder(new EmptyBorder(5, 5,
    5, 5)); setContentPane(contentPane);
    contentPane.setLayout(null);
    getContentPane().setBackground(new Color(150, 255, 225));



    JLabel welcome = new JLabel("Welcome to");
    welcome.setFont(new Font("Times New Roman",
    Font.PLAIN, 23)); welcome.setBounds(126, 10, 300, 60);
    contentPane.add(welcome);

    JLabel welcome1 = new JLabel(" PIL CANTEEN");
    welcome1.setFont(new Font("Felix Titling", Font.PLAIN,
    27)); welcome1.setBounds(92, 42, 300, 60);
    contentPane.add(welcome1);

    JLabel lblsignin = new JLabel("Login");
    lblsignin.setFont(new Font("Berlin Sans FB",
    Font.PLAIN, 25)); lblsignin.setBounds(154, 102, 200,
    50);
```

```java
contentPane.add(lblsignin);


JLabel lblUsername = new JLabel("Username");
lblUsername.setFont(new Font("Tahoma", Font.PLAIN,
18)); lblUsername.setBounds(20, 180, 90, 18);
contentPane.add(lblUsername);


JLabel lblPassword = new JLabel("Password");
lblPassword.setFont(new Font("Tahoma",
Font.PLAIN, 18)); lblPassword.setBounds(20, 240, 90,
18); contentPane.add(lblPassword);


username = new JTextField();
username.setFont(new Font("Tahoma", Font.PLAIN,
18)); username.setBounds(110, 175, 228, 30);
username.setBorder(new EmptyBorder(0, 5,
0, 0)); contentPane.add(username);
username.setColumns(10);


passwordField = new JPasswordField();
passwordField.setFont(new Font("Tahoma",
Font.PLAIN, 18)); passwordField.setBounds(110, 235,
228, 30);
passwordField.setBorder(new EmptyBorder(0, 5,
0, 0)); contentPane.add(passwordField);


loginButton = new JButton("Sign in");
loginButton.addActionListener(new
ActionListener() {
    public void actionPerformed(ActionEvent e) {
```

```java
        String userName = username.getText();
            String password = String.valueOf(passwordField.getPassword());

            String query = "select password_,first_name from account where
            user_name

=

        \""+userNa

        me+"\""; try

        {

            Class.forName("com.mysql.cj.jdbc.Driver");

            Connection connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/canteen_db", "root",
"1234");

        Statement sta = connection.createStatement();


            ResultSet rs =

            sta.executeQuery(query); rs.next();

                String db_password = rs.getString("password_");

                //System.out.println(db_password+" entered :"+password);


            if (db_password.equals(password)) {

            JOptionPane.showMessageDialog(loginButton,"Welco

            me, "+
rs.getString("first_name"));

            dispose();

            Order o =new Order(userName); //

            o.setVisible();

        } else {

                JOptionPane.showMessageDialog(loginButton, "Invalid
                                Password");

        }

        connection.close();

    } catch (Exception exception) {

        //exception.printStackTrace();

            JOptionPane.showMessageDialog(loginButton, "Invalid

            User"); System.out.println(exception);
```

}

```java
        }
    });
    loginButton.setFont(new Font("Tahoma", Font.PLAIN,
    18)); loginButton.setBounds(56, 310, 270, 38);
    loginButton.setFocusPainted(false);
    contentPane.add(loginButton);


    newUserButton = new JButton("New user");
    newUserButton.addActionListener(new
    ActionListener() {
        public void actionPerformed(ActionEvent
         e) { dispose();
            new UserRegistration();
        }
    });
    newUserButton.setFont(new Font("Tahoma", Font.PLAIN,
    18)); newUserButton.setBounds(56, 370, 270, 38);
    newUserButton.setFocusPainted(false);
    contentPane.add(newUserButton);
  }
}
```

UserRegistration.java-

```java
import java.awt.Font;
import java.awt.event.ActionEvent;
import
java.awt.event.ActionListener;
import java.sql.*;


import
javax.swing.JButton;
import
javax.swing.JFrame;
import
```

javax.swing.JLabel;

```java
import
javax.swing.JOptionPane;
import javax.swing.JPanel;
import
javax.swing.JPasswordField;
import javax.swing.JTextField;
import
javax.swing.border.EmptyBorder;
import java.awt.Toolkit;

public class UserRegistration extends
    JFrame { private static final long
    serialVersionUID = 1L; private JPanel
    contentPane;
    private JTextField
    firstname; private
    JTextField lastname;
    private JTextField email;
    private JTextField
    username; private
    JTextField mob;
    private JPasswordField
    passwordField; private JButton
    btnNewButton;

    public UserRegistration() {
        setIconImage(Toolkit.getDefaultToolkit().getImage("img/bg.p
        ng")); setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(200, 80, 1014, 597);
            setTitle("Canteen-MS-
        Registration"); setResizable(false);
        setVisible(true);
        contentPane = new
        JPanel();
```

