





Banking System Using Java8

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Table of Contents:

| Acknowledgement |
|------------------------------|
| Project Objectives |
| Project Scope |
| Requirement Specifications |
| Application Work Flow |
| Screenshots |
| Future Scope of Improvements |
| Code |
| Certificates |





Acknowledgement

We take this opportunity to express our profound gratitude and deep regards to our faculty Munmun Purkayastha for her exemplary guidance, monitoring and constant encouragement throughout the course of this project. The blessing, help and guidance given by her time to time shall carry us a long way in the journey of life on which we about to embark.

We are obliged to all of us for providing valuable information by each of us in our respective fields as a project team member. We are also grateful to us for cooperation during the period of our assignment.

We are also grateful to Globsyn for giving us such a platform to show our talents.

Indranil Mukherjee

Shambo Samanta

Tamal Saha

Neha Parween

Anamika Maji







The objectives of this project are

- 1. To maintain the accounts like saving account, Current Account.
- 2. Maintaining operations like withdrawing, depositing money and applying loan to the user.
- 3. Providing account number to the Customer for dealing transactions in the bank.
- 4. Reducing Manual work in terms of Banking.
- 5. Giving accuracy in Data and calculations.
- 6. Making the Software user friendly.
- 7. Providing multiple applications at a time.
- 8. Increasing security, speed, storing and accuracy.
- 9. To speed up the operation.
- 10. Managing and maintaining data in an easier way.
- 11. Providing convenience to users and Accountants
- 12.Our Main Objective is to design a software which integrates all the facilities available in "Banking System".

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The scopes of this project are

User

- i) A new user can register himself using the registration procedure by his own and will get auto generated User ID.
- ii) User Can Apply For Loan
- iii) User can see his Account Details, All accounts in this bank, Transfer money to another account, See Transaction Details, and edit his details

Accountant

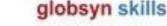
- iv) Accountant can create account for any Registered user
- v) Watch all accounts or any particular account details
- vi) Deposit or Withdraw or Transfer from any account
- vii) See Transaction Details of any Account
- viii) Edit or Delete any particular account





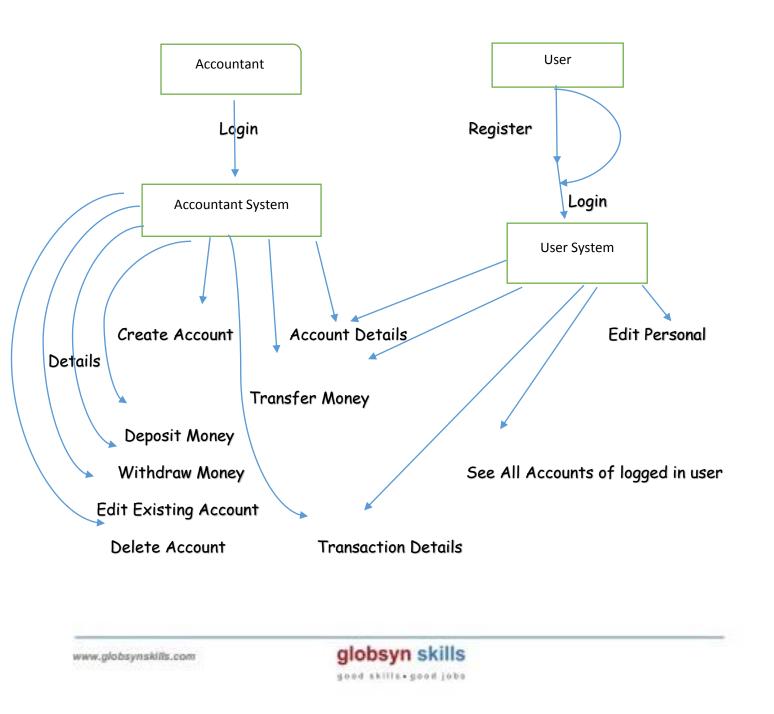
Requirement Specification

- € Hardware /Software Requirements
 - Hardware Requirements
 - Minimum Pentium Dual Core Processor
 - 1GB Ram
 - 50 MB free Hard Disk Space
 - o Software Requirements
 - JDK 1.8 (while compiling)
 - Java Runtime Environment(JRE) to run the program
 - It can be runned on any Operating System After Compilation





Application Work Flow





Screenshots



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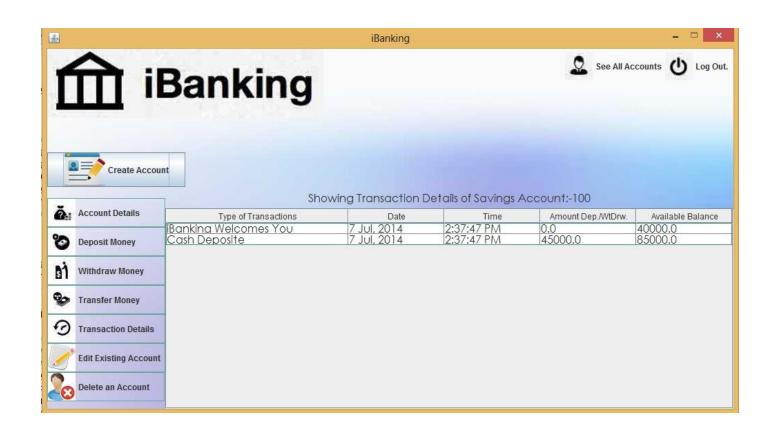
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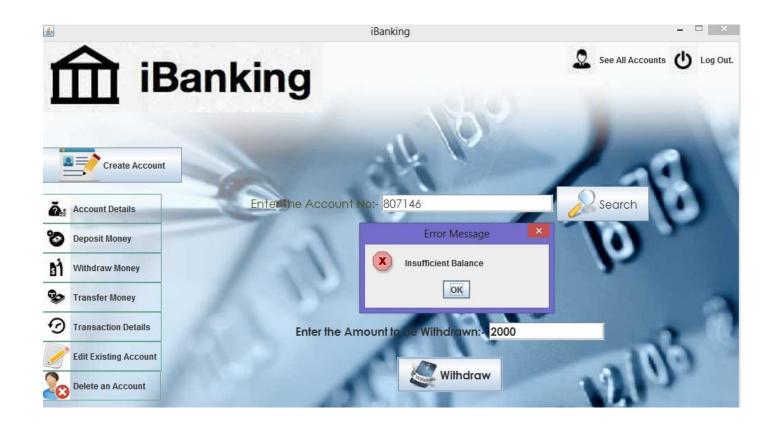
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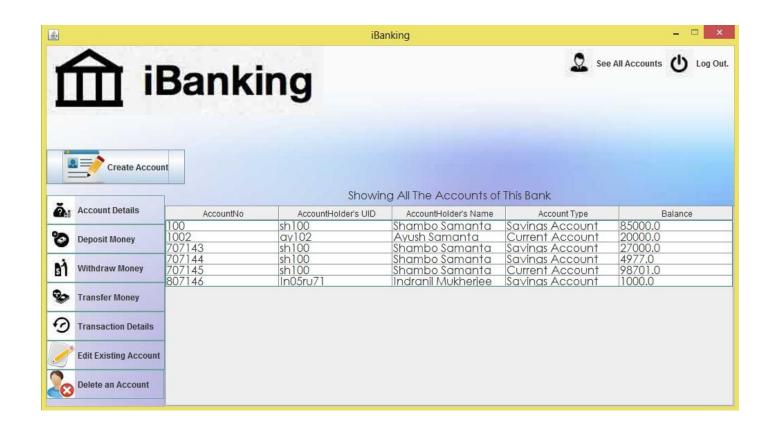






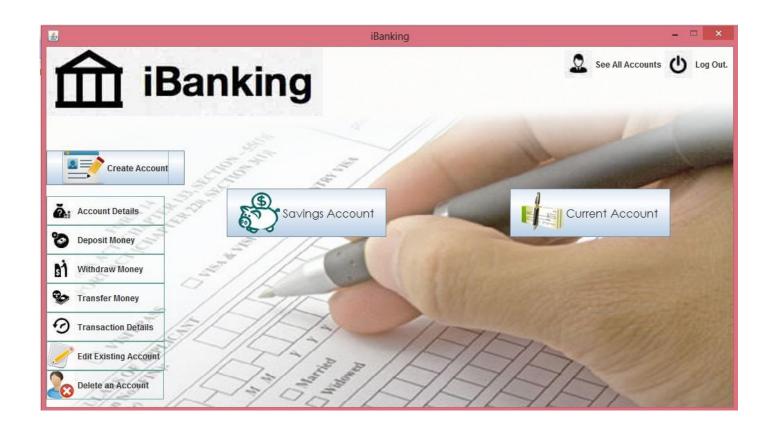
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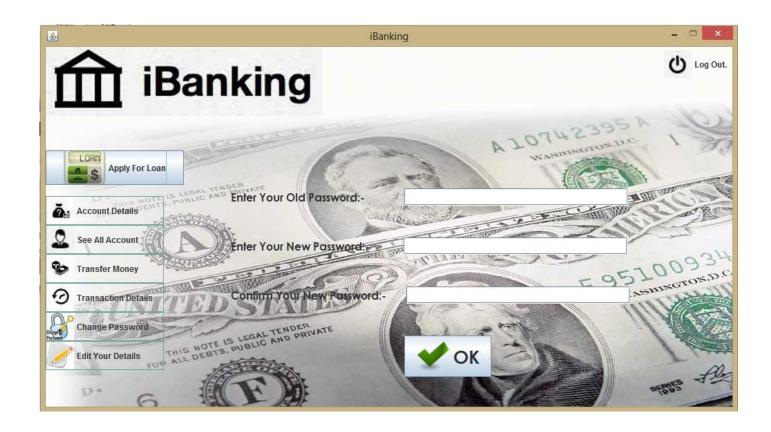
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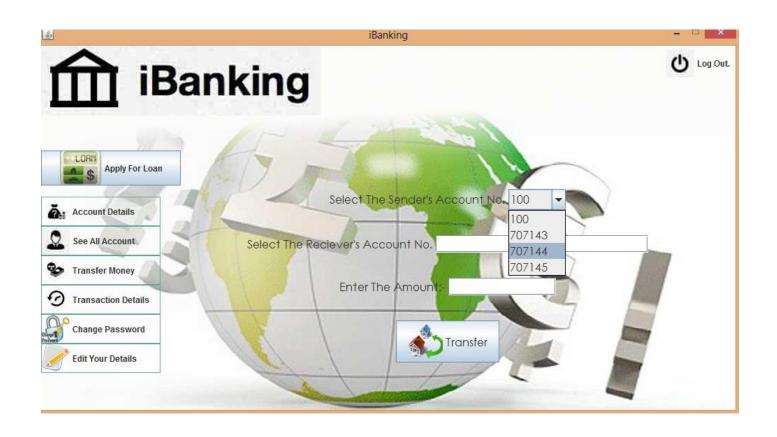
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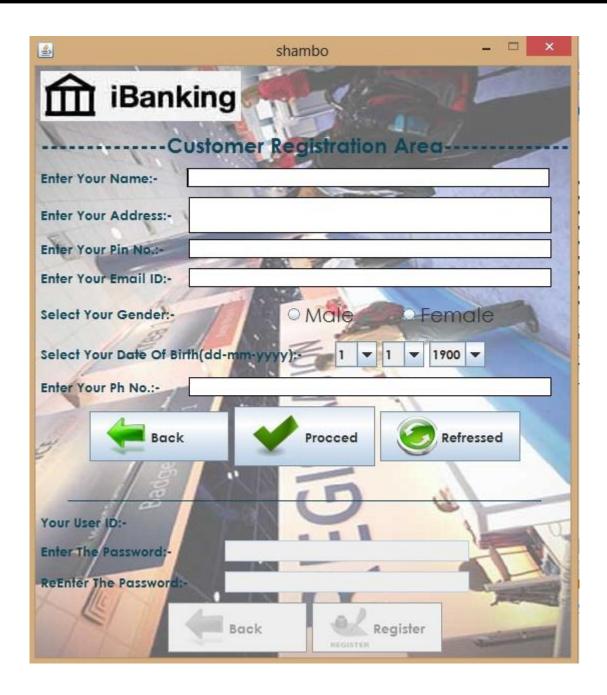






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Future Scope of Improvements

- ♣ Photo of an Account Holder can be uploaded this type of changes can be made in future
- Signature verification of an Account Holder can be implemented in future
- Apply for loan can be implemented in future
- ♣ In future by improving this software using JEE it can be run on Internet
- Passbook printing can be implemented in future





Coding

From package bank.view

```
package bank.view;
import javax.swing.*;
import java.awt.*;
public class AccordantLogIn extends JFrame{
      private JTextField tfID;
      private JLabel lblID,lblPass,lblHead,lblpic;
      private JPasswordField ps;
      private JPanel pnl,pnl1,pnl2,pnl3,pnl4,pnl5;
      private JButton btnlogin,btncncl;
      public AccordantLogIn(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             Bckgrndtrnslogin con=new Bckgrndtrnslogin();
             Container con2=getContentPane();
             pnl=new JPanel();
             pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y_AXIS));
             pnl1=new JPanel();
             pnl1.setBackground(new Color(140, 175, 222));
             ImageIcon ic=new ImageIcon("image\\aud.png");
             lblpic=new JLabel(ic);
             pnl1.add(lblpic);
             pnl2=new JPanel(new FlowLayout(FlowLayout.LEFT));
             lblID=new JLabel("Enter Your ID:-
             lblID.setFont(new Font("Century Gothic", Font.BOLD, 15));
             tfID=new JTextField(15);
             tfID.setFont(new Font("Century Gothic", Font.BOLD, 15));
             pnl2.setBackground(new Color(140, 175, 222));
             pnl2.add(lblID);
             pnl2.add(tfID);
             pnl3=new JPanel(new FlowLayout(FlowLayout.LEFT));
             lblPass=new JLabel("Enter Your Password:-");
             lblPass.setFont(new Font("Century Gothic", Font.BOLD, 15));
             ps=new JPasswordField(15);
             ps.setFont(new Font("Century Gothic", Font.BOLD, 15));
             pnl3.setBackground(new Color(140, 175, 222));
             pnl3.add(lblPass);
             pnl3.add(ps);
             pnl4=new JPanel();
```



```
ImageIcon ic1=new ImageIcon("image\\aclgin.png");
             btnlogin=new JButton("Log In",ic1);
             ImageIcon ic2=new ImageIcon("image\\cncl.png");
             btncncl=new JButton("Cancel",ic2);
             pnl4.add(btnlogin);
             pnl4.add(btncncl);
             pnl5=new JPanel();
             pnl5.setBackground(new Color(140, 175, 222));
             lblHead=new JLabel("-----");
             lblHead.setFont(new Font("Century Gothic", Font.BOLD, 24));
             pnl5.add(lblHead);
             pnl.add(pnl5);
             pnl.add(pnl1);
             pnl.add(pnl2);
             pnl.add(pnl3);
             pnl.add(pnl4);
             pnl.setOpaque(false);
             pnl1.setOpaque(false);
             pnl2.setOpaque(false);
             pnl3.setOpaque(false);
             pnl4.setOpaque(false);
             pnl5.setOpaque(false);
             con.add(pnl);
             con2.add(con);
             setVisible(true);
             setSize(400, 440);
             setResizable(false);
      public JTextField getTfID() {
             return tfID;
      public JPasswordField getPs() {
             return ps;
      public JButton getBtnlogin() {
             return btnlogin;
      public JButton getBtncncl() {
             return btncncl;
      }
class Bckgrndtrnslogin extends JPanel
{
      public Bckgrndtrnslogin() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      }
      public void paint(Graphics g)
             Image a=Toolkit.getDefaultToolkit().getImage("image\\dwn.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
}
```

```
package bank.view;
import java.awt.*;
import javax.swing.*;
import javax.swing.border.LineBorder;
public class AccntDetails extends JFrame
{
      private JPanel pnl,pnl1,pnl2,pnl3,pnl4,pnl5,pnl6;
      private JTextField tfAccId;
      private JButton btnSrch;
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      private JLabel
lblAccId2, lblUid2, lblUid, lblHldrNm2, lblHldrNm, lblBal2, lblBal, lblMinBl2, lblMinBl, lbltype2, lbltyp
e;
      public AccntDetails(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y_AXIS));
             Bckgrndad con=new Bckgrndad();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
                                               ", ic1, JLabel.LEFT);
             11=new JLabel("Account Details
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(11);
             11.setCursor(new Cursor(Cursor.HAND_CURSOR));
             11.setToolTipText("Click Here To View Account Details Of Any Account");
             ImageIcon ic2=new ImageIcon("image\\2.jpg");
                                                       ", ic2, JLabel.LEFT);
             12=new JLabel("Deposit Money
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND_CURSOR));
             12.setToolTipText("Click Here To Deposit Money To Any Account");
             ImageIcon ic3=new ImageIcon("image\\3.jpg");
             13=new JLabel("Withdraw Money
                                                    ", ic3, JLabel.LEFT);
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND CURSOR));
             13.setToolTipText("Click Here To Withdraw Money From Any Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
             14=new JLabel("Transfer Money
                                                      ", ic4, JLabel.LEFT);
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND_CURSOR));
             14.setToolTipText("Click Here To Transfer Money From An Account To Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND CURSOR));
             17.setToolTipText("Click Here To View The Transaction Details");
             ImageIcon ic9=new ImageIcon("image\\e1.jpg");
             19=new JLabel("Edit Existing Account ", ic9, JLabel.LEFT);
             19.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(19);
             19.setCursor(new Cursor(Cursor.HAND_CURSOR));
             19.setToolTipText("Click Here To Edit Existing Account Details");
```

```
ImageIcon ic10=new ImageIcon("image\\d1.jpg");
110=new JLabel("Delete an Account
                                         ", ic10, JLabel.LEFT);
110.setBorder(new LineBorder(new Color(103, 165, 152)));
spn.add(110);
110.setCursor(new Cursor(Cursor.HAND CURSOR));
110.setToolTipText("Click Here to Delete An Existing Account");
spn.setSize(400,50);
spn.setVisible(true);
p1=new JPanel();
ImageIcon ic5=new ImageIcon("image\\6.jpg");
15=new JLabel("See All Accounts", ic5, JLabel.LEFT);
15.setToolTipText("Click Here To See All The Accounts");
15.setCursor(new Cursor(Cursor.HAND CURSOR));
ImageIcon ic6=new ImageIcon("image\\7.jpg");
16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
16.setCursor(new Cursor(Cursor.HAND CURSOR));
16.setToolTipText("Click Here To LogOut");
p1.setLayout(new BorderLayout());
p2=new JPanel();
p2.add(15);
p2.add(16);
p3=new JPanel();
ImageIcon ic11=new ImageIcon("image\\ca.png");
b1=new JButton("Create Account", ic11);
b1.setCursor(new Cursor(Cursor.HAND_CURSOR));
b1.setToolTipText("Click Here To Create A New Account");
b1.setPreferredSize(new Dimension(150,20));
p3.setLayout(new GridLayout(2, 2));
ImageIcon ic8=new ImageIcon("image\\8.jpg");
18=new JLabel(ic8);
bl1=new JLabel("");
bl2=new JLabel("");
p4=new JPanel(new GridLayout(2, 2));
p4.add(bl1);
p4.add(b12);
p4.add(b1);
p3.add(18);
p3.add(p4);
spn.setOpaque(false);
p1.setOpaque(false);
p2.setOpaque(false);
p3.setOpaque(false);
p4.setOpaque(false);
p1.add(p3,BorderLayout.WEST);
p1.add(p2,BorderLayout.EAST);
con.add(p1,BorderLayout.NORTH);
con.add(spn,BorderLayout.WEST);
pnl=new JPanel();
pnl.setLayout(new BoxLayout(pnl,BoxLayout.Y_AXIS));
pnl1=new JPanel();
lblAccId2=new JLabel("Enter The Account No:-");
lblAccId2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
tfAccId=new JTextField(16);
tfAccId.setFont(new Font("Century Gothic", Font.PLAIN, 16));
ImageIcon pic=new ImageIcon("image\\sr.png");
btnSrch=new JButton("Search",pic);
btnSrch.setToolTipText("Click to Find the Details of the Account No Entered");
btnSrch.setCursor(new Cursor(Cursor.HAND_CURSOR));
btnSrch.setFont(new Font("Century Gothic", Font.PLAIN, 16));
pnl1.add(lblAccId2);
pnl1.add(tfAccId);
pnl1.add(btnSrch);
lblUid2=new JLabel();
lblUid2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
lblUid=new JLabel();
```

```
lblUid.setFont(new Font("Century Gothic", Font.BOLD, 16));
      pnl2=new JPanel();
      pnl2.add(lblUid2);
      pnl2.add(lblUid);
      pnl3=new JPanel();
      lblHldrNm2=new JLabel();
      lblHldrNm2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      lblHldrNm=new JLabel();
      lblHldrNm.setFont(new Font("Century Gothic", Font.BOLD, 16));
      pnl3.add(lblHldrNm2);
      pnl3.add(lblHldrNm);
      lblBal2=new JLabel();
      lblBal2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      lblBal=new JLabel();
      lblBal.setFont(new Font("Century Gothic", Font.BOLD, 16));
      pnl4=new JPanel();
      pnl4.add(lblBal2);
      pnl4.add(lblBal);
      lbltype2=new JLabel();
      lbltype2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      lbltype=new JLabel();
      lbltype.setFont(new Font("Century Gothic", Font.BOLD, 16));
      pnl6=new JPanel();
      pnl6.add(lbltype2);
      pnl6.add(lbltype);
      lblMinBl2=new JLabel();
      lblMinBl2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      lblMinBl=new JLabel();
      lblMinBl.setFont(new Font("Century Gothic", Font.BOLD, 16));
      pnl5=new JPanel();
      pnl5.add(lblMinBl2);
      pnl5.add(lblMinBl);
      pnl.add(pnl1);
      pnl.add(pnl6);
      pnl.add(pnl2);
      pnl.add(pnl3);
      pnl.add(pnl4);
      pnl.add(pnl5);
      lblAccId2.setForeground(new Color(83, 72, 11));
      lblUid2.setForeground(new Color(83, 72, 11));
      lblUid.setForeground(new Color(83, 72, 11));
      lblHldrNm2.setForeground(new Color(83, 72, 11));
      lblHldrNm.setForeground(new Color(83, 72, 11));
      lblBal2.setForeground(new Color(83, 72, 11));
      lblBal.setForeground(new Color(83, 72, 11));
      lblMinBl2.setForeground(new Color(83, 72, 11));
      lblMinBl.setForeground(new Color(83, 72, 11));
      lbltype2.setForeground(new Color(83, 72, 11));
      lbltype.setForeground(new Color(83, 72, 11));
      pnl.setOpaque(false);
      pnl1.setOpaque(false);
      pnl2.setOpaque(false);
      pnl3.setOpaque(false);
      pnl4.setOpaque(false);
      pnl5.setOpaque(false);
      pnl6.setOpaque(false);
      con.add(pnl,BorderLayout.CENTER);
      con2.add(con);
      setVisible(true);
      setSize(1000, 550);
      setResizable(false);
public JLabel getL1() {
      return 11;
```