```
contentPane.setBorder(new EmptyBorder(5, 5,
5, 5)); setContentPane(contentPane);
contentPane.setLayout(null);
```

```
JLabel lblNewUserRegister = new JLabel("New User Registration");
lblNewUserRegister.setFont(new Font("Times New Roman",
Font.PLAIN, 40)); lblNewUserRegister.setBounds(330, 52, 325+100,
50); contentPane.add(lblNewUserRegister);

JLabel lblName = new JLabel("First name");
lblName.setFont(new Font("Tahoma", Font.PLAIN,
20)); lblName.setBounds(58, 152, 99, 43);
contentPane.add(lblName);

JLabel lblNewLabel = new JLabel("Last name");
lblNewLabel.setFont(new Font("Tahoma", Font.PLAIN,
20)); lblNewLabel.setBounds(58, 243, 110, 29);
contentPane.add(lblNewLabel);

JLabel lblEmailAddress = new JLabel("Email\r\n address");
lblEmailAddress.setFont(new Font("Tahoma", Font.PLAIN, 20));
lblEmailAddress.setBounds(58, 324, 124, 36);
contentPane.add(lblEmailAddress);

firstname = new JTextField();
firstname.setFont(new Font("Tahoma", Font.PLAIN,
22)); firstname.setBounds(214, 156, 228, 40);
contentPane.add(firstname);
firstname.setColumns(10);

lastname = new JTextField();
lastname.setFont(new Font("Tahoma", Font.PLAIN, 22));
```

```java
lastname.setBounds(214, 240, 228,
40); contentPane.add(lastname);
lastname.setColumns(10);


email = new JTextField();
email.setFont(new Font("Tahoma", Font.PLAIN,
22)); email.setBounds(214, 320+5, 228, 40);
contentPane.add(email);
email.setColumns(10);


username = new JTextField();
username.setFont(new Font("Tahoma", Font.PLAIN,
22)); username.setBounds(707, 151+5, 228, 40);
contentPane.add(username);
username.setColumns(10);


JLabel lblUsername = new JLabel("Username");
lblUsername.setFont(new Font("Tahoma", Font.PLAIN,
20)); lblUsername.setBounds(542, 159, 99, 29);
contentPane.add(lblUsername);


JLabel lblPassword = new JLabel("Password");
lblPassword.setFont(new Font("Tahoma",
Font.PLAIN, 20)); lblPassword.setBounds(542, 245,
99, 24); contentPane.add(lblPassword);


JLabel lblMobileNumber = new JLabel("Mobile number");
lblMobileNumber.setFont(new Font("Tahoma", Font.PLAIN, 20));
lblMobileNumber.setBounds(542, 329, 139, 26);
```

```java
contentPane.add(lblMobileNumber);

mob = new JTextField();
mob.setFont(new Font("Tahoma", Font.PLAIN, 22));
mob.setBounds(707, 320+5, 228, 40);
contentPane.add(mob);
mob.setColumns(10);

passwordField = new JPasswordField();
passwordField.setFont(new Font("Tahoma",
Font.PLAIN, 22)); passwordField.setBounds(707,
235+5, 228, 40); contentPane.add(passwordField);

btnNewButton = new JButton("Register");
btnNewButton.addActionListener(new
ActionListener() {
  public void actionPerformed(ActionEvent
    e) { String firstName =
    firstname.getText(); String lastName =
    lastname.getText(); String emailId =
    email.getText();
    String          userName          =
    username.getText();          String
    mobileNumber = mob.getText();  int
    len = mobileNumber.length();
    String password = String.valueOf(passwordField.getPassword());

    String msg = "" +
    firstName; msg += " \n";

    if(firstName.length()>0 && lastName.length()>0 && emailId.length()>0 &&
userName.length()>0 && len>0) {
        if (len == 10) {
```

```java
                try {
            Connection connection =
DriverManager.getConnection("jdbc:mysql://localhost:3306/canteen_db", "root",
"1234");


            String query = "INSERT INTO account values('" + firstName + "','" +
            lastName
+ "','" + userName + "','" +

                password + "','" + emailId + "','" + mobileNumber + "','" + 0 + "')";


            Statement sta =
            connection.createStatement();
            sta.executeUpdate(query);


            JOptionPane.showMessageDialog(btnNewButton,"Welcome, " + msg
+ "Your account is sucessfully created");


            connection.close(
            ); dispose();
            Order o = new
            Order(userName);
            o.setVisible();


        } catch (SQLIntegrityConstraintViolationException exception) {
            //exception.printStackTrace
            ();
            System.out.println(exception
exists")
;                  );
            JOptionPane.showMessageDialog(btnNewButton, "This username
            already