}

```
public JLabel getL2() {
      return 12;
public JLabel getL3() {
      return 13;
public JLabel getL4() {
      return 14;
public JLabel getL5() {
      return 15;
public JLabel getL6() {
      return 16;
public JLabel getL7() {
      return 17;
public JLabel getL9() {
      return 19;
}
public JLabel getL10() {
      return 110;
public JButton getB1() {
      return b1;
public JPanel getPnl() {
      return pnl;
public JTextField getTfAccId() {
      return tfAccId;
public JButton getBtnSrch() {
      return btnSrch;
public JLabel getLblUid() {
      return lblUid;
public JLabel getLblHldrNm() {
      return lblHldrNm;
public JLabel getLblBal() {
      return lblBal;
public JLabel getLblMinBl() {
      return lblMinBl;
}
public JLabel getLbltype() {
      return lbltype;
public JLabel getLblMinBl2() {
      return lblMinBl2;
public JLabel getLblAccId2() {
      return lblAccId2;
public JLabel getLblUid2() {
      return lblUid2;
public JLabel getLblHldrNm2() {
      return lblHldrNm2;
public JLabel getLblBal2() {
      return lblBal2;
```

```
public JLabel getLbltype2() {
    return lbltype2;
}

class Bckgrndad extends JPanel
{

public Bckgrndad() {
    setOpaque(false);
    setLayout(new BorderLayout());
    // TODO Auto-generated constructor stub
}

public void paint(Graphics g)
{
    Image a=Toolkit.getDefaultToolkit().getImage("image\\achm.jpg");
    g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
    super.paint(g);
}

}
```

```
package bank.view;
import java.awt.*;
import javafx.scene.layout.Border;
import javax.swing.*;
import javax.swing.border.BevelBorder;
import javax.swing.border.LineBorder;
public class AccntEdit extends JFrame
{
      private JPanel pnl,pnl1,pnl2,pnl3,pnl4,pnl5,pnl6,pnl7;
      private JTextField tfAccId,tfMinBl;
      private JButton btnSrch,btnDn;
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      private JComboBox<String> jcmType;
      private String a[]={"Savings Account","Current Account"};
      private JLabel
lblAccId2,lblUid,lblUid2,lblHldrNm2,lblHldrNm,lblBal2,lblBal,lblMinBl2,lbltype2;
      public AccntEdit(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y AXIS));
             Bckgrnded con=new Bckgrnded();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details
                                                   ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(11);
             11.setCursor(new Cursor(Cursor.HAND CURSOR));
             11.setToolTipText("Click Here To View Account Details Of Any Account");
             ImageIcon ic2=new ImageIcon("image\\2.jpg");
                                                         , ic2, JLabel.LEFT);
             12=new JLabel("Deposit Money
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND CURSOR));
             12.setToolTipText("Click Here To Deposit Money To Any Account");
             ImageIcon ic3=new ImageIcon("image\\3.jpg");
                                                     ", ic3, JLabel.LEFT);
             13=new JLabel("Withdraw Money
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND_CURSOR));
             13.setToolTipText("Click Here To Withdraw Money From Any Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
14-new Ilabel("Transfer Money
                                                        ", ic4, JLabel.LEFT);
             14=new JLabel("Transfer Money
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND CURSOR));
             14.setToolTipText("Click Here To Transfer Money From An Account To Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND_CURSOR));
             17.setToolTipText("Click Here To View The Transaction Details");
             ImageIcon ic9=new ImageIcon("image\\e1.jpg");
             19=new JLabel("Edit Existing Account ", ic9, JLabel.LEFT);
```

```
19.setBorder(new LineBorder(new Color(103, 165, 152)));
spn.add(19);
19.setCursor(new Cursor(Cursor.HAND_CURSOR));
19.setToolTipText("Click Here To Edit Existing Account Details");
ImageIcon ic10=new ImageIcon("image\\d1.jpg");
110=new JLabel("Delete an Account
                                      ", ic10, JLabel.LEFT);
110.setBorder(new LineBorder(new Color(103, 165, 152)));
spn.add(110);
110.setCursor(new Cursor(Cursor.HAND_CURSOR));
110.setToolTipText("Click Here to Delete An Existing Account");
spn.setSize(400,50);
spn.setVisible(true);
p1=new JPanel();
ImageIcon ic5=new ImageIcon("image\\6.jpg");
15=new JLabel("See All Accounts", ic5, JLabel.LEFT);
15.setToolTipText("Click Here To See All The Accounts");
15.setCursor(new Cursor(Cursor.HAND_CURSOR));
ImageIcon ic6=new ImageIcon("image\\7.jpg");
16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
16.setCursor(new Cursor(Cursor.HAND_CURSOR));
16.setToolTipText("Click Here To LogOut");
p1.setLayout(new BorderLayout());
p2=new JPanel();
p2.add(15);
p2.add(16);
p3=new JPanel();
ImageIcon ic11=new ImageIcon("image\\ca.png");
b1=new JButton("Create Account", ic11);
b1.setCursor(new Cursor(Cursor.HAND CURSOR));
b1.setToolTipText("Click Here To Create A New Account");
b1.setPreferredSize(new Dimension(150,20));
p3.setLayout(new GridLayout(2, 2));
ImageIcon ic8=new ImageIcon("image\\8.jpg");
18=new JLabel(ic8);
bl1=new JLabel("");
bl2=new JLabel("");
p4=new JPanel(new GridLayout(2, 2));
p4.add(bl1);
p4.add(b12);
p4.add(b1);
p3.add(18);
p3.add(p4);
spn.setOpaque(false);
p1.setOpaque(false);
p2.setOpaque(false);
p3.setOpaque(false);
p4.setOpaque(false);
p1.add(p3,BorderLayout.WEST);
p1.add(p2,BorderLayout.EAST);
con.add(p1,BorderLayout.NORTH);
con.add(spn,BorderLayout.WEST);
pnl=new JPanel();
pnl.setLayout(new BoxLayout(pnl,BoxLayout.Y AXIS));
pnl1=new JPanel();
lblAccId2=new JLabel("Account No:-");
lblAccId2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
tfAccId=new JTextField(16);
tfAccId.setFont(new Font("Century Gothic", Font.PLAIN, 16));
ImageIcon pic=new ImageIcon("image\\sr.png");
btnSrch=new JButton("Search",pic);
btnSrch.setToolTipText("Click to Find the Details of the Account No Entered");
btnSrch.setCursor(new Cursor(Cursor.HAND_CURSOR));
btnSrch.setFont(new Font("Century Gothic", Font.PLAIN, 16));
pnl1.add(lblAccId2);
pnl1.add(tfAccId);
```

```
pnl1.add(btnSrch);
lblUid2=new JLabel("Acoount Holder's Uid:-");
lblUid2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
lblUid=new JLabel();
lblUid.setFont(new Font("Century Gothic", Font.BOLD, 16));
pnl2=new JPanel();
pnl2.add(lblUid2);
pnl2.add(lblUid);
pnl3=new JPanel();
lblHldrNm2=new JLabel("Account Holder's Name:--");
lblHldrNm2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
lblHldrNm=new JLabel();
lblHldrNm.setFont(new Font("Century Gothic", Font.BOLD, 16));
pnl3.add(lblHldrNm2);
pnl3.add(lblHldrNm);
lblBal2=new JLabel("Account Balance:--");
lblBal2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
lblBal=new JLabel();
lblBal.setFont(new Font("Century Gothic", Font.BOLD, 16));
pnl4=new JPanel();
pnl4.add(lblBal2);
pnl4.add(lblBal);
lblMinBl2=new JLabel("Account Should Have Minimum Balance:-");
lblMinBl2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
tfMinBl=new JTextField(10);
tfMinBl.setFont(new Font("Century Gothic", Font. BOLD, 16));
pnl5=new JPanel();
pnl5.add(lblMinBl2);
pnl5.add(tfMinBl);
lbltype2=new JLabel("Type of The Account:--");
lbltype2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
jcmType=new JComboBox<String>(a);
jcmType.setFont(new Font("Century Gothic", Font.BOLD, 16));
pnl6=new JPanel();
pnl6.add(lbltype2);
pnl6.add(jcmType);
ImageIcon pic1=new ImageIcon("image\\reg.png");
btnDn=new JButton("Done",pic1);
btnDn.setFont(new Font("Century Gothic", Font.BOLD, 16));
pnl7=new JPanel();
pnl7.add(btnDn);
pnl.add(pnl1);
pnl.add(pnl6);
pnl.add(pnl2);
pnl.add(pnl3);
pnl.add(pnl4);
pnl.add(pnl5);
pnl.add(pnl7);
lblAccId2.setForeground(Color.ORANGE);
lblUid.setForeground(new Color(8, 106, 17));
lblUid2.setForeground(Color.ORANGE);
lblHldrNm2.setForeground(Color.ORANGE);
lblHldrNm.setForeground(new Color(8, 106, 17));
lblBal2.setForeground(Color.ORANGE);
lblBal.setForeground(new Color(8, 106, 17));
lblMinBl2.setForeground(Color.ORANGE);
lbltype2.setForeground(Color.ORANGE);
pnl.setOpaque(false);
pnl1.setOpaque(false);
pnl2.setOpaque(false);
pnl3.setOpaque(false);
pnl4.setOpaque(false);
pnl5.setOpaque(false);
pnl6.setOpaque(false);
pnl7.setOpaque(false);
```

```
con.add(pnl,BorderLayout.CENTER);
      con2.add(con);
      setVisible(true);
      setSize(1000, 550);
      setResizable(false);
public JLabel getL1() {
      return 11;
public JLabel getL2() {
      return 12;
public JLabel getL3() {
      return 13;
public JLabel getL4() {
      return 14;
}
public JLabel getL5() {
      return 15;
public JLabel getL6() {
      return 16;
}
public JLabel getL7() {
      return 17;
public JLabel getL9() {
      return 19;
public JLabel getL10() {
      return 110;
public JButton getB1() {
      return b1;
public JPanel getPnl() {
      return pnl;
public JLabel getlblUid() {
      return lblUid;
public JComboBox<String> getJcmType() {
      return jcmType;
}
public JTextField getTfAccId() {
      return tfAccId;
public JButton getBtnSrch() {
      return btnSrch;
public JTextField getTfMinBl() {
      return tfMinBl;
public JButton getBtnDn() {
      return btnDn;
public JLabel getLblHldrNm() {
      return lblHldrNm;
public JLabel getLblBal() {
      return lblBal;
public JLabel getLblMinBl2() {
```

```
return lblMinBl2;
}

class Bckgrnded extends JPanel
{

   public Bckgrnded() {
        setOpaque(false);
        setLayout(new BorderLayout());
        // TODO Auto-generated constructor stub
   }
   public void paint(Graphics g)
   {
        Image a=Toolkit.getDefaultToolkit().getImage("image\\delete.jpg");
        g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
        super.paint(g);
   }
}
```

```
package bank.view;
import java.awt.*;
import javax.swing.*;
import javax.swing.border.LineBorder;
public class AccntTrans extends JFrame
      private JLabel lbl1;
      private JTextField tf;
      private JPanel pnlw1,pnlw2,pnlw3;
      private JButton btnSrch;
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      public AccntTrans(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y_AXIS));
             Bckgrndtrn con=new Bckgrndtrn();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details
                                                      ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(11);
             11.setCursor(new Cursor(Cursor.HAND CURSOR));
             11.setToolTipText("Click Here To View Account Details Of Any Account");
             ImageIcon ic2=new ImageIcon("image\\2.jpg");
             12=new JLabel("Deposit Money
                                                         , ic2, JLabel.LEFT);
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             12.setCursor(new Cursor(Cursor.HAND CURSOR));
             12.setToolTipText("Click Here To Deposit Money To Any Account");
             ImageIcon ic3=new ImageIcon("image\\3.jpg");
                                                    ", ic3, JLabel.LEFT);
             13=new JLabel("Withdraw Money
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND CURSOR));
             13.setToolTipText("Click Here To Withdraw Money From Any Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
14=new JLabel("Transfer Money ", ic4, JLabel.LEFT);
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND CURSOR));
             14.setToolTipText("Click Here To Transfer Money From An Account To Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details
                                                   ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND CURSOR));
             17.setToolTipText("Click Here To View The Transaction Details");
             ImageIcon ic9=new ImageIcon("image\\e1.jpg");
             19=new JLabel("Edit Existing Account ", ic9, JLabel.LEFT);
             19.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(19);
             19.setCursor(new Cursor(Cursor.HAND_CURSOR));
             19.setToolTipText("Click Here To Edit Existing Account Details");
             ImageIcon ic10=new ImageIcon("image\\d1.jpg");
                                                  ", ic10, JLabel.LEFT);
             110=new JLabel("Delete an Account
             110.setBorder(new LineBorder(new Color(103, 165, 152)));
```

```
spn.add(110);
110.setCursor(new Cursor(Cursor.HAND CURSOR));
110.setToolTipText("Click Here to Delete An Existing Account");
spn.setSize(400,50);
spn.setVisible(true);
p1=new JPanel();
ImageIcon ic5=new ImageIcon("image\\6.jpg");
15=new JLabel("See All Accounts", ic5, JLabel.LEFT);
15.setToolTipText("Click Here To See All The Accounts");
15.setCursor(new Cursor(Cursor.HAND_CURSOR));
ImageIcon ic6=new ImageIcon("image\\7.jpg");
16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
16.setCursor(new Cursor(Cursor.HAND CURSOR));
16.setToolTipText("Click Here To LogOut");
p1.setLayout(new BorderLayout());
p2=new JPanel();
p2.add(15);
p2.add(16);
p3=new JPanel();
ImageIcon ic11=new ImageIcon("image\\ca.png");
b1=new JButton("Create Account", ic11);
b1.setCursor(new Cursor(Cursor.HAND_CURSOR));
b1.setToolTipText("Click Here To Create A New Account");
b1.setPreferredSize(new Dimension(150,20));
p3.setLayout(new GridLayout(2, 2));
ImageIcon ic8=new ImageIcon("image\\8.jpg");
18=new JLabel(ic8);
bl1=new JLabel("");
bl2=new JLabel("");
p4=new JPanel(new GridLayout(2, 2));
p4.add(bl1);
p4.add(b12);
p4.add(b1);
p3.add(18);
p3.add(p4);
spn.setOpaque(false);
p1.setOpaque(false);
p2.setOpaque(false);
p3.setOpaque(false);
p4.setOpaque(false);
p1.add(p3,BorderLayout.WEST);
p1.add(p2,BorderLayout.EAST);
con.add(p1,BorderLayout.NORTH);
con.add(spn,BorderLayout.WEST);
pnlw1=new JPanel();
pnlw1.setLayout(new BoxLayout(pnlw1, BoxLayout.Y_AXIS));
pnlw2=new JPanel();
tf=new JTextField(20);
tf.setToolTipText("Enter Account No Here");
tf.setFont(new Font("Century Gothic", Font.PLAIN, 16));
lbl1=new JLabel("Enter the Account No.:-");
lbl1.setFont(new Font("Century Gothic", Font.PLAIN, 16));
ImageIcon pic=new ImageIcon("image\\srch.png");
btnSrch=new JButton("Search", pic);
btnSrch.setToolTipText("Click Here to Search The Account No You have Entered");
btnSrch.setFont(new Font("Century Gothic", Font.PLAIN, 16));
pnlw2.add(lbl1);
pnlw2.add(tf);
pnlw3=new JPanel();
pnlw3.add(btnSrch);
pnlw1.add(pnlw2);
pnlw1.add(pnlw3);
pnlw1.setOpaque(false);
pnlw2.setOpaque(false);
pnlw3.setOpaque(false);
```

```
con.add(pnlw1,BorderLayout.CENTER);
             con2.add(con);
             setVisible(true);
             setSize(1000, 550);
             setResizable(false);
      public JLabel getL1() {
             return 11;
      public JLabel getL2() {
             return 12;
      public JLabel getL3() {
             return 13;
      public JLabel getL4() {
             return 14;
      public JLabel getL5() {
             return 15;
      }
      public JLabel getL6() {
             return 16;
      public JLabel getL7() {
             return 17;
      public JLabel getL9() {
             return 19;
      public JLabel getL10() {
             return 110;
      public JButton getB1() {
             return b1;
      public JTextField getTf() {
             return tf;
      public JButton getBtnSrch() {
             return btnSrch;
      }
class Bckgrndtrn extends JPanel
      public Bckgrndtrn() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      }
      public void paint(Graphics g)
      {
             Image a=Toolkit.getDefaultToolkit().getImage("image\\transctn.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
```