        } catch (Exception
            exception) {
            exception.printStackTrace
            ();
        }                                                        }
```
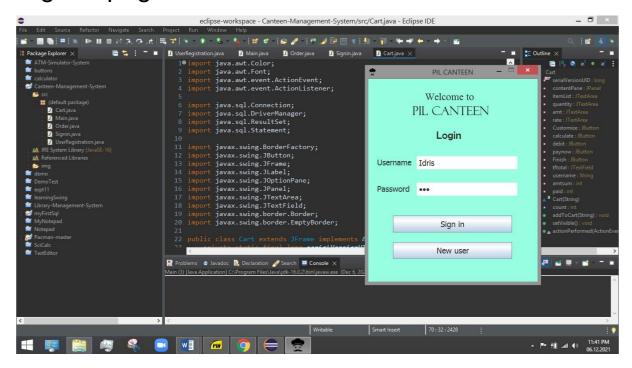
```
		else {




			JOptionPane.showMessageDialog(btnNewButton, "Enter a valid
mobile number");
```

```
                    }
              }
              else
              {
                      JOptionPane.showMessageDialog(btnNewButton, "Enter all the fields");

              }
          }  }
      });
      btnNewButton.setFont(new Font("Tahoma", Font.PLAIN,
      22)); btnNewButton.setBounds(399, 447, 259, 74);
      btnNewButton.setFocusPainted(isEnabled());
      contentPane.add(btnNewButton);
   }
}
```
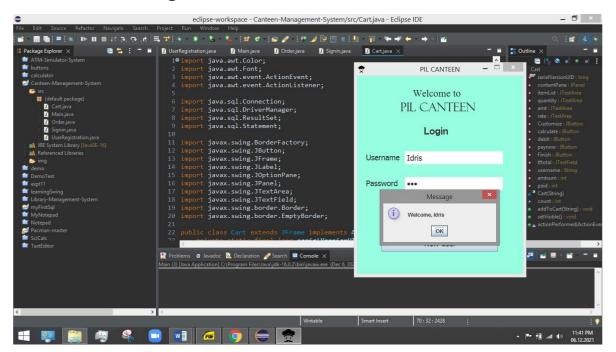
Main.java-

```
import java.awt.EventQueue;


public class Main {
      public static void main(String[] args)
    { EventQueue.invokeLater(new
    Runnable() {
      public void run()
        { new
        Signin();
      }
    });
  }
}
```
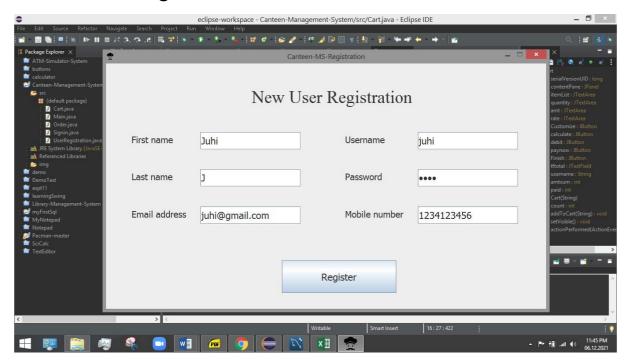
4. OUTPUT-
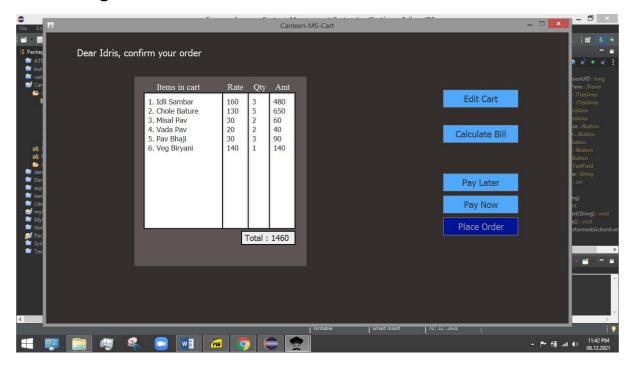
Sign-in page-

Welcome Page-
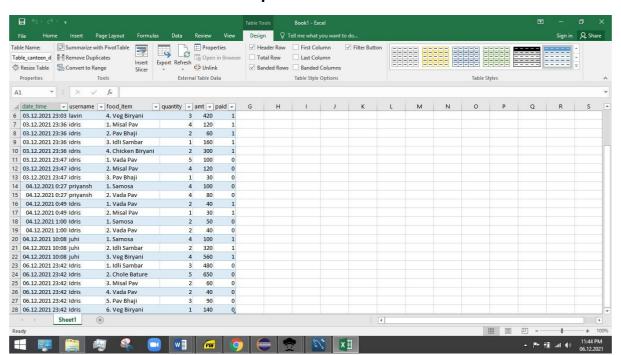
New User Registraton-

Menu Cum Place your Order page-

Cart Page-

Database Result in Spreadsheet-

Database for Calculating Debt-