{

```
package bank.view;
import javax.swing.*;
import javax.swing.border.LineBorder;
import java.awt.*;
public class AccntTableVew extends JFrame{
      private JTable tble;
      private JScrollPane spn1;
      private JLabel lbl;
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      private JPanel pnl,pnl1;
      public AccntTableVew(String arg0, JTable tbl) throws HeadlessException {
             super(arg0);
             this.tble = tbl;
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y AXIS));
             Bckgrndtb con=new Bckgrndtb();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details
                                                        ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(l1);
             11.setCursor(new Cursor(Cursor.HAND CURSOR));
             11.setToolTipText("Click Here To View Account Details Of Any Account");
             ImageIcon ic2=new ImageIcon("image\\2.jpg");
                                                          , ic2, JLabel.LEFT);
             12=new JLabel("Deposit Money
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND_CURSOR));
             12.setToolTipText("Click Here To Deposit Money To Any Account");
             ImageIcon ic3=new ImageIcon("image\\3.jpg");
             13=new JLabel("Withdraw Money
                                                     ", ic3, JLabel.LEFT);
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND CURSOR));
             13.setToolTipText("Click Here To Withdraw Money From Any Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
14=new JLabel("Transfer Money ", ic4, JLabel.LEFT);
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND_CURSOR));
             14.setToolTipText("Click Here To Transfer Money From An Account To Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details
                                                   ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND CURSOR));
             17.setToolTipText("Click Here To View The Transaction Details");
             ImageIcon ic9=new ImageIcon("image\\e1.jpg");
             19=new JLabel("Edit Existing Account ", ic9, JLabel.LEFT);
             19.setBorder(new LineBorder(new Color(103, 165, 152)));
             19.setCursor(new Cursor(Cursor.HAND CURSOR));
             19.setToolTipText("Click Here To Edit Existing Account Details");
             ImageIcon ic10=new ImageIcon("image\\d1.jpg");
                                                       ', ic10, JLabel.LEFT);
             110=new JLabel("Delete an Account
             110.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(110);
             110.setCursor(new Cursor(Cursor.HAND_CURSOR));
```

```
110.setToolTipText("Click Here to Delete An Existing Account");
spn.setSize(400,50);
spn.setVisible(true);
p1=new JPanel();
ImageIcon ic5=new ImageIcon("image\\6.jpg");
15=new JLabel("See All Accounts", ic5, JLabel.LEFT);
15.setToolTipText("Click Here To See All The Accounts");
15.setCursor(new Cursor(Cursor.HAND_CURSOR));
ImageIcon ic6=new ImageIcon("image\\7.jpg");
16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
16.setCursor(new Cursor(Cursor.HAND CURSOR));
16.setToolTipText("Click Here To LogOut");
p1.setLayout(new BorderLayout());
p2=new JPanel();
p2.add(15);
p2.add(16);
p3=new JPanel();
ImageIcon ic11=new ImageIcon("image\\ca.png");
b1=new JButton("Create Account", ic11);
b1.setCursor(new Cursor(Cursor.HAND_CURSOR));
b1.setToolTipText("Click Here To Create A New Account");
b1.setPreferredSize(new Dimension(150,20));
p3.setLayout(new GridLayout(2, 2));
ImageIcon ic8=new ImageIcon("image\\8.jpg");
18=new JLabel(ic8);
bl1=new JLabel("");
bl2=new JLabel("");
p4=new JPanel(new GridLayout(2, 2));
p4.add(bl1);
p4.add(b12);
p4.add(b1);
p3.add(18);
p3.add(p4);
spn.setOpaque(false);
p1.setOpaque(false);
p2.setOpaque(false);
p3.setOpaque(false);
p4.setOpaque(false);
p1.add(p3,BorderLayout.WEST);
p1.add(p2,BorderLayout.EAST);
con.add(p1,BorderLayout.NORTH);
con.add(spn,BorderLayout.WEST);
lbl=new JLabel();
lbl.setFont(new Font("Century Gothic", Font.PLAIN, 16));
tble.setFont(new Font("Century Gothic", Font.PLAIN, 16));
tble.setBorder(new LineBorder(new Color(60, 155, 136)));
spn1=new JScrollPane(tble);
pnl=new JPanel();
pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y_AXIS));
pnl1=new JPanel();
pnl1.add(lbl);
pnl.add(pnl1);
tble.setOpaque(false);
spn1.setOpaque(false);
pnl.add(spn1);
pnl.setOpaque(false);
pnl1.setOpaque(false);
con.add(pnl,BorderLayout.CENTER);
con2.add(con);
setVisible(true);
setSize(1000, 550);
setResizable(false);
```

```
public JLabel getLbl() {
             return lbl;
      public JLabel getL1() {
             return 11;
      public JLabel getL2() {
             return 12;
      public JLabel getL3() {
             return 13;
      public JLabel getL4() {
             return 14;
      public JLabel getL5() {
             return 15;
      public JLabel getL6() {
             return 16;
      }
      public JLabel getL7() {
             return 17;
      public JLabel getL9() {
             return 19;
      public JLabel getL10() {
             return 110;
      public JButton getB1() {
             return b1;
}
class Bckgrndtb extends JPanel
{
      public Bckgrndtb() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      public void paint(Graphics g)
      {
             Image a=Toolkit.getDefaultToolkit().getImage("image\\frtb.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
}
```

```
package bank.view;
import javax.swing.*;
import javax.swing.border.BevelBorder;
import javax.swing.border.LineBorder;
import java.awt.*;
public class AccountantHome extends JFrame
{
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      public AccountantHome(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y AXIS));
             Bckgrnd con=new Bckgrnd();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details
                                                        ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(l1);
             11.setCursor(new Cursor(Cursor.HAND CURSOR));
             11.setToolTipText("Click Here To View Account Details Of Any Account");
             ImageIcon ic2=new ImageIcon("image\\2.jpg");
                                                          , ic2, JLabel.LEFT);
             12=new JLabel("Deposit Money
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND CURSOR));
             12.setToolTipText("Click Here To Deposit Money To Any Account");
             ImageIcon ic3=new ImageIcon("image\\3.jpg");
             13=new JLabel("Withdraw Money
                                                    ", ic3, JLabel.LEFT);
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND_CURSOR));
             13.setToolTipText("Click Here To Withdraw Money From Any Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
14=new JLabel("Transfer Money ", ic4, JLabel.LEFT);
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND_CURSOR));
             14.setToolTipText("Click Here To Transfer Money From An Account To Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details
                                                    ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND_CURSOR));
             17.setToolTipText("Click Here To View The Transaction Details");
             ImageIcon ic9=new ImageIcon("image\\e1.jpg");
             19=new JLabel("Edit Existing Account ", ic9, JLabel.LEFT);
             19.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(19);
             19.setCursor(new Cursor(Cursor.HAND_CURSOR));
             19.setToolTipText("Click Here To Edit Existing Account Details");
             ImageIcon ic10=new ImageIcon("image\\d1.jpg");
             110=new JLabel("Delete an Account
                                                     ", ic10, JLabel.LEFT);
             110.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(110);
             110.setCursor(new Cursor(Cursor.HAND_CURSOR));
             110.setToolTipText("Click Here to Delete An Existing Account");
             spn.setSize(400,50);
```

```
spn.setVisible(true);
      p1=new JPanel();
      ImageIcon ic5=new ImageIcon("image\\6.jpg");
      15=new JLabel("See All Accounts", ic5, JLabel.LEFT);
      15.setToolTipText("Click Here To See All The Accounts");
      15.setCursor(new Cursor(Cursor.HAND CURSOR));
      ImageIcon ic6=new ImageIcon("image\\7.jpg");
      16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
      16.setCursor(new Cursor(Cursor.HAND_CURSOR));
      16.setToolTipText("Click Here To LogOut");
      p1.setLayout(new BorderLayout());
      p2=new JPanel();
      p2.add(15);
      p2.add(16);
      p3=new JPanel();
      ImageIcon ic11=new ImageIcon("image\\ca.png");
      b1=new JButton("Create Account", ic11);
      b1.setCursor(new Cursor(Cursor.HAND CURSOR));
      b1.setToolTipText("Click Here To Create A New Account");
      b1.setPreferredSize(new Dimension(150,20));
      p3.setLayout(new GridLayout(2, 2));
      ImageIcon ic8=new ImageIcon("image\\8.jpg");
      18=new JLabel(ic8);
      bl1=new JLabel("");
      bl2=new JLabel("");
      p4=new JPanel(new GridLayout(2, 2));
      p4.add(bl1);
      p4.add(b12);
      p4.add(b1);
      p3.add(18);
      p3.add(p4);
      spn.setOpaque(false);
      p1.setOpaque(false);
      p2.setOpaque(false);
      p3.setOpaque(false);
      p4.setOpaque(false);
      p1.add(p3,BorderLayout.WEST);
      p1.add(p2,BorderLayout.EAST);
      con.add(p1,BorderLayout.NORTH);
      con.add(spn,BorderLayout.WEST);
      con2.add(con);
      setVisible(true);
      setSize(1000, 550);
      setResizable(false);
public JLabel getL1() {
      return 11;
public JLabel getL2() {
      return 12;
public JLabel getL3() {
      return 13;
public JLabel getL4() {
      return 14;
public JLabel getL5() {
      return 15;
public JLabel getL6() {
      return 16;
public JLabel getL7() {
      return 17;
```

```
}
      public JLabel getL9() {
             return 19;
      public JLabel getL10() {
             return 110;
      public JButton getB1() {
             return b1;
class Bckgrnd extends JPanel
{
      public Bckgrnd() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      public void paint(Graphics g)
      {
             Image a=Toolkit.getDefaultToolkit().getImage("image\\achmf.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
}
```

```
package bank.view;
import java.awt.*;
import javax.swing.*;
public class AccountDeposite extends AccntDetails
      private JPanel pn17,pn18;
      private JTextField tfDepAmt;
      private JLabel 111;
      private JButton btnDeps;
      public AccountDeposite(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             pnl7=new JPanel();
             pnl8=new JPanel();
             tfDepAmt=new JTextField(10);
             tfDepAmt.setFont(new Font("Century Gothic", Font.BOLD, 16));
             tfDepAmt.setToolTipText("Enter The Deposit Amount Here");
             111=new JLabel("Enter the Amount To Be Deposited:-");
             111.setFont(new Font("Century Gothic", Font.BOLD, 16));
             pnl7.add(l11);
             pnl7.add(tfDepAmt);
             pnl8=new JPanel();
             ImageIcon pic1=new ImageIcon("image\\dep.png");
             btnDeps=new JButton("Deposit",pic1);
             btnDeps.setFont(new Font("Century Gothic", Font.BOLD, 16));
             pnl8.add(btnDeps);
             pnl7.setOpaque(false);
             pnl8.setOpaque(false);
             super.getPnl().add(pnl7);
             super.getPnl().add(pnl8);
      public JTextField getTfDepAmt() {
             return tfDepAmt;
      public JButton getBtnDeps() {
             return btnDeps;
      }
}
```

```
package bank.view;
import java.awt.*;
import javax.swing.*;
public class AccountWithdraw extends AccntDetails
{
      private JPanel pn17,pn18;
      private JTextField tfWithdAmt;
      private JLabel 111;
      private JButton btnWithdraw;
      public AccountWithdraw(String arg0) throws HeadlessException {
             // TODO Auto-generated constructor stub
             pnl7=new JPanel();
             pnl8=new JPanel();
             tfWithdAmt=new JTextField(10);
             tfWithdAmt.setFont(new Font("Century Gothic", Font.BOLD, 16));
             tfWithdAmt.setToolTipText("Enter The Amount Here");
             111=new JLabel("Enter the Amount to be Withdrawn:-");
             111.setFont(new Font("Century Gothic", Font.BOLD, 16));
             pnl7.add(l11);
             pnl7.add(tfWithdAmt);
             pnl8=new JPanel();
             ImageIcon pic1=new ImageIcon("image\\wtdr.png");
             btnWithdraw=new JButton("Withdraw",pic1);
             btnWithdraw.setFont(new Font("Century Gothic", Font.BOLD, 16));
             pnl8.add(btnWithdraw);
             pnl7.setOpaque(false);
             pnl8.setOpaque(false);
             super.getPnl().add(pnl7);
             super.getPnl().add(pnl8);
      public JTextField getTfWithdAmt() {
             return tfWithdAmt;
      public JButton getBtnWithdraw() {
             return btnWithdraw;
      }
```

```
package bank.view;
import java.awt.HeadlessException;
import javax.swing.*;
public class DeleteAccount extends AccntDetails
{
      private JPanel pnl7;
      private JButton btnDelete;
      public DeleteAccount(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             pnl7=new JPanel();
             ImageIcon ic=new ImageIcon("image\\d.png");
             btnDelete=new JButton("Delete",ic);
             pnl7.add(btnDelete);
             pnl7.setOpaque(false);
             super.getPnl().add(pnl7);
      public JButton getBtnDelete() {
             return btnDelete;
      }
}
```

```
package bank.view;
import java.awt.*;
import javax.swing.*;
import javax.swing.border.LineBorder;
public class AccTransferMoney extends JFrame
{
      private JLabel lbl1,lbl2,lbl3,lbl4;
      private JPanel pnl,pnl1,pnl2,pnl3,pnl4,pnl5;
      private JTextField tf1,tf2,tf3;
      private JButton btnTrans;
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      public AccTransferMoney(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y_AXIS));
             Bckgrndtnsf con=new Bckgrndtnsf();
             Container con2=getContentPane();
             bl3=new JLabel("
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(11);
             11.setCursor(new Cursor(Cursor.HAND_CURSOR));
             11.setToolTipText("Click Here To View Account Details Of Any Account");
             ImageIcon ic2=new ImageIcon("image\\2.jpg");
                                                       ", ic2, JLabel.LEFT);
             12=new JLabel("Deposit Money
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND CURSOR));
             12.setToolTipText("Click Here To Deposit Money To Any Account");
             ImageIcon ic3=new ImageIcon("image\\3.jpg");
             13=new JLabel("Withdraw Money", ic3, JLabel.LEFT);
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND CURSOR));
             13.setToolTipText("Click Here To Withdraw Money From Any Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
                                                      ", ic4, JLabel.LEFT);
             14=new JLabel("Transfer Money
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND_CURSOR));
             14.setToolTipText("Click Here To Transfer Money From An Account To Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND CURSOR));
             17.setToolTipText("Click Here To View The Transaction Details");
             ImageIcon ic9=new ImageIcon("image\\e1.jpg");
             19=new JLabel("Edit Existing Account ", ic9, JLabel.LEFT);
             19.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(19);
             19.setCursor(new Cursor(Cursor.HAND_CURSOR));
             19.setToolTipText("Click Here To Edit Existing Account Details");
             ImageIcon ic10=new ImageIcon("image\\d1.jpg");
                                                      ', ic10, JLabel.LEFT);
             110=new JLabel("Delete an Account
```

```
110.setBorder(new LineBorder(new Color(103, 165, 152)));
spn.add(110);
110.setCursor(new Cursor(Cursor.HAND_CURSOR));
110.setToolTipText("Click Here to Delete An Existing Account");
spn.setSize(400,50);
spn.setVisible(true);
p1=new JPanel();
ImageIcon ic5=new ImageIcon("image\\6.jpg");
15=new JLabel("See All Accounts", ic5, JLabel.LEFT);
15.setToolTipText("Click Here To See All The Accounts");
15.setCursor(new Cursor(Cursor.HAND CURSOR));
ImageIcon ic6=new ImageIcon("image\\7.jpg");
16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
16.setCursor(new Cursor(Cursor.HAND_CURSOR));
16.setToolTipText("Click Here To LogOut");
p1.setLayout(new BorderLayout());
p2=new JPanel();
p2.add(15);
p2.add(16);
p3=new JPanel();
ImageIcon ic11=new ImageIcon("image\\ca.png");
b1=new JButton("Create Account", ic11);
b1.setCursor(new Cursor(Cursor.HAND_CURSOR));
b1.setToolTipText("Click Here To Create A New Account");
b1.setPreferredSize(new Dimension(150,20));
p3.setLayout(new GridLayout(2, 2));
ImageIcon ic8=new ImageIcon("image\\8.jpg");
18=new JLabel(ic8);
bl1=new JLabel("");
bl2=new JLabel("");
p4=new JPanel(new GridLayout(2, 2));
p4.add(bl1);
p4.add(b12);
p4.add(b1);
p3.add(18);
p3.add(p4);
spn.setOpaque(false);
p1.setOpaque(false);
p2.setOpaque(false);
p3.setOpaque(false);
p4.setOpaque(false);
p1.add(p3,BorderLayout.WEST);
p1.add(p2,BorderLayout.EAST);
con.add(p1,BorderLayout.NORTH);
con.add(spn,BorderLayout.WEST);
pnl=new JPanel();
pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y AXIS));
pnl1=new JPanel();
lbl1=new JLabel("-----");
lbl1.setFont(new Font("Century Gothic", Font.PLAIN, 36));
pnl1.add(lbl1);
pnl2=new JPanel();
1b12=new JLabel("Enter Sender's Bank Account No:-");
1bl2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
tf1=new JTextField(20);
tf1.setFont(new Font("Century Gothic", Font.PLAIN, 16));
pn12.add(1b12);
pnl2.add(tf1);
pnl3=new JPanel();
1b13=new JLabel("Enter Receiver's Bank Account No:-");
lbl3.setFont(new Font("Century Gothic", Font.PLAIN, 16));
tf2=new JTextField(20);
tf2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
pnl3.add(1bl3);
```

```
pnl3.add(tf2);
      pnl4=new JPanel();
      ImageIcon ic=new ImageIcon("image\\mntrnsf.png");
      btnTrans=new JButton("Transfer",ic);
      btnTrans.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      pnl4.add(btnTrans);
      pnl5=new JPanel();
      lbl4=new JLabel("Enter Amount:-");
      lbl4.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      tf3=new JTextField(20);
      tf3.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      pn15.add(1b14);
      pn15.add(tf3);
      pnl.add(pnl1);
      pnl.add(pnl2);
      pnl.add(pnl3);
      pnl.add(pnl5);
      pnl.add(pnl4);
      pnl.setOpaque(false);
      pnl1.setOpaque(false);
      pnl2.setOpaque(false);
      pnl3.setOpaque(false);
      pnl4.setOpaque(false);
      pnl5.setOpaque(false);
      con.add(pnl,BorderLayout.CENTER);
      con2.add(con);
      setVisible(true);
      setSize(1000, 550);
      setResizable(false);
public JLabel getL1() {
      return 11;
public JLabel getL2() {
      return 12;
public JLabel getL3() {
      return 13;
public JLabel getL4() {
      return 14;
public JLabel getL5() {
      return 15;
public JLabel getL6() {
      return 16;
}
public JLabel getL7() {
      return 17;
public JLabel getL9() {
      return 19;
public JLabel getL10() {
      return 110;
public JButton getB1() {
      return b1;
public JTextField getTf1() {
      return tf1;
public JTextField getTf2() {
      return tf2;
```

```
}
      public JButton getBtnTrans() {
             return btnTrans;
      }
      public JTextField getTf3() {
             return tf3;
      }
}
class Bckgrndtnsf extends JPanel
{
      public Bckgrndtnsf() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      public void paint(Graphics g)
      {
             Image a=Toolkit.getDefaultToolkit().getImage("image\\acctnf.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
}
```

```
package bank.view;
import java.awt.*;
import javax.swing.*;
import javax.swing.border.LineBorder;
public class CreatAccnt extends JFrame
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      private JPanel pnl,pnl1,pnl2;
      private JButton btnSaving,btnCurrent;
      public CreatAccnt(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y AXIS));
             Bckgrndcr con=new Bckgrndcr();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(bl3);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details
                                                        ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(l1);
             11.setCursor(new Cursor(Cursor.HAND CURSOR));
             11.setToolTipText("Click Here To View Account Details Of Any Account");
             ImageIcon ic2=new ImageIcon("image\\2.jpg");
                                                          , ic2, JLabel.LEFT):
             12=new JLabel("Deposit Money
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND_CURSOR));
             12.setToolTipText("Click Here To Deposit Money To Any Account");
             ImageIcon ic3=new ImageIcon("image\\3.jpg");
             13=new JLabel("Withdraw Money
                                                     ", ic3, JLabel.LEFT);
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND CURSOR));
             13.setToolTipText("Click Here To Withdraw Money From Any Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
14=new JLabel("Transfer Money ", ic4, JLabel.LEFT);
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND_CURSOR));
             14.setToolTipText("Click Here To Transfer Money From An Account To Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details
                                                   ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND CURSOR));
             17.setToolTipText("Click Here To View The Transaction Details");
             ImageIcon ic9=new ImageIcon("image\\e1.jpg");
             19=new JLabel("Edit Existing Account ", ic9, JLabel.LEFT);
             19.setBorder(new LineBorder(new Color(103, 165, 152)));
             19.setCursor(new Cursor(Cursor.HAND CURSOR));
             19.setToolTipText("Click Here To Edit Existing Account Details");
             ImageIcon ic10=new ImageIcon("image\\d1.jpg");
                                                       ', ic10, JLabel.LEFT);
             110=new JLabel("Delete an Account
             110.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(110);
             110.setCursor(new Cursor(Cursor.HAND_CURSOR));
```

```
110.setToolTipText("Click Here to Delete An Existing Account");
spn.setSize(400,50);
spn.setVisible(true);
p1=new JPanel();
ImageIcon ic5=new ImageIcon("image\\6.jpg");
15=new JLabel("See All Accounts", ic5, JLabel.LEFT);
15.setToolTipText("Click Here To See All The Accounts");
15.setCursor(new Cursor(Cursor.HAND CURSOR));
ImageIcon ic6=new ImageIcon("image\\7.jpg");
16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
16.setCursor(new Cursor(Cursor.HAND CURSOR));
16.setToolTipText("Click Here To LogOut");
p1.setLayout(new BorderLayout());
p2=new JPanel();
p2.add(15);
p2.add(16);
p3=new JPanel();
ImageIcon ic11=new ImageIcon("image\\ca.png");
b1=new JButton("Create Account", ic11);
b1.setCursor(new Cursor(Cursor.HAND_CURSOR));
b1.setToolTipText("Click Here To Create A New Account");
b1.setPreferredSize(new Dimension(150,20));
p3.setLayout(new GridLayout(2, 2));
ImageIcon ic8=new ImageIcon("image\\8.jpg");
18=new JLabel(ic8);
bl1=new JLabel("");
bl2=new JLabel("");
p4=new JPanel(new GridLayout(2, 2));
p4.add(bl1);
p4.add(b12);
p4.add(b1);
p3.add(18);
p3.add(p4);
spn.setOpaque(false);
p1.setOpaque(false);
p2.setOpaque(false);
p3.setOpaque(false);
p4.setOpaque(false);
p1.add(p3,BorderLayout.WEST);
p1.add(p2,BorderLayout.EAST);
con.add(p1,BorderLayout.NORTH);
con.add(spn,BorderLayout.WEST);
pnl=new JPanel();
pnl.setLayout(new BoxLayout(pnl, BoxLayout.X_AXIS));
pnl1=new JPanel();
ImageIcon pc1=new ImageIcon("image\\sa.png");
btnSaving=new JButton("\nSavings Account",pc1);
btnSaving.setToolTipText("Click Here to Create an Savings Bank Account");
btnSaving.setFont(new Font("Century Gothic", Font.PLAIN, 16));
pnl1.add(btnSaving);
pnl.add(pnl1);
pnl2=new JPanel();
ImageIcon pc2=new ImageIcon("image\\caa.png");
btnCurrent=new JButton("\nCurrent Account",pc2);
btnCurrent.setToolTipText("Click Here to Create an Current Bank Account");
btnCurrent.setFont(new Font("Century Gothic", Font.PLAIN, 16));
pnl2.add(btnCurrent);
pnl.add(pnl2);
pnl.setOpaque(false);
pnl1.setOpaque(false);
pnl2.setOpaque(false);
con.add(pnl,BorderLayout.CENTER);
con2.add(con);
```

```
setVisible(true);
             setSize(1000, 550);
             setResizable(false);
      public JLabel getL1() {
             return 11;
      public JLabel getL2() {
             return 12;
      public JLabel getL3() {
             return 13;
      public JLabel getL4() {
             return 14;
      public JLabel getL5() {
             return 15;
      }
      public JLabel getL6() {
             return 16;
      public JLabel getL7() {
             return 17;
      }
      public JLabel getL9() {
             return 19;
      public JLabel getL10() {
             return 110;
      public JButton getB1() {
             return b1;
      public JButton getBtnSaving() {
             return btnSaving;
      public JButton getBtnCurrent() {
             return btnCurrent;
      }
class Bckgrndcr extends JPanel
      public Bckgrndcr() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      }
      public void paint(Graphics g)
             Image a=Toolkit.getDefaultToolkit().getImage("image\\cra.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
```

{

```
package bank.view;
import java.awt.*;
import java.text.SimpleDateFormat;
import java.util.Date;
import javax.swing.*;
import javax.swing.border.LineBorder;
public class CreatAccntM extends JFrame
{
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      private JComboBox<String> jcb;
      private JComboBox<String> uid;
      private String [] acd={"Savings Account","Current Account"};
      private String [] uidar;
      private JTextField tfUid,tfAmnt,tfMinA;
      private JLabel lbUid2,lbAmt2,lbMin2,lbHold,lbHold2,lblAccn,lblAccn2,lblType;
      private JPanel pnl,pnl1,pnl2,pnl3,pnl4,pnl5,pnl6,pnl7;
      private JButton btnCreate;
      public CreatAccntM(String arg0,String [] uidr) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y AXIS));
             Bckgrndcm con=new Bckgrndcm();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details
                                                  ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(11);
             11.setCursor(new Cursor(Cursor.HAND CURSOR));
             11.setToolTipText("Click Here To View Account Details Of Any Account");
             ImageIcon ic2=new ImageIcon("image\\2.jpg");
                                                         , ic2, JLabel.LEFT);
             12=new JLabel("Deposit Money
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND CURSOR));
             12.setToolTipText("Click Here To Deposit Money To Any Account");
             ImageIcon ic3=new ImageIcon("image\\3.jpg");
                                                     ", ic3, JLabel.LEFT);
             13=new JLabel("Withdraw Money
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND_CURSOR));
             13.setToolTipText("Click Here To Withdraw Money From Any Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
14-new Ilabel("Transfer Money "
                                                       ", ic4, JLabel.LEFT);
             14=new JLabel("Transfer Money
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND CURSOR));
             14.setToolTipText("Click Here To Transfer Money From An Account To Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND_CURSOR));
             17.setToolTipText("Click Here To View The Transaction Details");
             ImageIcon ic9=new ImageIcon("image\\e1.jpg");
             19=new JLabel("Edit Existing Account ", ic9, JLabel.LEFT);
```

```
19.setBorder(new LineBorder(new Color(103, 165, 152)));
spn.add(19);
19.setCursor(new Cursor(Cursor.HAND CURSOR));
19.setToolTipText("Click Here To Edit Existing Account Details");
ImageIcon ic10=new ImageIcon("image\\d1.jpg");
110=new JLabel("Delete an Account
                                        ", ic10, JLabel.LEFT);
110.setBorder(new LineBorder(new Color(103, 165, 152)));
spn.add(110);
110.setCursor(new Cursor(Cursor.HAND_CURSOR));
110.setToolTipText("Click Here to Delete An Existing Account");
spn.setSize(400,50);
spn.setVisible(true);
p1=new JPanel();
ImageIcon ic5=new ImageIcon("image\\6.jpg");
15=new JLabel("See All Accounts", ic5, JLabel.LEFT);
15.setToolTipText("Click Here To See All The Accounts");
15.setCursor(new Cursor(Cursor.HAND_CURSOR));
ImageIcon ic6=new ImageIcon("image\\7.jpg");
16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
16.setCursor(new Cursor(Cursor.HAND_CURSOR));
16.setToolTipText("Click Here To LogOut");
p1.setLayout(new BorderLayout());
p2=new JPanel();
p2.add(15);
p2.add(16);
p3=new JPanel();
ImageIcon ic11=new ImageIcon("image\\ca.png");
b1=new JButton("Create Account", ic11);
b1.setCursor(new Cursor(Cursor.HAND CURSOR));
b1.setToolTipText("Click Here To Create A New Account");
b1.setPreferredSize(new Dimension(150,20));
p3.setLayout(new GridLayout(2, 2));
ImageIcon ic8=new ImageIcon("image\\8.jpg");
18=new JLabel(ic8);
bl1=new JLabel("");
bl2=new JLabel("");
p4=new JPanel(new GridLayout(2, 2));
p4.add(bl1);
p4.add(b12);
p4.add(b1);
p3.add(18);
p3.add(p4);
spn.setOpaque(false);
p1.setOpaque(false);
p2.setOpaque(false);
p3.setOpaque(false);
p4.setOpaque(false);
p1.add(p3,BorderLayout.WEST);
p1.add(p2,BorderLayout.EAST);
con.add(p1,BorderLayout.NORTH);
con.add(spn,BorderLayout.WEST);
uidar=uidr;
pnl=new JPanel();
pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y_AXIS));
lblAccn2=new JLabel("Account No:-");
lblAccn2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
lblAccn=new JLabel("sh");
lblAccn.setForeground(Color.BLUE);
lblAccn.setFont(new Font("Century Gothic", Font.BOLD, 16));
pnl1=new JPanel();
pnl1.add(lblAccn2);
pnl1.add(lblAccn);
pnl2=new JPanel();
lbUid2=new JLabel("Enter the Uid:-");
```

```
lbUid2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      uid=new JComboBox<String>(uidar);
      pnl2.add(lbUid2);
      pnl2.add(uid);
      lbHold2=new JLabel("The Holder's Name is:-");
      lbHold2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      lbHold=new JLabel();
      lbHold.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      pnl3=new JPanel();
      pnl3.add(lbHold2);
      pnl3.add(lbHold);
      lblType=new JLabel("Select The Account Type:-");
      lblType.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      jcb=new JComboBox<String>(acd);
      jcb.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      pnl4=new JPanel();
      pnl4.add(lblType);
      pnl4.add(jcb);
      lbAmt2=new JLabel("Enter The Opening Amount Balance:-");
      lbAmt2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      tfAmnt=new JTextField(10);
      pnl5=new JPanel();
      pnl5.add(lbAmt2);
      pnl5.add(tfAmnt);
      lbMin2=new JLabel("Shambo");
      lbMin2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      tfMinA=new JTextField(10);
      pnl6=new JPanel();
      pnl6.add(lbMin2);
      pnl6.add(tfMinA);
      pnl7=new JPanel();
      ImageIcon pic=new ImageIcon("image\\caa.png");
      btnCreate=new JButton("Create",pic);
      btnCreate.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      pnl7.add(btnCreate);
      pnl.add(pnl1);
      pnl.add(pnl2);
      pnl.add(pnl3);
      pnl.add(pnl4);
      pnl.add(pnl5);
      pnl.add(pnl6);
      pnl.add(pnl7);
      pnl.setOpaque(false);
      pnl1.setOpaque(false);
      pnl2.setOpaque(false);
      pnl3.setOpaque(false);
      pnl4.setOpaque(false);
      pnl5.setOpaque(false);
      pnl6.setOpaque(false);
      pnl7.setOpaque(false);
      con.add(pnl,BorderLayout.CENTER);
      con2.add(con);
      setVisible(true);
      setSize(1000, 550);
      setResizable(false);
public JLabel getL1() {
      return 11;
public JLabel getL2() {
      return 12;
public JLabel getL3() {
      return 13;
```

```
public JLabel getL4() {
             return 14;
      public JLabel getL5() {
             return 15;
      public JLabel getL6() {
             return 16;
      public JLabel getL7() {
             return 17;
      public JLabel getL9() {
             return 19;
      public JLabel getL10() {
             return 110;
      public JButton getB1() {
             return b1;
      public JComboBox<String> getJcb() {
             return jcb;
      }
      public JComboBox<String> getUid() {
             return uid;
      public String[] getAcd() {
             return acd;
      public String[] getUidar() {
             return uidar;
      public JTextField getTfUid() {
             return tfUid;
      public JTextField getTfAmnt() {
             return tfAmnt;
      public JTextField getTfMinA() {
             return tfMinA;
      public JLabel getLbHold() {
             return lbHold;
      }
      public JLabel getLblAccn() {
             return lblAccn;
      public JButton getBtnCreate() {
             return btnCreate;
      public JLabel getLbMin2() {
             return lbMin2;
class Bckgrndcm extends JPanel
      public Bckgrndcm() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      public void paint(Graphics g)
```

```
{
    Image a=Toolkit.getDefaultToolkit().getImage("image\\crm.jpg");
    g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
    super.paint(g);
}
```

```
package bank.view;
import java.awt.*;
import javax.swing.*;
import javax.swing.border.LineBorder;
public class UsrTransctnDet1s extends JFrame{
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      private String [] data;
      private JComboBox<String> jcmacc;
      private JPanel pnl,pnl1,pnl2;
      private JLabel lbl1;
      private JButton btnTransctn;
      public UsrTransctnDetls(String arg0, String[] data)throws HeadlessException {
             super(arg0);
             this.data = data;
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y_AXIS));
             UBckgrndtrns con=new UBckgrndtrns();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(11);
             11.setCursor(new Cursor(Cursor.HAND_CURSOR));
             11.setToolTipText("Click Here to View Account Details of any Account");
             ImageIcon ic2=new ImageIcon("image\\6.jpg");
                                                     ", ic2, JLabel.LEFT);
             12=new JLabel("See All Account
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND CURSOR));
             12.setToolTipText("Click Here to See All Your Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
14=new JLabel("Transfer Money ", ic4, JLabel.LEFT);
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND CURSOR));
             14.setToolTipText("Click Here to Transfer Money from an Account to Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND_CURSOR));
             17.setToolTipText("Click Here to view the Transaction Details");
             ImageIcon ic3=new ImageIcon("image\\cp.png");
             13=new JLabel("Change Password", ic3, JLabel.LEFT);
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND CURSOR));
             13.setToolTipText("Click Here To Change Password");
             ImageIcon ic9=new ImageIcon("image\\e1.jpg");
             19=new JLabel("Edit Your Details", ic9, JLabel. LEFT);
             19.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(19);
             19.setCursor(new Cursor(Cursor.HAND_CURSOR));
             19.setToolTipText("Click Here to Edit Your Personal Details");
             spn.setSize(400,50);
             spn.setVisible(true);
```

```
p1=new JPanel();
      ImageIcon ic6=new ImageIcon("image\\7.jpg");
      16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
      16.setCursor(new Cursor(Cursor.HAND_CURSOR));
      16.setToolTipText("Click Here to LogOut");
      p1.setLayout(new BorderLayout());
      p2=new JPanel();
      p2.add(16);
      p3=new JPanel();
      ImageIcon ic11=new ImageIcon("image\\loan.png");
      b1=new JButton("Apply For Loan", ic11);
      b1.setCursor(new Cursor(Cursor.HAND_CURSOR));
      b1.setToolTipText("Click Here To Apply For Loan");
      b1.setPreferredSize(new Dimension(150,20));
      p3.setLayout(new GridLayout(2, 2));
      ImageIcon ic8=new ImageIcon("image\\8.jpg");
      18=new JLabel(ic8);
      bl1=new JLabel("");
bl2=new JLabel("");
      p4=new JPanel(new GridLayout(2, 2));
      p4.add(bl1);
      p4.add(b12);
      p4.add(b1);
      p3.add(18);
      p3.add(p4);
      spn.setOpaque(false);
      p1.setOpaque(false);
      p2.setOpaque(false);
      p3.setOpaque(false);
      p4.setOpaque(false);
      p1.add(p3,BorderLayout.WEST);
      p1.add(p2,BorderLayout.EAST);
      con.add(p1,BorderLayout.NORTH);
      con.add(spn,BorderLayout.WEST);
      jcmacc=new JComboBox<String>(data);
      pnl=new JPanel();
      pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y_AXIS));
      pnl1=new JPanel();
      lbl1=new JLabel("Select Account No");
      lbl1.setFont(new Font("Century Gothic", Font.PLAIN, 26));
      jcmacc=new JComboBox<String>(data);
      jcmacc.setFont(new Font("Century Gothic", Font.PLAIN, 26));
      pnl1.add(lbl1);
      pnl1.add(jcmacc);
      pnl2=new JPanel();
      ImageIcon ui=new ImageIcon("image\\trans.png");
      btnTransctn=new JButton("Get Transactions",ui);
      pnl2.add(btnTransctn);
      btnTransctn.setFont(new Font("Century Gothic", Font.PLAIN, 26));
      pnl.add(pnl1);
      pnl.add(pnl2);
      pnl.setOpaque(false);
      pnl1.setOpaque(false);
      pnl2.setOpaque(false);
      con.add(pnl,BorderLayout.CENTER);
      con2.add(con);
      setVisible(true);
      setSize(1000, 550);
      setResizable(false);
public JLabel getL3() {
      return 13;
```

```
public JLabel getL1() {
             return 11;
      public JLabel getL2() {
             return 12;
      }
      public JLabel getL4() {
             return 14;
      public JLabel getL6() {
             return 16;
      public JLabel getL7() {
             return 17;
      public JLabel getL9() {
             return 19;
      public JButton getB1() {
             return b1;
      }
      public JComboBox<String> getJcmacc() {
             return jcmacc;
      public JButton getBtnTransctn() {
             return btnTransctn;
      }
}
class UBckgrndtrns extends JPanel
{
      public UBckgrndtrns() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      public void paint(Graphics g)
             Image a=Toolkit.getDefaultToolkit().getImage("image\\u8.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
}
```

```
package bank.view;
import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.Container;
import java.awt.Cursor;
import java.awt.Dimension;
import java.awt.Font;
import java.awt.Graphics;
import java.awt.GridLayout;
import java.awt.HeadlessException;
import java.awt.Image;
import java.awt.Toolkit;
import javax.swing.*;
import javax.swing.border.LineBorder;
public class UsrAccntData extends JFrame{
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      private String [] data;
      private JComboBox<String> jcmb;
      private JLabel
lblAcNo2,lblHolderNm,lblHolderNm2,lblHolUid,lblHolUid2,lblBal,lblBal2,lblType,lblType2,lblMinBa
1,1blMinBal2;
      private JPanel pnl,pnl1,pnl2,pnl3,pnl4,pnl5,pnl6;
      public UsrAccntData(String arg0, String[] data) throws HeadlessException {
             super(arg0);
             this.data = data;
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y_AXIS));
             UBckgrndad con=new UBckgrndad();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details
                                                        ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(11);
             11.setCursor(new Cursor(Cursor.HAND CURSOR));
             11.setToolTipText("Click Here to View Account Details of any Account");
             ImageIcon ic2=new ImageIcon("image\\6.jpg");
             12=new JLabel("See All Account
                                                         , ic2, JLabel.LEFT);
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND CURSOR));
             12.setToolTipText("Click Here to See All Your Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
                                                       ', ic4, JLabel.LEFT);
             14=new JLabel("Transfer Money
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND CURSOR));
             14.setToolTipText("Click Here to Transfer Money from an Account to Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
                                                    ", ic7, JLabel.LEFT);
             17=new JLabel("Transaction Details
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND_CURSOR));
             17.setToolTipText("Click Here to view the Transaction Details");
             ImageIcon ic3=new ImageIcon("image\\cp.png");
                                                   ", ic3, JLabel.LEFT);
             13=new JLabel("Change Password
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
```

```
spn.add(13);
13.setCursor(new Cursor(Cursor.HAND CURSOR));
13.setToolTipText("Click Here To Change Password");
ImageIcon ic9=new ImageIcon("image\\e1.jpg");
19=new JLabel("Edit Your Details
                                            ", ic9, JLabel.LEFT);
19.setBorder(new LineBorder(new Color(103, 165, 152)));
spn.add(19);
19.setCursor(new Cursor(Cursor.HAND_CURSOR));
19.setToolTipText("Click Here to Edit Your Personal Details");
spn.setSize(400,50);
spn.setVisible(true);
p1=new JPanel();
ImageIcon ic6=new ImageIcon("image\\7.jpg");
16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
16.setCursor(new Cursor(Cursor.HAND CURSOR));
16.setToolTipText("Click Here to LogOut");
p1.setLayout(new BorderLayout());
p2=new JPanel();
p2.add(16);
p3=new JPanel();
ImageIcon ic11=new ImageIcon("image\\loan.png");
b1=new JButton("Apply For Loan", ic11);
b1.setCursor(new Cursor(Cursor.HAND CURSOR));
b1.setToolTipText("Click Here To Apply For Loan");
b1.setPreferredSize(new Dimension(150,20));
p3.setLayout(new GridLayout(2, 2));
ImageIcon ic8=new ImageIcon("image\\8.jpg");
18=new JLabel(ic8);
bl1=new JLabel("");
bl2=new JLabel("");
p4=new JPanel(new GridLayout(2, 2));
p4.add(bl1);
p4.add(b12);
p4.add(b1);
p3.add(18);
p3.add(p4);
spn.setOpaque(false);
p1.setOpaque(false);
p2.setOpaque(false);
p3.setOpaque(false);
p4.setOpaque(false);
p1.add(p3,BorderLayout.WEST);
p1.add(p2,BorderLayout.EAST);
con.add(p1,BorderLayout.NORTH);
con.add(spn,BorderLayout.WEST);
pnl=new JPanel();
pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y_AXIS));
jcmb=new JComboBox<String>(data);
jcmb.setFont(new Font("Century Gothic", Font.PLAIN, 16));
lblAcNo2=new JLabel("Select The Account No:-");
lblAcNo2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
pnl1=new JPanel();
pnl1.add(lblAcNo2);
pnl1.add(jcmb);
pnl2=new JPanel();
lblHolUid2=new JLabel("The Account Holder's Uid is:-");
lblHolUid2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
lblHolUid=new JLabel();
lblHolUid.setFont(new Font("Century Gothic", Font.BOLD, 16));
pnl2.add(lblHolUid2);
pnl2.add(lblHolUid);
pnl3=new JPanel();
```

```
1blHolderNm2=new JLabel("The Account Holder's Name is:-");
      lblHolderNm2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      lblHolderNm=new JLabel();
      lblHolderNm.setFont(new Font("Century Gothic", Font.BOLD, 16));
      pnl3.add(lblHolderNm2);
      pnl3.add(lblHolderNm);
      pnl4=new JPanel();
      lblType2=new JLabel("The Account Type is:-");
      lblType2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      lblType=new JLabel();
      lblType.setFont(new Font("Century Gothic", Font.BOLD, 16));
      pnl4.add(lblType2);
      pnl4.add(lblType);
      pnl5=new JPanel();
      lblBal2=new JLabel("The Account's Available Balance is:-");
      lblBal2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      lblBal=new JLabel();
      lblBal.setFont(new Font("Century Gothic", Font.BOLD, 16));
      pnl5.add(lblBal2);
      pnl5.add(lblBal);
      pnl6=new JPanel();
      lblMinBal2=new JLabel("The Account's Minimum Balance is:-");
      lblMinBal2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      lblMinBal=new JLabel();
      lblMinBal.setFont(new Font("Century Gothic", Font.BOLD, 16));
      pnl6.add(lblMinBal2);
      pnl6.add(lblMinBal);
      pnl.add(pnl1);
      pnl.add(pnl2);
      pnl.add(pnl3);
      pnl.add(pnl4);
      pnl.add(pnl5);
      pnl.add(pnl6);
      lblAcNo2.setForeground(Color.RED);
      lblHolderNm.setForeground(Color.RED);
      lblHolderNm2.setForeground(Color.RED);
      lblHolUid.setForeground(Color.RED);
      lblHolUid2.setForeground(Color.RED);
      lblBal.setForeground(Color.RED);
      lblBal2.setForeground(Color.RED);
      lblType.setForeground(Color.RED);
      lblType2.setForeground(Color.RED);
      lblMinBal.setForeground(Color.RED);
      lblMinBal2.setForeground(Color.RED);
      pnl.setOpaque(false);
      pnl1.setOpaque(false);
      pnl2.setOpaque(false);
      pnl3.setOpaque(false);
      pnl4.setOpaque(false);
      pnl5.setOpaque(false);
      pnl6.setOpaque(false);
      con.add(pnl,BorderLayout.CENTER);
      con2.add(con);
      setVisible(true);
      setSize(1000, 550);
      setResizable(false);
public JLabel getL3() {
      return 13;
public JLabel getL1() {
      return 11;
public JLabel getL2() {
```

```
return 12;
      }
      public JLabel getL4() {
             return 14;
      public JLabel getL6() {
             return 16;
      public JLabel getL7() {
             return 17;
      public JLabel getL9() {
             return 19;
      public JButton getB1() {
             return b1;
      public JComboBox<String> getJcmb() {
             return jcmb;
      public JLabel getLblHolderNm() {
             return lblHolderNm;
      }
      public JLabel getLblHolUid() {
             return lblHolUid;
      }
      public JLabel getLblBal() {
             return lblBal;
      public JLabel getLblType() {
             return lblType;
      public JLabel getLblMinBal() {
             return lblMinBal;
}
class UBckgrndad extends JPanel
      public UBckgrndad() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      }
      public void paint(Graphics g)
      {
             Image a=Toolkit.getDefaultToolkit().getImage("image\\u6.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
}
```

```
package bank.view;
import java.awt.*;
import javax.swing.*;
import javax.swing.border.LineBorder;
public class UserTransferMn extends JFrame
{
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      private JComboBox<String> icb;
      private JLabel 1b11,1b12,1b13,1b4;
      private JTextField tf1,tf3;
      private String [] a;
      private JButton btnTransf;
      private JPanel pnl,pnl1,pnl2,pnl3,pnl4,pnl5;
      public UserTransferMn(String arg0,String [] a) throws HeadlessException {
             super(arg0);
             this.a=a;
             // TODO Auto-generated constructor stub
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y AXIS));
             UBckgrndtm con=new UBckgrndtm();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(l1);
             11.setCursor(new Cursor(Cursor.HAND_CURSOR));
             11.setToolTipText("Click Here to View Account Details of any Account");
             ImageIcon ic2=new ImageIcon("image\\6.jpg");
             12=new JLabel("See All Account
                                                      ", ic2, JLabel.LEFT);
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND CURSOR));
             12.setToolTipText("Click Here to See All Your Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
14=new JLabel("Transfer Money ", ic4, JLabel.LEFT);
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND_CURSOR));
             14.setToolTipText("Click Here to Transfer Money from an Account to Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details
                                                ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND CURSOR));
             17.setToolTipText("Click Here to view the Transaction Details");
             ImageIcon ic3=new ImageIcon("image\\cp.png");
             13=new JLabel("Change Password
                                                 ", ic3, JLabel.LEFT);
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND CURSOR));
             13.setToolTipText("Click Here To Change Password");
             19.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(19);
```

```
19.setCursor(new Cursor(Cursor.HAND CURSOR));
19.setToolTipText("Click Here to Edit Your Personal Details");
spn.setSize(400,50);
spn.setVisible(true);
p1=new JPanel();
ImageIcon ic6=new ImageIcon("image\\7.jpg");
16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
16.setCursor(new Cursor(Cursor.HAND_CURSOR));
16.setToolTipText("Click Here to LogOut");
p1.setLayout(new BorderLayout());
p2=new JPanel();
p2.add(16);
p3=new JPanel();
ImageIcon ic11=new ImageIcon("image\\loan.png");
b1=new JButton("Apply For Loan", ic11);
b1.setCursor(new Cursor(Cursor.HAND CURSOR));
b1.setToolTipText("Click Here To Apply For Loan");
b1.setPreferredSize(new Dimension(150,20));
p3.setLayout(new GridLayout(2, 2));
ImageIcon ic8=new ImageIcon("image\\8.jpg");
18=new JLabel(ic8);
bl1=new JLabel("");
bl2=new JLabel("");
p4=new JPanel(new GridLayout(2, 2));
p4.add(bl1);
p4.add(b12);
p4.add(b1);
p3.add(18);
p3.add(p4);
spn.setOpaque(false);
p1.setOpaque(false);
p2.setOpaque(false);
p3.setOpaque(false);
p4.setOpaque(false);
p1.add(p3,BorderLayout.WEST);
p1.add(p2,BorderLayout.EAST);
con.add(p1,BorderLayout.NORTH);
con.add(spn,BorderLayout.WEST);
pnl=new JPanel();
pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y AXIS));
pnl4=new JPanel();
lbl3=new JLabel("Transfering Amount from one Account to Another");
1b13.setFont(new Font("Century Gothic", Font.PLAIN, 24));
pnl1=new JPanel();
lbl1=new JLabel("Select The Sender's Account No.");
lbl1.setFont(new Font("Century Gothic", Font.PLAIN, 16));
icb=new JComboBox<String>(a);
jcb.setFont(new Font("Century Gothic", Font.PLAIN, 16));
pnl1.add(lbl1);
pnl1.add(jcb);
pnl2=new JPanel();
1b12=new JLabel("Select The Reciever's Account No.");
lbl2.setFont(new Font("Century Gothic", Font.PLAIN, 16));
tf1=new JTextField(20);
tfl.setFont(new Font("Century Gothic", Font.PLAIN, 16));
pnl2.add(1bl2);
pnl2.add(tf1);
pnl3=new JPanel();
ImageIcon ic=new ImageIcon("image\\mntrnsf.png");
btnTransf=new JButton("Transfer",ic);
btnTransf.setFont(new Font("Century Gothic", Font.PLAIN, 16));
pnl3.add(btnTransf);
pnl5=new JPanel();
1b4=new JLabel("Enter The Amount:-");
```

```
lb4.setFont(new Font("Century Gothic", Font.PLAIN, 16));
             tf3=new JTextField(10);
             tf3.setFont(new Font("Century Gothic", Font.PLAIN, 16));
             pn15.add(1b4);
             pnl5.add(tf3);
             pnl.add(pnl1);
             pnl.add(pnl2);
             pnl.add(pnl5);
             pnl.add(pnl3);
             pnl.add(pnl4);
             pnl.setOpaque(false);
             pnl1.setOpaque(false);
             pnl2.setOpaque(false);
             pnl3.setOpaque(false);
             pnl4.setOpaque(false);
             pnl5.setOpaque(false);
             con.add(pnl,BorderLayout.CENTER);
             con2.add(con);
             setVisible(true);
             setSize(1000, 550);
             setResizable(false);
      }
      public JLabel getL3() {
             return 13;
      }
      public JLabel getL1() {
             return 11;
      public JLabel getL2() {
             return 12;
      public JLabel getL4() {
             return 14;
      public JLabel getL6() {
             return 16;
      public JLabel getL7() {
             return 17;
      public JLabel getL9() {
             return 19;
      public JButton getB1() {
             return b1;
      public JComboBox<String> getJcb() {
             return jcb;
      }
      public JTextField getTf1() {
             return tf1;
      public JButton getBtnTransf() {
             return btnTransf;
      public JTextField getTf3() {
             return tf3;
      }
class UBckgrndtm extends JPanel
      public UBckgrndtm() {
             setOpaque(false);
```

{

```
setLayout(new BorderLayout());
    // TODO Auto-generated constructor stub
}
public void paint(Graphics g)
{
    Image a=Toolkit.getDefaultToolkit().getImage("image\\u7.jpg");
        g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
        super.paint(g);
}
```

```
package bank.view;
import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.Container;
import java.awt.Cursor;
import java.awt.Dimension;
import java.awt.Font;
import java.awt.Graphics;
import java.awt.GridLayout;
import java.awt.HeadlessException;
import java.awt.Image;
import java.awt.Toolkit;
import javax.swing.*;
import javax.swing.border.LineBorder;
public class UserTabl extends JFrame{
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      private JTable tble;
      private JLabel lbl;
      private JScrollPane spnl;
      private JPanel pnl,pnl1;
      public UserTabl(String arg0, JTable jtbl) throws HeadlessException {
             super(arg0);
             this.tble = jtbl;
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y_AXIS));
             UBckgrndtb con=new UBckgrndtb();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(bl3);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details
                                                       ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(l1);
             11.setCursor(new Cursor(Cursor.HAND CURSOR));
             11.setToolTipText("Click Here to View Account Details of any Account");
             ImageIcon ic2=new ImageIcon("image\\6.jpg");
                                                         , ic2, JLabel.LEFT);
             12=new JLabel("See All Account
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND_CURSOR));
             12.setToolTipText("Click Here to See All Your Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
                                                       ', ic4, JLabel.LEFT);
             14=new JLabel("Transfer Money
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND_CURSOR));
             14.setToolTipText("Click Here to Transfer Money from an Account to Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details
                                                  ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             17.setCursor(new Cursor(Cursor.HAND CURSOR));
             17.setToolTipText("Click Here to view the Transaction Details");
             ImageIcon ic3=new ImageIcon("image\\cp.png");
                                                  ", ic3, JLabel.LEFT);
             13=new JLabel("Change Password
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND_CURSOR));
```

```
13.setToolTipText("Click Here To Change Password");
      ImageIcon ic9=new ImageIcon("image\\e1.jpg");
                                                    , ic9, JLabel.LEFT);
      19=new JLabel("Edit Your Details
      19.setBorder(new LineBorder(new Color(103, 165, 152)));
      spn.add(19);
      19.setCursor(new Cursor(Cursor.HAND CURSOR));
      19.setToolTipText("Click Here to Edit Your Personal Details");
      spn.setSize(400,50);
      spn.setVisible(true);
      p1=new JPanel();
      ImageIcon ic6=new ImageIcon("image\\7.jpg");
      16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
      16.setCursor(new Cursor(Cursor.HAND_CURSOR));
      16.setToolTipText("Click Here to LogOut");
      p1.setLayout(new BorderLayout());
      p2=new JPanel();
      p2.add(16);
      p3=new JPanel();
      ImageIcon ic11=new ImageIcon("image\\loan.png");
      b1=new JButton("Apply For Loan", ic11);
      b1.setCursor(new Cursor(Cursor.HAND_CURSOR));
      b1.setToolTipText("Click Here To Apply For Loan");
      b1.setPreferredSize(new Dimension(150,20));
      p3.setLayout(new GridLayout(2, 2));
      ImageIcon ic8=new ImageIcon("image\\8.jpg");
      18=new JLabel(ic8);
      bl1=new JLabel("");
      bl2=new JLabel("");
      p4=new JPanel(new GridLayout(2, 2));
      p4.add(bl1);
      p4.add(b12);
      p4.add(b1);
      p3.add(18);
      p3.add(p4);
      spn.setOpaque(false);
      p1.setOpaque(false);
      p2.setOpaque(false);
      p3.setOpaque(false);
      p4.setOpaque(false);
      p1.add(p3,BorderLayout.WEST);
      p1.add(p2,BorderLayout.EAST);
      con.add(p1,BorderLayout.NORTH);
      con.add(spn,BorderLayout.WEST);
      lbl=new JLabel();
      lbl.setFont(new Font("Century Gothic", Font.PLAIN, 24));
      tble.setFont(new Font("Century Gothic", Font.PLAIN, 16));
      tble.setBorder(new LineBorder(new Color(60, 155, 136)));
      spnl=new JScrollPane(tble);
      pnl=new JPanel();
      pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y_AXIS));
      pnl1=new JPanel();
      pnl1.add(lbl);
      pnl.add(pnl1);
      pnl.add(spnl);
      pnl.setOpaque(false);
      pnl1.setOpaque(false);
      con.add(pnl,BorderLayout.CENTER);
      con2.add(con);
      setVisible(true);
      setSize(1000, 550);
      setResizable(false);
public JLabel getL3() {
```

```
return 13;
      }
      public JLabel getL1() {
             return 11;
      public JLabel getL2() {
             return 12;
      public JLabel getL4() {
             return 14;
      public JLabel getL6() {
             return 16;
      public JLabel getL7() {
             return 17;
      public JLabel getL9() {
             return 19;
      public JButton getB1() {
             return b1;
      }
      public JLabel getLbl() {
             return lbl;
      }
}
class UBckgrndtb extends JPanel
{
      public UBckgrndtb() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      public void paint(Graphics g)
             Image a=Toolkit.getDefaultToolkit().getImage("image\\frtb.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
}
```

```
package bank.view;
import java.awt.*;
import javax.swing.*;
import javax.swing.border.LineBorder;
public class UserReg extends JFrame{
      private JPanel
pnl,pnl1,pnl2,pnl3,pnl4,pnl5,pnl6,pnl7,pnl8,pnl9,pnl10,pnl11,pnl12,pnl13,pnl14,pnl15;
      private JLabel 11,12,13,14,15,16,17,18,19,1blpas,1blrepas,1bluid,1bluid2,1blul;
      private JTextField tf1,tf2,tf3,tf4;
      private JTextArea ta1;
      private String [] dd=new String[31];
      private String [] mm=new String[12];
      private String [] yyyy=new String[115];
      private JComboBox<String> jdt;
      private JComboBox<String> jmn;
      private JComboBox<String> jyr;
      private JPasswordField pswrd, cnfpswrd;
      private JRadioButton male,female;
      private ButtonGroup bgrp;
      private JButton btnPrs,btnRefrs,btnBack,btnRegister,btnBack2;
      public UserReg(String arg0) throws HeadlessException {
             super(arg0);
             UrBckgrnd con=new UrBckgrnd();
             // TODO Auto-generated constructor stub
             for(int i=0;i<31;i++)</pre>
                    dd[i]=Integer.toString(i+1);
             for(int i=0;i<12;i++)</pre>
             {
                    mm[i]=Integer.toString(i+1);
             for(int i=0;i<115;i++)</pre>
                    yyyy[i]=Integer.toString(i+1900);
             pnl=new JPanel();
             pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y AXIS));
             pnl1=new JPanel(new FlowLayout(FlowLayout.LEFT));
             11=new JLabel("Enter Your Name:-
                                                    ");
             11.setFont(new Font("Century Gothic", Font.BOLD, 13));
             tf1=new JTextField(30);
             tfl.setFont(new Font("Century Gothic", Font.BOLD, 13));
             tf1.setBorder(new LineBorder(Color.black));
             pnl1.add(l1);
             pnl1.add(tf1);
             pnl2=new JPanel(new FlowLayout(FlowLayout.LEFT));
             12=new JLabel("Enter Your Address:- ");
             12.setFont(new Font("Century Gothic", Font.BOLD, 13));
             tal=new JTextArea(2,30);
             tal.setFont(new Font("Century Gothic", Font.BOLD, 13));
             tal.setBorder(new LineBorder(Color.black));
             tal.setPreferredSize(new Dimension(100, 35));
             pn12.add(12);
             pnl2.add(ta1);
             pnl3=new JPanel(new FlowLayout(FlowLayout.LEFT));
                                                      ");
             13=new JLabel("Enter Your Pin No.:-
             13.setFont(new Font("Century Gothic", Font.BOLD, 13));
             tf2=new JTextField(30);
             tf2.setFont(new Font("Century Gothic", Font.BOLD, 13));
             tf2.setBorder(new LineBorder(Color.black));
             pn13.add(13);
```

```
pnl3.add(tf2);
pnl4=new JPanel(new FlowLayout(FlowLayout.LEFT));
14=new JLabel("Enter Your Email ID:- ");
14.setFont(new Font("Century Gothic", Font.BOLD, 13));
tf3=new JTextField(30);
tf3.setFont(new Font("Century Gothic", Font.BOLD, 13));
tf3.setBorder(new LineBorder(Color.black));
pn14.add(14);
pnl4.add(tf3);
pnl5=new JPanel(new FlowLayout(FlowLayout.LEFT));
15=new JLabel("Enter Your Ph No.:-
15.setFont(new Font("Century Gothic", Font.BOLD, 13));
tf4=new JTextField(30);
tf4.setFont(new Font("Century Gothic", Font.BOLD, 13));
tf4.setBorder(new LineBorder(Color.black));
pn15.add(15);
pnl5.add(tf4);
pnl6=new JPanel(new FlowLayout(FlowLayout.LEFT));
                                                              ", JLabel. LEFT);
16=new JLabel("Select Your Gender:-
16.setFont(new Font("Century Gothic", Font.BOLD, 13));
male=new JRadioButton("Male
                                 ");
male.setActionCommand("Male");
male.setFont(new Font("Century Gothic", Font.PLAIN, 20));
female=new JRadioButton("Female");
female.setActionCommand("Female");
female.setFont(new Font("Century Gothic", Font.PLAIN, 20));
pn16.add(16);
bgrp=new ButtonGroup();
bgrp.add(male);
bgrp.add(female);
pnl6.add(male);
pnl6.add(female);
pnl7=new JPanel(new FlowLayout(FlowLayout.LEFT));
                                                              ");
17=new JLabel("Select Your Date Of Birth(dd-mm-yyyy):-
17.setFont(new Font("Century Gothic", Font.BOLD, 13));
jdt=new JComboBox<String>(dd);
jdt.setFont(new Font("Century Gothic", Font.BOLD, 13));
jmn=new JComboBox<String>(mm);
jmn.setFont(new Font("Century Gothic", Font.BOLD, 13));
jyr=new JComboBox<String>(yyyy);
jyr.setFont(new Font("Century Gothic", Font.BOLD, 13));
pn17.add(17);
pnl7.add(jdt);
pnl7.add(jmn);
pnl7.add(jyr);
pnl8=new JPanel();
ImageIcon ic1=new ImageIcon("image\\dn.png");
ImageIcon ic2=new ImageIcon("image\\left.png");
ImageIcon ic3=new ImageIcon("image\\re.png");
                                ",ic2);
btnBack=new JButton("Back
btnPrs=new JButton("Procced",ic1);
btnPrs.setFont(new Font("Century Gothic", Font.BOLD, 13));
btnBack.setFont(new Font("Century Gothic", Font.BOLD, 13));
btnRefrs=new JButton("Refressed",ic3);
btnRefrs.setFont(new Font("Century Gothic", Font.BOLD, 13));
pnl8.add(btnBack);
pnl8.add(btnPrs);
pnl8.add(btnRefrs);
pnl9=new JPanel(new FlowLayout(FlowLayout.LEFT));
ImageIcon ic=new ImageIcon("image\\logo.jpg");
18=new JLabel(ic);
pn19.add(18);
pnl10=new JPanel(new FlowLayout(FlowLayout.CENTER));
19=new JLabel("------Customer Registration Area----
19.setFont(new Font("Century Gothic", Font.BOLD, 21));
```

```
pnl10.add(19);
             pnl11=new JPanel();
             lblul=new JLabel('
             lblul.setFont(new Font("Century Gothic", Font.BOLD, 21));
             pnl11.add(lblul);
             pnl12=new JPanel(new FlowLayout(FlowLayout.LEFT));
             lbluid2=new JLabel("Your User ID:-
                                                                                          ");
             lbluid2.setFont(new Font("Century Gothic", Font.BOLD, 13));
             lbluid=new JLabel();
             lbluid.setFont(new Font("Century Gothic", Font.BOLD, 13));
             pnl12.add(lbluid2);
             pnl12.add(lbluid);
             pnl13=new JPanel(new FlowLayout(FlowLayout.LEFT));
             lblpas=new JLabel("Enter The Password:-
             lblpas.setFont(new Font("Century Gothic", Font.BOLD, 13));
             pswrd=new JPasswordField(20);
             pswrd.setFont(new Font("Century Gothic", Font.BOLD, 13));
             pswrd.setToolTipText("The Password Should Contains One Small And One Capital
Letter And One Digit And A Special Charecter");
             pswrd.setEditable(false);
             pnl13.add(lblpas);
             pnl13.add(pswrd);
             pnl14=new JPanel(new FlowLayout(FlowLayout.LEFT));
             lblrepas=new JLabel("ReEnter The Password:-
             lblrepas.setFont(new Font("Century Gothic", Font.BOLD, 13));
             cnfpswrd=new JPasswordField(20);
             cnfpswrd.setToolTipText("The Password Should Contains One Small And One Capital
Letter And One Digit And A Special Charecter");
             cnfpswrd.setFont(new Font("Century Gothic", Font.BOLD, 13));
             cnfpswrd.setEditable(false);
             pnl14.add(lblrepas);
             pnl14.add(cnfpswrd);
             pnl15=new JPanel();
             ImageIcon pic=new ImageIcon("image\\regtr.png");
             btnRegister=new JButton("Register",pic);
                                              ",ic2);
             btnBack2=new JButton("Back
             btnBack2.setFont(new Font("Century Gothic", Font.BOLD, 13));
             btnRegister.setFont(new Font("Century Gothic", Font.BOLD, 13));
             btnRegister.setEnabled(false);
             btnBack2.setEnabled(false);
             pnl15.add(btnBack2);
             pnl15.add(btnRegister);
             11.setForeground(new Color(14,72,91));
             12.setForeground(new Color(14,72,91));
             13.setForeground(new Color(14,72,91));
             14.setForeground(new Color(14,72,91));
             15.setForeground(new Color(14,72,91));
             16.setForeground(new Color(14,72,91));
             17.setForeground(new Color(14,72,91));
             18.setForeground(new Color(14,72,91));
             19.setForeground(new Color(14,72,91));
             lblpas.setForeground(new Color(14,72,91));
             lblrepas.setForeground(new Color(14,72,91));
             lbluid.setForeground(new Color(14,72,91));
             lbluid2.setForeground(new Color(14,72,91));
             lblul.setForeground(new Color(14,72,91));
             pnl.add(pnl9);
             pnl.add(pnl10);
             pnl.add(pnl1);
             pnl.add(pnl2);
             pnl.add(pnl3);
             pnl.add(pnl4);
             pnl.add(pnl6);
             pnl.add(pnl7);
             pnl.add(pnl5);
```

```
pnl.add(pnl8);
      pnl.add(pnl11);
      pnl.add(pnl12);
      pnl.add(pnl13);
      pnl.add(pnl14);
      pnl.add(pnl15);
      pnl.setOpaque(false);
      pnl1.setOpaque(false);
      pnl2.setOpaque(false);
      pnl3.setOpaque(false);
      pnl4.setOpaque(false);
      pnl5.setOpaque(false);
      pnl6.setOpaque(false);
      pnl7.setOpaque(false);
      pnl8.setOpaque(false);
      pnl9.setOpaque(false);
      pnl10.setOpaque(false);
      pnl11.setOpaque(false);
      pnl12.setOpaque(false);
      pnl13.setOpaque(false);
      pnl14.setOpaque(false);
      pnl15.setOpaque(false);
      male.setOpaque(false);
      female.setOpaque(false);
      Container con2=getContentPane();
      con.add(pnl,BorderLayout.WEST);
      con2.add(con);
      setSize(540, 620);
      setResizable(false);
      setVisible(true);
public JButton getBtnBack2() {
      return btnBack2;
public JTextField getTf1() {
      return tf1;
public JTextField getTf2() {
      return tf2;
public JTextField getTf3() {
      return tf3;
public JTextField getTf4() {
      return tf4;
}
public JTextArea getTa1() {
      return ta1;
public JPasswordField getPswrd() {
      return pswrd;
public JPasswordField getCnfpswrd() {
      return cnfpswrd;
public JRadioButton getMale() {
      return male;
public JRadioButton getFemale() {
      return female;
public ButtonGroup getBgrp() {
      return bgrp;
public JButton getBtnPrs() {
```

```
return btnPrs;
      }
      public JButton getBtnRefrs() {
             return btnRefrs;
      public JButton getBtnBack() {
             return btnBack;
      }
      public JLabel getLbluid() {
             return lbluid;
      public JButton getBtnRegister() {
             return btnRegister;
      public JComboBox<String> getJdt() {
             return jdt;
      public JComboBox<String> getJmn() {
             return jmn;
      public JComboBox<String> getJyr() {
             return jyr;
      }
}
class UrBckgrnd extends JPanel
      public UrBckgrnd() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      public void paint(Graphics g)
      {
             Image a=Toolkit.getDefaultToolkit().getImage("image\\reg.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
}
```

```
package bank.view;
import javafx.scene.control.PasswordField;
import javax.swing.*;
import javax.swing.border.BevelBorder;
import java.awt.*;
public class UserLogin extends JFrame
{
      private JButton btnLogin,btnCreate;
      private JPanel pnl,pnl1,pnl2,pnl3,pnl4,pnl5,pnl6,pnl7,pnl8,pnl9,pnl10,pnlbg;
      private JLabel lbl1,lbl2,lbl3,lbl4,lbl5;
      private JTextField tf1;
      private JPasswordField ps;
      public UserLogin(String arg0) throws HeadlessException {
             super(arg0);
             UlogBckgrnd con=new UlogBckgrnd();
             // TODO Auto-generated constructor stub
             Container con2=getContentPane();
             pnl=new JPanel();
             pnl.setBorder(new BevelBorder(BevelBorder.RAISED));
             pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y_AXIS));
             pnl1=new JPanel();
             lbl1=new JLabel("Enter the User ID and Password to Login");
             lbl1.setFont(new Font("Century Gothic", Font.BOLD, 15));
             pnl1.add(lbl1);
             pnl2=new JPanel();
             lbl2=new JLabel("Uid:-
             lbl2.setFont(new Font("Century Gothic", Font.BOLD, 12));
             tf1=new JTextField(15);
             tfl.setFont(new Font("Century Gothic", Font.PLAIN, 12));
             pn12.add(1b12);
             pnl2.add(tf1);
             pnl3=new JPanel();
             lbl3=new JLabel("Password:- ");
             lbl3.setFont(new Font("Century Gothic", Font.BOLD, 12));
             ps=new JPasswordField(15);
             ps.setFont(new Font("Century Gothic", Font.PLAIN, 12));
             pn13.add(1b13);
             pnl3.add(ps);
             pnl4=new JPanel();
             pnl4.setAlignmentY(200);
             ImageIcon ic1=new ImageIcon("image\\cuslogn.png");
             btnLogin=new JButton("Log In",ic1);
             btnLogin.setFont(new Font("Century Gothic", Font. BOLD, 12));
             pnl4.add(btnLogin);
             pnl5=new JPanel();
             pnl5.setLayout(new BorderLayout());
             pnl6=new JPanel();
             ImageIcon icm=new ImageIcon("image\\logo.jpg");
             lbl4=new JLabel(icm);
             pnl6.add(1b14);
             pnl5.add(pnl6,BorderLayout.WEST);
             pnl.add(pnl1);
             pnl.add(pnl2);
             pnl.add(pnl3);
             pnl.add(pnl4);
             pnl7=new JPanel();
             pnl7.setLayout(new BoxLayout(pnl7, BoxLayout.Y_AXIS));
             lbl5=new JLabel("Still Not Have Any Account ??");
             lbl5.setFont(new Font("Century Gothic", Font.BOLD, 18));
             pnl8=new JPanel();
             pn18.add(1b15);
             pn19=new JPanel();
```

```
pnl9.setLayout(new BorderLayout());
             ImageIcon nc=new ImageIcon("image\\newreg.png");
             btnCreate=new JButton("Create",nc);
             pnl10=new JPanel();
             pnl10.add(btnCreate);
             pnl9.add(pnl10, BorderLayout.CENTER);
             pnl7.add(pnl8);
             pnl7.add(pnl9);
             pnlbg=new JPanel();
             pnlbg.setLayout(new BorderLayout());
             pnlbg.add(pnl,BorderLayout.WEST);
             pnlbg.add(pnl5,BorderLayout.NORTH);
             pnlbg.add(pnl7,BorderLayout.CENTER);
             lbl1.setForeground(new Color(153, 125, 14));
             lbl2.setForeground(new Color(153, 125, 14));
             lbl3.setForeground(new Color(153, 125, 14));
             lbl5.setForeground(new Color(153, 125, 14));
             pnl.setOpaque(false);
             pnl1.setOpaque(false);
             pnl2.setOpaque(false);
             pnl3.setOpaque(false);
             pnl4.setOpaque(false);
             pnl5.setOpaque(false);
             pnl6.setOpaque(false);
             pnl7.setOpaque(false);
             pnl8.setOpaque(false);
             pnl9.setOpaque(false);
             pnl10.setOpaque(false);
             pnlbg.setOpaque(false);
             con.add(pnlbg);
             con2.add(con);
             setVisible(true);
             setBackground(Color.BLACK);
             setSize(600,300);
             setResizable(false);
      public JButton getBtnLogin() {
             return btnLogin;
      public JButton getBtnCreate() {
             return btnCreate;
      public JTextField getTf1() {
             return tf1;
      }
      public JPasswordField getPs() {
             return ps;
}
class UlogBckgrnd extends JPanel
{
      public UlogBckgrnd() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      public void paint(Graphics g)
             Image a=Toolkit.getDefaultToolkit().getImage("image\\ulog.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
}
```

```
package bank.view;
import javax.swing.*;
import javax.swing.border.BevelBorder;
import javax.swing.border.LineBorder;
import java.awt.*;
public class UserHome extends JFrame
{
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      public UserHome(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y_AXIS));
             UBckgrnd con=new UBckgrnd();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(l1);
             11.setCursor(new Cursor(Cursor.HAND CURSOR));
             11.setToolTipText("Click Here to View Account Details of any Account");
             ImageIcon ic2=new ImageIcon("image\\6.jpg");
                                                        , ic2, JLabel.LEFT);
             12=new JLabel("See All Account
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND_CURSOR));
             12.setToolTipText("Click Here to See All Your Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
             14=new JLabel("Transfer Money ", ic4, JLabel.LEFT);
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND_CURSOR));
             14.setToolTipText("Click Here to Transfer Money from an Account to Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND_CURSOR));
             17.setToolTipText("Click Here to view the Transaction Details");
             ImageIcon ic3=new ImageIcon("image\\cp.png");
             13=new JLabel("Change Password", ic3, JLabel.LEFT);
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND_CURSOR));
             13.setToolTipText("Click Here To Change Password");
             ImageIcon ic9=new ImageIcon("image\\e1.jpg");
             19=new JLabel("Edit Your Details
                                                        ", ic9, JLabel.LEFT);
             19.setBorder(new LineBorder(new Color(103, 165, 152)));
             19.setCursor(new Cursor(Cursor.HAND CURSOR));
             19.setToolTipText("Click Here to Edit Your Personal Details");
             spn.setSize(400,50);
             spn.setVisible(true);
             p1=new JPanel();
             ImageIcon ic6=new ImageIcon("image\\7.jpg");
             16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
```

```
16.setCursor(new Cursor(Cursor.HAND CURSOR));
             16.setToolTipText("Click Here to LogOut");
             p1.setLayout(new BorderLayout());
             p2=new JPanel();
             p2.add(16);
             p3=new JPanel();
             ImageIcon ic11=new ImageIcon("image\\loan.png");
             b1=new JButton("Apply For Loan", ic11);
             b1.setCursor(new Cursor(Cursor.HAND_CURSOR));
             b1.setToolTipText("Click Here To Apply For Loan");
             b1.setPreferredSize(new Dimension(150,20));
             p3.setLayout(new GridLayout(2, 2));
             ImageIcon ic8=new ImageIcon("image\\8.jpg");
             18=new JLabel(ic8);
             bl1=new JLabel("");
             bl2=new JLabel("");
             p4=new JPanel(new GridLayout(2, 2));
             p4.add(bl1);
             p4.add(b12);
             p4.add(b1);
             p3.add(18);
             p3.add(p4);
             spn.setOpaque(false);
             p1.setOpaque(false);
             p2.setOpaque(false);
             p3.setOpaque(false);
             p4.setOpaque(false);
             p1.add(p3,BorderLayout.WEST);
             p1.add(p2,BorderLayout.EAST);
             con.add(p1,BorderLayout.NORTH);
             con.add(spn,BorderLayout.WEST);
             con2.add(con);
             setVisible(true);
             setSize(1000, 550);
             setResizable(false);
      }
      public JLabel getL3() {
             return 13;
      public JLabel getL1() {
             return 11;
      public JLabel getL2() {
             return 12;
      public JLabel getL4() {
             return 14;
      }
      public JLabel getL6() {
             return 16;
      public JLabel getL7() {
             return 17;
      public JLabel getL9() {
             return 19;
      }
      public JButton getB1() {
             return b1;
class UBckgrnd extends JPanel
```

}

{

```
package bank.view;
import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.Container;
import java.awt.Cursor;
import java.awt.Dimension;
import java.awt.Font;
import java.awt.Graphics;
import java.awt.GridLayout;
import java.awt.HeadlessException;
import java.awt.Image;
import java.awt.Toolkit;
import javax.swing.*;
import javax.swing.GroupLayout.Alignment;
import javax.swing.border.LineBorder;
public class UserEditDetails extends JFrame
{
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      private JLabel
lblUid,lblUid2,lblName,lblPhno,lblEmail,lblAddrs,lblPin,lblDob,lblGender,lblGender2;
      private JTextField tfName,tfPhno,tfEmail,tfAddres,tfPin,tfDob;
      private JPanel pnl,pnl1,pnl2,pnl3,pnl4,pnl5,pnl6,pnl7,pnl8,pnl9,pnl10;
      private JButton btnDone;
      public UserEditDetails(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y_AXIS));
             UBckgrnded con=new UBckgrnded();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details
                                                       ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(11);
             11.setCursor(new Cursor(Cursor.HAND CURSOR));
             11.setToolTipText("Click Here to View Account Details of any Account");
             ImageIcon ic2=new ImageIcon("image\\6.jpg");
             12=new JLabel("See All Account
                                                         , ic2, JLabel. LEFT);
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND_CURSOR));
             12.setToolTipText("Click Here to See All Your Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
                                                       ', ic4, JLabel.LEFT);
             14=new JLabel("Transfer Money
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND CURSOR));
             14.setToolTipText("Click Here to Transfer Money from an Account to Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND_CURSOR));
             17.setToolTipText("Click Here to view the Transaction Details");
             ImageIcon ic3=new ImageIcon("image\\cp.png");
             13=new JLabel("Change Password
                                                   ", ic3, JLabel.LEFT);
```

```
13.setBorder(new LineBorder(new Color(103, 165, 152)));
spn.add(13);
13.setCursor(new Cursor(Cursor.HAND CURSOR));
13.setToolTipText("Click Here To Change Password");
ImageIcon ic9=new ImageIcon("image\\e1.jpg");
19=new JLabel("Edit Your Details
                                              ic9, JLabel.LEFT);
19.setBorder(new LineBorder(new Color(103, 165, 152)));
spn.add(19);
19.setCursor(new Cursor(Cursor.HAND_CURSOR));
19.setToolTipText("Click Here to Edit Your Personal Details");
spn.setSize(400,50);
spn.setVisible(true);
p1=new JPanel();
ImageIcon ic6=new ImageIcon("image\\7.jpg");
16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
16.setCursor(new Cursor(Cursor.HAND CURSOR));
16.setToolTipText("Click Here to LogOut");
p1.setLayout(new BorderLayout());
p2=new JPanel();
p2.add(16);
p3=new JPanel();
ImageIcon ic11=new ImageIcon("image\\loan.png");
b1=new JButton("Apply For Loan", ic11);
b1.setCursor(new Cursor(Cursor.HAND CURSOR));
b1.setToolTipText("Click Here To Apply For Loan");
b1.setPreferredSize(new Dimension(150,20));
p3.setLayout(new GridLayout(2, 2));
ImageIcon ic8=new ImageIcon("image\\8.jpg");
18=new JLabel(ic8);
bl1=new JLabel("");
bl2=new JLabel("");
p4=new JPanel(new GridLayout(2, 2));
p4.add(bl1);
p4.add(b12);
p4.add(b1);
p3.add(18);
p3.add(p4);
spn.setOpaque(false);
p1.setOpaque(false);
p2.setOpaque(false);
p3.setOpaque(false);
p4.setOpaque(false);
p1.add(p3,BorderLayout.WEST);
p1.add(p2,BorderLayout.EAST);
con.add(p1,BorderLayout.NORTH);
con.add(spn,BorderLayout.WEST);
pnl=new JPanel();
pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y AXIS));
pnl1=new JPanel();
lblUid2=new JLabel("Uid:-
                            ");
lblUid=new JLabel();
pnl1.add(lblUid2);
pnl1.add(lblUid);
pnl2=new JPanel();
lblName=new JLabel("Edit Your Name:-");
tfName=new JTextField(15);
pnl2.add(lblName);
pnl2.add(tfName);
pnl3=new JPanel();
lblAddrs=new JLabel("Edit Your Address:-");
tfAddres=new JTextField(40);
pnl3.add(lblAddrs);
pnl3.add(tfAddres);
pnl4=new JPanel();
lblEmail=new JLabel("Edit Your Email:-");
```

```
tfEmail=new JTextField(25);
      pnl4.add(lblEmail);
      pnl4.add(tfEmail);
      pnl5=new JPanel();
      lblDob=new JLabel("Edit your Date of Birth:-");
      tfDob=new JTextField(10);
      pnl5.add(lblDob);
      pnl5.add(tfDob);
      pnl6=new JPanel();
      lblGender2=new JLabel("Your Gender:-");
      lblGender=new JLabel();
      pnl6.add(lblGender2);
      pnl6.add(lblGender);
      pnl7=new JPanel();
      lblPhno=new JLabel("Edit Your Ph No:-");
      tfPhno=new JTextField(15);
      pnl7.add(lblPhno);
      pnl7.add(tfPhno);
      pnl8=new JPanel();
      lblPin=new JLabel("Edit Your Pin Code");
      tfPin=new JTextField(10);
      pnl8.add(lblPin);
      pnl8.add(tfPin);
      pn19=new JPanel();
      ImageIcon ic=new ImageIcon("image\\dn.png");
      btnDone=new JButton("Done",ic);
      pn19.add(btnDone);
      //pnl10=new JPanel();
      //pnl10.setLayout(new BorderLayout());
      pnl.setOpaque(false);
      pnl1.setOpaque(false);
      pnl2.setOpaque(false);
      pnl3.setOpaque(false);
      pnl4.setOpaque(false);
      pnl5.setOpaque(false);
      pnl6.setOpaque(false);
      pnl7.setOpaque(false);
      pnl8.setOpaque(false);
      pnl9.setOpaque(false);
      pnl.add(pnl1);
      pnl.add(pnl2);
      pnl.add(pnl3);
      pnl.add(pnl8);
      pnl.add(pnl4);
      pnl.add(pnl5);
      pnl.add(pnl6);
      pnl.add(pnl7);
      pnl.add(pnl9);
      //pnl10.add(pnl,BorderLayout.WEST);
      con.add(pnl,BorderLayout.CENTER);
      con2.add(con);
      setVisible(true);
      setSize(1000, 550);
      setResizable(false);
public JLabel getL1() {
      return 11;
public JLabel getL2() {
      return 12;
public JLabel getL4() {
      return 14;
public JLabel getL6() {
```

```
return 16;
      }
      public JLabel getL7() {
             return 17;
      public JLabel getL9() {
             return 19;
      public JButton getB1() {
             return b1;
      public JLabel getL3() {
             return 13;
      public JLabel getLblUid() {
             return lblUid;
      public JLabel getLblGender() {
             return lblGender;
      public JTextField getTfName() {
             return tfName;
      }
      public JTextField getTfPhno() {
             return tfPhno;
      public JTextField getTfEmail() {
             return tfEmail;
      public JTextField getTfAddres() {
             return tfAddres;
      public JTextField getTfPin() {
             return tfPin;
      public JTextField getTfDob() {
             return tfDob;
      public JButton getBtnDone() {
             return btnDone;
}
class UBckgrnded extends JPanel
{
      public UBckgrnded() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      }
      public void paint(Graphics g)
             Image a=Toolkit.getDefaultToolkit().getImage("image\\u4.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
}
```

```
package bank.view;
import java.awt.*;
import javax.swing.*;
import javax.swing.border.LineBorder;
public class UserChangePasswrd extends JFrame{
      private JLabel lblold,lblnew,lblcfm;
      private JPasswordField psold,psnew,pscfm;
      private JButton btnOK;
      private JPanel pnl,pnl1,pnl2,pnl3,pnl4;
      private JPanel spn,p1,p2,p3,p4;
      private JLabel 11,12,13,14,15,16,17,18,b11,b12,b13,19,110;
      private JButton b1;
      public UserChangePasswrd(String arg0) throws HeadlessException {
             super(arg0);
             // TODO Auto-generated constructor stub
             spn=new JPanel();
             spn.setLayout(new BoxLayout(spn,BoxLayout.Y_AXIS));
             UBckgrndcp con=new UBckgrndcp();
             Container con2=getContentPane();
             bl3=new JLabel(" ");
             spn.add(b13);
             ImageIcon ic1=new ImageIcon("image\\Untitled-1.jpg");
             11=new JLabel("Account Details ", ic1, JLabel.LEFT);
             11.setBorder(new LineBorder(new Color(103, 165, 152)));
             11.setSize(50,10);
             spn.add(11);
             11.setCursor(new Cursor(Cursor.HAND_CURSOR));
             11.setToolTipText("Click Here to View Account Details of any Account");
             ImageIcon ic2=new ImageIcon("image\\6.jpg");
                                                      ", ic2, JLabel.LEFT);
             12=new JLabel("See All Account
             12.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(12);
             12.setCursor(new Cursor(Cursor.HAND CURSOR));
             12.setToolTipText("Click Here to See All Your Account");
             ImageIcon ic4=new ImageIcon("image\\4.jpg");
14=new JLabel("Transfer Money ", ic4, JLabel.LEFT);
             14.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(14);
             14.setCursor(new Cursor(Cursor.HAND CURSOR));
             14.setToolTipText("Click Here to Transfer Money from an Account to Another
Account");
             ImageIcon ic7=new ImageIcon("image\\5.jpg");
             17=new JLabel("Transaction Details ", ic7, JLabel.LEFT);
             17.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(17);
             17.setCursor(new Cursor(Cursor.HAND_CURSOR));
             17.setToolTipText("Click Here to view the Transaction Details");
             ImageIcon ic3=new ImageIcon("image\\cp.png");
             13=new JLabel("Change Password", ic3, JLabel.LEFT);
             13.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(13);
             13.setCursor(new Cursor(Cursor.HAND CURSOR));
             13.setToolTipText("Click Here To Change Password");
             ImageIcon ic9=new ImageIcon("image\\e1.jpg");
             19=new JLabel("Edit Your Details
                                                      ", ic9, JLabel.LEFT);
             19.setBorder(new LineBorder(new Color(103, 165, 152)));
             spn.add(19);
             19.setCursor(new Cursor(Cursor.HAND_CURSOR));
             19.setToolTipText("Click Here to Edit Your Personal Details");
             spn.setSize(400,50);
```

```
spn.setVisible(true);
             p1=new JPanel();
             ImageIcon ic6=new ImageIcon("image\\7.jpg");
             16=new JLabel("Log Out. ", ic6, JLabel.LEFT);
             16.setCursor(new Cursor(Cursor.HAND_CURSOR));
             16.setToolTipText("Click Here to LogOut");
             p1.setLayout(new BorderLayout());
             p2=new JPanel();
             p2.add(16);
             p3=new JPanel();
             ImageIcon ic11=new ImageIcon("image\\loan.png");
             b1=new JButton("Apply For Loan", ic11);
             b1.setCursor(new Cursor(Cursor.HAND CURSOR));
             b1.setToolTipText("Click Here To Apply For Loan");
             b1.setPreferredSize(new Dimension(150,20));
             p3.setLayout(new GridLayout(2, 2));
             ImageIcon ic8=new ImageIcon("image\\8.jpg");
             18=new JLabel(ic8);
             bl1=new JLabel("");
bl2=new JLabel("");
             p4=new JPanel(new GridLayout(2, 2));
             p4.add(bl1);
             p4.add(b12);
             p4.add(b1);
             p3.add(18);
             p3.add(p4);
             spn.setOpaque(false);
             p1.setOpaque(false);
             p2.setOpaque(false);
             p3.setOpaque(false);
             p4.setOpaque(false);
             p1.add(p3,BorderLayout.WEST);
             p1.add(p2,BorderLayout.EAST);
             con.add(p1,BorderLayout.NORTH);
             con.add(spn,BorderLayout.WEST);
             pnl=new JPanel();
             pnl.setLayout(new BoxLayout(pnl, BoxLayout.Y_AXIS));
             pnl1=new JPanel(new FlowLayout(FlowLayout.LEFT));
             pnl2=new JPanel(new FlowLayout(FlowLayout.LEFT));
             pnl3=new JPanel(new FlowLayout(FlowLayout.LEFT));
             pnl4=new JPanel();
             lblold=new JLabel('
                                                          Enter Your Old Password:-
");
                                                          Enter Your New Password: -
             lblnew=new JLabel("
             lblcfm=new JLabel("
                                                          Confirm Your New Password: -
             psold=new JPasswordField(20);
             psnew=new JPasswordField(20);
             pscfm=new JPasswordField(20);
             lblold.setFont(new Font("Century Gothic",Font.BOLD ,16));
             lblnew.setFont(new Font("Century Gothic",Font.BOLD ,16));
             lblcfm.setFont(new Font("Century Gothic",Font.BOLD ,16));
             psold.setFont(new Font("Century Gothic", Font.BOLD ,16));
psnew.setFont(new Font("Century Gothic", Font.BOLD ,16));
             pscfm.setFont(new Font("Century Gothic", Font. BOLD , 16));
             pnl1.add(lblold);
             pnl1.add(psold);
             pnl2.add(lblnew);
             pnl2.add(psnew);
             pnl3.add(lblcfm);
             pnl3.add(pscfm);
             ImageIcon ic=new ImageIcon("image\\dn.png");
             btnOK=new JButton("OK",ic);
             btnOK.setFont(new Font("Century Gothic", Font.BOLD , 26));
             pnl4.add(btnOK);
```

```
pnl.setOpaque(false);
             pnl1.setOpaque(false);
             pnl2.setOpaque(false);
             pnl3.setOpaque(false);
             pnl4.setOpaque(false);
             pnl.add(pnl1);
             pnl.add(pnl2);
             pnl.add(pnl3);
             pnl.add(pnl4);
             con.add(pnl,BorderLayout.CENTER);
             con2.add(con);
             setVisible(true);
             setSize(1000, 550);
             setResizable(false);
      public JLabel getL3() {
             return 13;
      public JLabel getL1() {
             return 11;
      }
      public JLabel getL2() {
             return 12;
      }
      public JLabel getL4() {
             return 14;
      public JLabel getL6() {
             return 16;
      public JLabel getL7() {
             return 17;
      public JLabel getL9() {
             return 19;
      public JButton getB1() {
             return b1;
      public JPasswordField getPsold() {
             return psold;
      }
      public JPasswordField getPsnew() {
             return psnew;
      public JPasswordField getPscfm() {
             return pscfm;
      }
      public JButton getBtnOK() {
             return btnOK;
      }
class UBckgrndcp extends JPanel
      public UBckgrndcp() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      public void paint(Graphics g)
             Image a=Toolkit.getDefaultToolkit().getImage("image\\u5.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
```

}

{

```
super.paint(g);
}
```

```
package bank.view;
import java.awt.*;
import javax.swing.*;
public class SecndPage extends JFrame
{
      private JButton bAdmin,bUser,btnHelp;
      private JPanel pnl,pnl1;
      private JLabel 11,12,15;
      public SecndPage(String arg0) throws HeadlessException {
             super(arg0);
             ScBckgrnd con=new ScBckgrnd();
             // TODO Auto-generated constructor stub
                               ");
             11=new JLabel("
             12=new JLabel("
                               ");
             15=new JLabel("Welcome and Please Choose A Option", JLabel. CENTER);
             15.setFont(new Font("Century Gothic", Font.BOLD, 20));
             15.setForeground(Color.cyan);
             ImageIcon ic1=new ImageIcon("image\\acc.png");
             bAdmin=new JButton("Accountant", ic1);
             ImageIcon ic2=new ImageIcon("image\\usr.png");
             bUser=new JButton("User
                                               ",ic2);
             Container con2=getContentPane();
             pnl=new JPanel(new GridLayout(3, 4, 20, 20));
             pnl.setOpaque(false);
             pnl.add(11);
             pnl.add(12);
             //pnl.add(13);
             //pnl.add(14);
             //pnl.add(15);
             pnl.add(bAdmin);
             pnl.add(bUser);
             ImageIcon ic3=new ImageIcon("image\\hlp.png");
             btnHelp=new JButton("Help",ic3);
             pnl1=new JPanel();
             pnl1.add(btnHelp);
             pnl1.setOpaque(false);
             con.add(15,BorderLayout.NORTH);
             con.add(pnl,BorderLayout.CENTER);
             con.add(pnl1,BorderLayout.SOUTH);
             con2.add(con);
             setVisible(true);
             setSize(400, 350);
             setResizable(false);
      }
      public JButton getbAdmin() {
             return bAdmin;
      public JButton getbUser() {
             return bUser;
      public JButton getBtnHelp() {
             return btnHelp;
class ScBckgrnd extends JPanel
      public ScBckgrnd() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
```

```
public void paint(Graphics g)
{
    Image a=Toolkit.getDefaultToolkit().getImage("image\\12.jpg");
        g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
        super.paint(g);
}
```

```
package bank.view;
import javax.swing.JOptionPane;
public class InfMsg {
    private String a;

    public InfMsg(String a) {
        super();
        this.a = a;
        JOptionPane.showMessageDiaLog(null, a,
"Information",JOptionPane.INFORMATION_MESSAGE);
    }
}
```

```
package bank.view;
import javax.swing.*;
import bank.controller.SndPgController;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
public class Front extends JFrame{
      private static final long serialVersionUID = 1L;
      private JLabel lb1,1;
      private JProgressBar pr;
      private Timer tt;
      int i=0;
      public Front(String arg0) throws HeadlessException {
             super(arg0);
             FrBckgrnd con=new FrBckgrnd();
             // TODO Auto-generated constructor stub
             ImageIcon icn1=new ImageIcon("C:\\Users\\SHAMBO\\Downloads\\8.jpg");
             lb1=new JLabel(icn1, JLabel.RIGHT);
             lb1.setLocation(0, 100);
             lb1.setSize(400,40);
             Container con2=getContentPane();
             con.add(lb1,BorderLayout.NORTH);
              EventQueue.invokeLater(new Runnable() {
                  @Override
                   public void run(){
                       String s = "Welcome To iBanking";
                       MarqueePanel mp = new MarqueePanel(s, 60);
                       con.add(mp,BorderLayout.CENTER);
                       mp.start();
                   }
              });
             1=new JLabel("Welcome to our Bank", JLabel. CENTER);
             1.setSize(new Dimension(900, 100));
             1.setFont(new Font(null,Font.BOLD, 50));
             pr=new JProgressBar();
             //pr.setSize(900,200);
             pr.setStringPainted(true);
             pr.setPreferredSize(new Dimension(900, 27));
             pr.setValue(0);
             ActionListener ac=new ActionListener() {
                    @Override
                    public void actionPerformed(ActionEvent arg0) {
                           // TODO Auto-generated method stub
                           i++;
                          pr.setValue(i);
                          if(i==100)
                                 SecndPage sndpg=new SecndPage("iBanking");
                                 new SndPgController(sndpg).control();
                                 dispose();
                          }
                    }
             tt=new Timer(100, ac);
             tt.start();
             con.add(pr,BorderLayout.SOUTH);
             con2.add(con);
             setResizable(false);
             setSize(640, 411);
             setVisible(true);
      }
```

```
//Class For Marquee Text
class MarqueePanel extends JPanel implements ActionListener {
    private static final int RATE = 13;
    private final Timer timer = new Timer(1000 / RATE, this);
    private final JLabel label = new JLabel();
    private final String s;
    private final int n;
    private int index;
    public MarqueePanel(String s, int n) {
        if (s == null || n < 1) {</pre>
            throw new IllegalArgumentException("Null string or n < 1");</pre>
        StringBuilder sb = new StringBuilder(n);
        for (int i = 0; i < n; i++) {</pre>
            sb.append(' ');
        this.s = sb + s + sb;
        this.n = n;
        label.setFont(new Font("Comic Sans MS", Font.ITALIC, 46));
        label.setText(sb.toString());
        label.setForeground(Color.RED);
        this.add(label);
        setOpaque(false);
    }
    public void start() {
        timer.start();
    }
    public void stop() {
        timer.stop();
    }
    @Override
    public void actionPerformed(ActionEvent e) {
        index++;
        if (index > s.length() - n) {
            index = 0;
        label.setText(s.substring(index, index + n));
    }
}
class FrBckgrnd extends JPanel
{
      public FrBckgrnd() {
             setOpaque(false);
             setLayout(new BorderLayout());
             // TODO Auto-generated constructor stub
      }
      public void paint(Graphics g)
      {
             Image a=Toolkit.getDefaultToolkit().getImage("image\\bf.jpg");
             g.drawImage(a, 0, 0, getSize().width,getSize().height,this);
             super.paint(g);
      }
}
```

}

From package bank.controller

```
package bank.controller;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.text.SimpleDateFormat;
import java.util.ArrayList;
import java.util.Date;
import javax.swing.JTable;
import prj.*;
import bank.model.*;
import bank.view.*;
public class AccntCreatCntrl
{
      private JTable jtbl;
      private String [] head2={"AccountNo","AccountHolder's UID","AccountHolder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private int sha,ka;
      private AccntDetails ad;
      private ArrayList<Savings_Account> dat;
      private CreatAccnt cacc;
      private Date dt=new Date();
      private String abc,acno;
      private ArrayList<Savings_Account> sacc=new ArrayList<Savings_Account>();
      private ArrayList<Customer> cust=new ArrayList<Customer>();
      private int ht;
      private String [] uida;
      public AccntCreatCntrl( CreatAccnt cacc) {
             this.cacc = cacc;
                    sacc=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in its Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error occured while Reading The Account Details");
             try {
                    cust=CustomerReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in its Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error occured while Reading The Customer Details");
             int j=cust.size();
             uida=new String[j];
             for(int i=0;i<j;i++)</pre>
                    uida[i]=cust.get(i).getUid();
             ht=sacc.size()+1;
             abc=new SimpleDateFormat("ddMMyy").format(dt);
             acno=abc+Integer.toString(ht);
```

```
try {
             dat=AccountReaderWritter.read();
      } catch (FileNotFoundException e) {
             // TODO Auto-generated catch block
             new ErrMsg("File Not Found in Location");
      } catch (IOException e) {
             // TODO Auto-generated catch block
             new ErrMsg("Error Occured While Reading Account Details");
      sha=dat.size();
      data2=new String [sha][5];
public void control()
      cacc.getB1().addActionListener((a)->{
             CreatAccnt cracc=new CreatAccnt("iBanking");
             new AccntCreatCntrl(cracc).control();
             cacc.dispose();
      });
      cacc.getL1().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                    AccntDetails ad=new AccntDetails("iBanking");
                    new AccntDetailsContrl(ad).control();
                    cacc.dispose();
                    //account details
             }
      });
      cacc.getL2().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                                               //<u>deposite</u> money
                    AccountDeposite acdep=new AccountDeposite("iBanking");
                    new AccntDepositeCntrl(acdep, acdep).control();
                    cacc.dispose();
             }
      });
      cacc.getL3().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                                               //withdraw money
                    AccountWithdraw acwt=new AccountWithdraw("iBanking");
                    new AccntWithdrawCntrl(acwt,acwt).control();
                    cacc.dispose();
             }
      });
      cacc.getL4().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                                               //transfer money
                    AccTransferMoney actfm=new AccTransferMoney("iBanking");
                    new AccntTransferCntrl(actfm).control();
                    cacc.dispose();
             }
      });
      cacc.getL5().addMouseListener(new MouseAdapter() {
             public void mouseClicked(MouseEvent arg0) {
                                               //see all account
                    if(sha>0)
                           for(ka=0;ka<sha;ka++)</pre>
                           {
                                 data2[ka][0]=Long.toString(dat.get(ka).getAccountid());
```

```
data2[ka][1]=dat.get(ka).getUid();
                                        data2[ka][2]=dat.get(ka).getHoldername();
                                        data2[ka][3]=dat.get(ka).getType();
                                        data2[ka][4]=Double.toString(dat.get(ka).getBalance());
                                 jtbl=new JTable(data2,head2);
                                 AccntTableVew atbv=new AccntTableVew("iBanking", jtbl);
                                 new AccntTableViewCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
Bank");
                                 cacc.dispose();
                          }
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in This Bank");
                           }
                    }
             });
             cacc.getL6().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //log out
                          SecndPage snd=new SecndPage("iBanking");
                          new SndPgController(snd).control();
                           cacc.dispose();
                    }
             });
             cacc.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0)
                    {
                                                     //transction details
                          AccntTrans act=new AccntTrans("iBanking");
                          new AccTransCntrl(act).control();
                          cacc.dispose();
                    }
             });
             cacc.getL9().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //edit account
                          AccntEdit aced=new AccntEdit("iBanking");
                          new AccntEditCntrl(aced).control();
                          cacc.dispose();
                    }
             });
             cacc.getL10().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //delete account
                          DeleteAccount del=new DeleteAccount("iBanking");
                          new DelAccntCntrl(del, del).control();
                          cacc.dispose();
                    }
             });
             cacc.getBtnSaving().addActionListener((a)->{
                    CreatAccntM cam=new CreatAccntM("iBanking", uida);
                    new CreatAccntMnCntrl(cam).control();
                    cam.getJcb().setSelectedItem("Savings Account");
```

```
package bank.controller;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.util.ArrayList;
import javax.swing.JOptionPane;
import prj.AccountReaderWritter;
import bank.model.*;
import bank.view.*;
public class AccntDepositeCntrl extends AccntDetailsContrl
{
      private AccountDeposite acdp;
      private int sh=0,i;
      private ArrayList<Savings_Account> acc;
      public AccntDepositeCntrl(AccntDetails acdt,
                    AccountDeposite acdp) {
             super(acdt);
             this.acdp = acdp;
             try {
                    acc=(ArrayList<Savings_Account>)AccountReaderWritter.read();
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("There is a Problem While Reading from File");
             }
      }
      public void control()
             super.control();
             acdp.getBtnDeps().addActionListener((a)->{
                    if(acdp.getTfAccId().getText().trim().length()==0)
                    {
                          new ErrMsg("Please Enter The Account No");
                    else if(acdp.getTfDepAmt().getText().trim().length()==0)
                           new ErrMsg("Please Enter The Amount");
                    }
                    else
                    long accno=Long.parseLong(acdp.getTfAccId().getText().trim());
                    for(i=0;i<acc.size();i++)</pre>
                    {
                          if(acc.get(i).getAccountid()==accno)
                                 if(acc.get(i).getType().equals("Savings Account"))
      acc.get(i).deposite(Double.parseDouble(acdp.getTfDepAmt().getText().trim()));
                                        new InfMsg("Now Available Balance :-
"+Double.toString(acc.get(i).getBalance()));
                                 else if(acc.get(i).getType().equals("Current Account"))
      acc.get(i).deposite(Double.parseDouble(acdp.getTfDepAmt().getText().trim()));
                                        new InfMsg("Now Available Balance :-
"+Double.toString(acc.get(i).getBalance()));
                                 super.clear();
                                 sh++;
                           }
                    if(sh==0)
                    {
```

```
new ErrMsg("There is No Such Account");
                   }
             }
                   try {
                          AccountReaderWritter.writter(acc);
                   } catch (Exception e) {
                          // TODO Auto-generated catch block
                          new ErrMsg("There are Some error Occured While Depositing The
Balance");
                   }});
             acdp.getTfDepAmt().addKeyListener(new KeyAdapter() {
                   @Override
                   public void keyTyped(KeyEvent a) {
                          // TODO Auto-generated method stub
                          char key=a.getKeyChar();
      if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACK_SPACE)||(key==KeyEvent.VK_DELETE))
                                 a.consume();
                          }
                   }
             });
      }
}
```

```
package bank.controller;
import bank.view.*;
import bank.model.*;
import prj.*;
import javax.swing.*;
import com.sun.glass.events.KeyEvent;
import java.awt.*;
import java.awt.event.KeyAdapter;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
public class AccntDetailsContrl
{
      private AccntDetails acdt;
      private int sh=0,i;
      private JTable jtbl;
      private String [] head2={"AccountNo","AccountHolder's UID","AccountHolder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private int sha,ka;
      private ArrayList<Savings_Account> dat;
      private ArrayList<Savings_Account> acc;
      public AccntDetailsContrl(AccntDetails acdt) {
             this.acdt = acdt;
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Account Details");
             sha=dat.size();
             data2=new String [sha][5];
      }
      public void control()
             acdt.getB1().addActionListener((a)->{
                    CreatAccnt cracc=new CreatAccnt("iBanking");
                    new AccntCreatCntrl(cracc).control();
                    acdt.dispose();
             });
             acdt.getL1().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                          AccntDetails ad=new AccntDetails("iBanking");
                          new AccntDetailsContrl(ad).control();
                          acdt.dispose();
                          //account details
                    }
             });
             acdt.getL2().addMouseListener(new MouseAdapter() {
```

```
@Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //deposite money
                          AccountDeposite acdep=new AccountDeposite("iBanking");
                          new AccntDepositeCntrl(acdep, acdep).control();
                          acdt.dispose();
                    }
             });
             acdt.getL3().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //withdraw money
                          AccountWithdraw acwt=new AccountWithdraw("iBanking");
                          new AccntWithdrawCntrl(acwt,acwt).control();
                           acdt.dispose();
                    }
             });
             acdt.getL4().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //transfer money
                          AccTransferMoney actfm=new AccTransferMoney("iBanking");
                          new AccntTransferCntrl(actfm).control();
                           acdt.dispose();
                    }
             });
             acdt.getL5().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //see all account
                          if(sha>0)
                          {
                                 for(ka=0;ka<sha;ka++)</pre>
                                 {
                                        data2[ka][0]=Long.toString(dat.get(ka).getAccountid());
                                        data2[ka][1]=dat.get(ka).getUid();
                                        data2[ka][2]=dat.get(ka).getHoldername();
                                        data2[ka][3]=dat.get(ka).getType();
                                        data2[ka][4]=Double.toString(dat.get(ka).getBalance());
                                 jtbl=new JTable(data2,head2);
                                 AccntTableVew atbv=new AccntTableVew("iBanking", jtbl);
                                 new AccntTableViewCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
Bank");
                                 acdt.dispose();
                          }
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in This Bank");
                          }
                    }
             });
             acdt.getL6().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //log out
                           SecndPage snd=new SecndPage("iBanking");
                           new SndPgController(snd).control();
                           acdt.dispose();
                    }
             });
             acdt.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0)
```

```
{
                                                      //transction details
                           AccntTrans act=new AccntTrans("iBanking");
                           new AccTransCntrl(act).control();
                           acdt.dispose();
                    }
             });
             acdt.getL9().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //edit account
                           AccntEdit aced=new AccntEdit("iBanking");
                           new AccntEditCntrl(aced).control();
                           acdt.dispose();
                    }
             });
             acdt.getL10().addMouseListener(new MouseAdapter() {
                    public void mouseClicked(MouseEvent arg0) {
                                                      //delete account
                           DeleteAccount del=new DeleteAccount("iBanking");
                           new DelAccntCntrl(del, del).control();
                           acdt.dispose();
                    }
             });
             acdt.getBtnSrch().addActionListener((a)->{
                    if(acdt.getTfAccId().getText().trim().length()==0)
                    {
                           new ErrMsg("Please Enter The Account No");
                    }
                    else
                    long accno=Long.parseLong(acdt.getTfAccId().getText().trim());
                    try {
                           acc=(ArrayList<Savings Account>)AccountReaderWritter.read();
                    } catch (Exception e) {
                           // TODO Auto-generated catch block
                           new ErrMsg("There is a Problem While Reading from File");
                    for(i=0;i<acc.size();i++)</pre>
                           if(acc.get(i).getAccountid()==accno)
                                 view();
                                 acdt.getLblUid().setText(acc.get(i).getUid());
                                 acdt.getLblHldrNm().setText(acc.get(i).getHoldername());
                                 acdt.getLbltype().setText(acc.get(i).getType());
      acdt.getLblBal().setText(Double.toString(acc.get(i).getBalance()));
                                 if(acc.get(i).getType().equals("Current Account"))
                                 {
                                        if(acc.get(i).getBalance()<0)</pre>
                                               JOptionPane.showMessageDialog(null, "The Balance
Shows in Negetive Fig. that amount is already OverDrafted",
"Information", JOptionPane. INFORMATION_MESSAGE);
                                        }
                                 }
```

```
sh++;
                           break;
                    }
             if(sh==0)
                    new ErrMsg("There is No Such Account");
             }
      }});
      acdt.getTfAccId().addKeyListener(new KeyAdapter() {
             @Override
             public void keyTyped(java.awt.event.KeyEvent a) {
                    // TODO Auto-generated method stub
                    char key=a.getKeyChar();
if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACKSPACE)||(key==KeyEvent.VK_DELETE))
                           a.consume();
                    }
             }
      });
public int getI() {
      return i;
}
public Savings_Account getAcc()
      return acc.get(i);
}
public void view()
      acdt.getLblBal2().setText("Available Balance:-");
      acdt.getLblHldrNm2().setText("Account Holder's Name:-");
      acdt.getLbltype2().setText("Account Type:-");
      acdt.getLblUid2().setText("Account Holder's UID:-");
public void clear()
      acdt.getTfAccId().setText("");
      acdt.getLblBal().setText("");
      acdt.getLblBal2().setText("");
      acdt.getLblHldrNm().setText("");
      acdt.getLblHldrNm2().setText("");
      acdt.getLblMinBl().setText("");
      acdt.getLblMinBl2().setText("");
      acdt.getLbltype().setText("");
      acdt.getLbltype2().setText("");
}
```

```
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import javax.swing.JOptionPane;
import javax.swing.JTable;
import prj.AccountReaderWritter;
import bank.model.*;
import bank.view.*;
public class AccntTransferCntrl
{
      private AccTransferMoney actnfm;
      private JTable jtbl;
private String [] head2={"AccountNo","AccountHolder's UID","AccountHolder's
Name","Account Type","Balance"};
      private String [][] data2;
      private int sha,ka;
      private AccntDetails ad;
      private ArrayList<Savings Account> dat;
      private ArrayList<Savings_Account> accs;
      private int cnt=0,cnt1=0;
      public AccntTransferCntrl(AccTransferMoney actnfm) {
             this.actnfm = actnfm;
             try {
                    accs=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("The File not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("There are some problem with the Reading of the File");
             }
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
```

package bank.controller;

```
new ErrMsg("File Not Found in Location");
      } catch (IOException e) {
             // TODO Auto-generated catch block
             new ErrMsg("Error Occured While Reading Account Details");
      sha=dat.size();
      data2=new String [sha][5];
public void control()
      actnfm.getB1().addActionListener((a)->{
             CreatAccnt cracc=new CreatAccnt("iBanking");
             new AccntCreatCntrl(cracc).control();
             actnfm.dispose();
      });
      actnfm.getL1().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                    AccntDetails ad=new AccntDetails("iBanking");
                    new AccntDetailsContrl(ad).control();
                    actnfm.dispose();
                    //account details
             }
      });
      actnfm.getL2().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                                               //deposite money
                    AccountDeposite acdep=new AccountDeposite("iBanking");
                    new AccntDepositeCntrl(acdep, acdep).control();
                    actnfm.dispose();
             }
      });
      actnfm.getL3().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                                               //withdraw money
                    AccountWithdraw acwt=new AccountWithdraw("iBanking");
                    new AccntWithdrawCntrl(acwt,acwt).control();
                    actnfm.dispose();
             }
      });
      actnfm.getL4().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                                              //transfer money
                    AccTransferMoney actfm=new AccTransferMoney("iBanking");
                    new AccntTransferCntrl(actfm).control();
                    actnfm.dispose();
             }
      });
      actnfm.getL5().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                                              //see all account
                    if(sha>0)
                          for(ka=0;ka<sha;ka++)</pre>
                                 data2[ka][0]=Long.toString(dat.get(ka).getAccountid());
                                 data2[ka][1]=dat.get(ka).getUid();
                                 data2[ka][2]=dat.get(ka).getHoldername();
                                 data2[ka][3]=dat.get(ka).getType();
                                 data2[ka][4]=Double.toString(dat.get(ka).getBalance());
```

```
}
                                 jtbl=new JTable(data2,head2);
                                 AccntTableVew atbv=new AccntTableVew("iBanking", jtbl);
                                 new AccntTableViewCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
Bank");
                                 actnfm.dispose();
                          }
                          else
                          {
                                 new ErrMsg("Sorry There is No Account in This Bank");
                          }
                    }
             });
             actnfm.getL6().addMouseListener(new MouseAdapter() {
                   @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //log out
                          SecndPage snd=new SecndPage("iBanking");
                          new SndPgController(snd).control();
                          actnfm.dispose();
                    }
             });
             actnfm.getL7().addMouseListener(new MouseAdapter() {
                   @Override
                   public void mouseClicked(MouseEvent arg0)
                                                     //transction details
                          AccntTrans act=new AccntTrans("iBanking");
                          new AccTransCntrl(act).control();
                          actnfm.dispose();
                    }
             });
             actnfm.getL9().addMouseListener(new MouseAdapter() {
                    public void mouseClicked(MouseEvent arg0) {
                                                     //edit account
                          AccntEdit aced=new AccntEdit("iBanking");
                          new AccntEditCntrl(aced).control();
                          actnfm.dispose();
                    }
             });
             actnfm.getL10().addMouseListener(new MouseAdapter() {
                   @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //delete account
                          DeleteAccount del=new DeleteAccount("iBanking");
                          new DelAccntCntrl(del, del).control();
                          actnfm.dispose();
                   }
             });
             actnfm.getTf1().addKeyListener(new KeyAdapter() {
                    public void keyTyped(KeyEvent a) {
                          // TODO Auto-generated method stub
                          char key=a.getKeyChar();
      if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACK_SPACE)||(key==KeyEvent.VK_DELETE))
                          {
                                 a.consume();
```

```
}
                    }
             });
             actnfm.getTf2().addKeyListener(new KeyAdapter() {
                    @Override
                    public void keyTyped(KeyEvent a) {
                           // TODO Auto-generated method stub
                           char key=a.getKeyChar();
      if(!(Character.isDigit(key))||(key==KeyEvent.VK\_BACK\_SPACE)||(key==KeyEvent.VK\_DELETE))
                                  a.consume();
                           }
                    }
             });
             actnfm.getBtnTrans().addActionListener((a)->{
                    if(actnfm.getTf1().getText().trim().length()==0)
                           new WarMsg("Please Enter The Sender's Account No:-");
                    else if(actnfm.getTf2().getText().trim().length()==0)
                    {
                           new WarMsg("Please Enter The Receiver's Account No:-");
                    }
                    else if(actnfm.getTf3().getText().trim().length()==0)
                           new WarMsg("Please Enter The Amount");
                    }
                    else
                    {
                           long ano1=Long.parseLong(actnfm.getTf2().getText().trim());
                           for(int i=0;i<accs.size();i++)</pre>
                                  if(accs.get(i).getAccountid()==ano1)
                                        cnt1++;
                                        long
ano=Long.parseLong(actnfm.getTf1().getText().trim());
                                        for(int j=0;j<accs.size();j++)</pre>
                                               if(accs.get(j).getAccountid()==ano)
                                               {
                                                      double
amt=Double.parseDouble(actnfm.getTf3().getText().trim());
                                                      if(accs.get(j).getType().equals("Savings
Account"))
                                                             try {
      accs.get(j).acctrnsfer(accs.get(i), amt);
      JOptionPane.showMessageDialog(null, "Balance Successfully Transferred",
"Information", JOptionPane. INFORMATION_MESSAGE);
                                                                   new InfMsg("Sender's New
Balance :-"+Double.toString(accs.get(j).getBalance()));
                                                                   clear();
                                                             } catch (Exception e) {
                                                                   // TODO Auto-generated catch
block
                                                                   new ErrMsg("Insufficient
Balance in Sender's Account");
                                                             }
                                                      }
                                                      else
if(accs.get(j).getType().equals("Current Account"))
```

```
{
                                                            try {
      accs.get(j).curAcctrnsfer(accs.get(i), amt);
      JOptionPane.showMessageDialog(null, "The Balance Successfully Transfered",
"Information", JOptionPane. INFORMATION_MESSAGE);
                                                                   new InfMsg("Sender's New
Balance :-"+Double.toString(accs.get(j).getBalance()));
                                                                   clear();
                                                             } catch (Exception e) {
                                                                   // TODO Auto-generated catch
block
                                                                   new ErrMsg("Insufficient
Balance in Sender's Account");
                                                            }
                                                      }
                                                      cnt++;
                                               }
                                        if(cnt==0)
                                               new ErrMsg("The Sender's Account No. Is Not
Valid");
                                        }
                                  }
                           if(cnt1==0)
                           {
                                 new ErrMsg("The Receiver's Account No. Is Not Valid");
                           }
                           try {
                                 AccountReaderWritter.writter(accs);
                           } catch (Exception e) {
                                 // TODO Auto-generated catch block
                                  new ErrMsg("Can't Transfer The Money");
                           }
                    }
             });
      public void clear()
             actnfm.getTf1().setText("");
             actnfm.getTf2().setText("");
             actnfm.getTf3().setText("");
      }
}
```

```
package bank.controller;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import javax.swing.JTable;
import prj.AccountReaderWritter;
import bank.model.Savings Account;
import bank.view.*;
public class AccntTableViewCntrl
      private AccntTableVew actb;
      private JTable jtbl;
      private String [] head2={"AccountNo","AccountHolder's UID","AccountHolder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private int sha,ka;
      private AccntDetails ad;
      private ArrayList<Savings Account> dat;
      public AccntTableViewCntrl(AccntTableVew actb) {
             this.actb = actb;
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Account Details");
             sha=dat.size();
             data2=new String [sha][5];
      public void control()
      {
             actb.getB1().addActionListener((a)->{
                    CreatAccnt cracc=new CreatAccnt("iBanking");
                    new AccntCreatCntrl(cracc).control();
                    actb.dispose();
             });
             actb.getL1().addMouseListener(new MouseAdapter() {
                   @Override
                    public void mouseClicked(MouseEvent arg0) {
                          AccntDetails ad=new AccntDetails("iBanking");
                          new AccntDetailsContrl(ad).control();
                          actb.dispose();
                          //account details
                    }
             });
             actb.getL2().addMouseListener(new MouseAdapter() {
                   @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //deposite money
                          AccountDeposite acdep=new AccountDeposite("iBanking");
                          new AccntDepositeCntrl(acdep, acdep).control();
                          actb.dispose();
                    }
             });
             actb.getL3().addMouseListener(new MouseAdapter() {
```

```
@Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //withdraw money
                          AccountWithdraw acwt=new AccountWithdraw("iBanking");
                          new AccntWithdrawCntrl(acwt,acwt).control();
                          actb.dispose();
                    }
             });
             actb.getL4().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //transfer money
                          AccTransferMoney actfm=new AccTransferMoney("iBanking");
                          new AccntTransferCntrl(actfm).control();
                          actb.dispose();
                    }
             });
             actb.getL5().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //see all account
                           if(sha>0)
                           {
                                 for(ka=0;ka<sha;ka++)</pre>
                                        data2[ka][0]=Long.toString(dat.get(ka).getAccountid());
                                        data2[ka][1]=dat.get(ka).getUid();
                                        data2[ka][2]=dat.get(ka).getHoldername();
                                        data2[ka][3]=dat.get(ka).getType();
                                        data2[ka][4]=Double.toString(dat.get(ka).getBalance());
                                 jtbl=new JTable(data2,head2);
                                 AccntTableVew atbv=new AccntTableVew("iBanking", jtbl);
                                 new AccntTableViewCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
Bank");
                                 actb.dispose();
                          }
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in This Bank");
                           }
                    }
             });
             actb.getL6().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //log out
                          SecndPage snd=new SecndPage("iBanking");
                          new SndPgController(snd).control();
                          actb.dispose();
                    }
             });
             actb.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0)
                    {
                                                     //transction details
                          AccntTrans act=new AccntTrans("iBanking");
                          new AccTransCntrl(act).control();
                          actb.dispose();
                    }
             });
             actb.getL9().addMouseListener(new MouseAdapter() {
                    @Override
```

```
public void mouseClicked(MouseEvent arg0) {
                                                     //edit account
                          AccntEdit aced=new AccntEdit("iBanking");
                          new AccntEditCntrl(aced).control();
                          actb.dispose();
                   }
             });
             actb.getL10().addMouseListener(new MouseAdapter() {
                   @Override
                   public void mouseClicked(MouseEvent arg0) {
                                                     //delete account
                          DeleteAccount del=new DeleteAccount("iBanking");
                          new DelAccntCntrl(del, del).control();
                          actb.dispose();
                   }
             });
      }
}
```

```
package bank.controller;
import bank.view.*;
public class AccntLoginCntrl {
      private AccntantLogIn acli;
      public AccntLoginCntrl(AccntantLogIn acli) {
             super();
             this.acli = acli;
      public void control()
             acli.getBtncncl().addActionListener((a)->{
                   SecndPage sp=new SecndPage("iBanking");
                   new SndPgController(sp).control();
             });
             acli.getBtnlogin().addActionListener((a)->{
                    if(acli.getTfID().getText().trim().length()==0)
                    {
                          new WarMsg("Enter Your User ID");
                    }
                    else if(new String(acli.getPs().getPassword()).trim().length()==0)
                    {
                          new WarMsg("Enter Your Password");
                    }
                   else
                    {
                          String uid=acli.getTfID().getText().trim();
                          String pass=new String(acli.getPs().getPassword()).trim();
                          if(uid.equals("Shambo") && pass.equals("Indranil"))
                          {
                                 AccountantHome achm=new AccountantHome("iBanking");
                                 new AccountantHomeContrl(achm).control();
                                 acli.dispose();
                          }
                          else
                                 new ErrMsg("Sorry You Have Entered Wrong Id and Password");
                    }
             });
      }
```

```
package bank.controller;
import bank.view.*;
import bank.model.*;
import prj.*;
import javax.swing.*;
import com.sun.glass.events.KeyEvent;
import java.awt.*;
import java.awt.event.KeyAdapter;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
public class AccntEditCntrl {
      private AccntEdit acdt;
      private JTable jtbl;
      private String [] head2={"AccountNo","AccountHolder's UID","AccountHolder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private int sha, ka;
      private AccntDetails ad;
      private ArrayList<Savings_Account> dat;
      private int sh=0,i,k;
      private ArrayList<Savings_Account> acc;
      private ArrayList<Customer> cus=new ArrayList<Customer>();
      public AccntEditCntrl( AccntEdit acdt) {
             this.acdt = acdt;
             try {
                    acc=(ArrayList<Savings Account>)AccountReaderWritter.read();
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("There is a Problem While Reading from File");
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                   new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Account Details");
             sha=dat.size();
             data2=new String [sha][5];
      public void control()
             acdt.getB1().addActionListener((a)->{
                    CreatAccnt cracc=new CreatAccnt("iBanking");
                   new AccntCreatCntrl(cracc).control();
                   acdt.dispose();
             acdt.getL1().addMouseListener(new MouseAdapter() {
```

```
public void mouseClicked(MouseEvent arg0) {
                          AccntDetails ad=new AccntDetails("iBanking");
                          new AccntDetailsContrl(ad).control();
                          acdt.dispose();
                           //account details
                    }
             });
             acdt.getL2().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //deposite money
                          AccountDeposite acdep=new AccountDeposite("iBanking");
                          new AccntDepositeCntrl(acdep, acdep).control();
                           acdt.dispose();
                    }
             });
             acdt.getL3().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //withdraw money
                          AccountWithdraw acwt=new AccountWithdraw("iBanking");
                          new AccntWithdrawCntrl(acwt,acwt).control();
                           acdt.dispose();
                    }
             });
             acdt.getL4().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //transfer money
                          AccTransferMoney actfm=new AccTransferMoney("iBanking");
                          new AccntTransferCntrl(actfm).control();
                          acdt.dispose();
                    }
             });
             acdt.getL5().addMouseListener(new MouseAdapter() {
                    public void mouseClicked(MouseEvent arg0) {
                                                     //see all account
                           if(sha>0)
                                 for(ka=0;ka<sha;ka++)</pre>
                                 {
                                        data2[ka][0]=Long.toString(dat.get(ka).getAccountid());
                                        data2[ka][1]=dat.get(ka).getUid();
                                        data2[ka][2]=dat.get(ka).getHoldername();
                                        data2[ka][3]=dat.get(ka).getType();
                                        data2[ka][4]=Double.toString(dat.get(ka).getBalance());
                                 }
                                 jtbl=new JTable(data2,head2);
                                 AccntTableVew atbv=new AccntTableVew("iBanking", jtbl);
                                 new AccntTableViewCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
Bank");
                                 acdt.dispose();
                          }
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in This Bank");
                           }
                    }
             });
             acdt.getL6().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
```

@Override

```
SecndPage snd=new SecndPage("iBanking");
                          new SndPgController(snd).control();
                          acdt.dispose();
                    }
             });
             acdt.getL7().addMouseListener(new MouseAdapter() {
                   @Override
                   public void mouseClicked(MouseEvent arg0)
                                                     //transction details
                          AccntTrans act=new AccntTrans("iBanking");
                          new AccTransCntrl(act).control();
                          acdt.dispose();
                    }
             });
             acdt.getL9().addMouseListener(new MouseAdapter() {
                    public void mouseClicked(MouseEvent arg0) {
                                                     //edit account
                          AccntEdit aced=new AccntEdit("iBanking");
                          new AccntEditCntrl(aced).control();
                          acdt.dispose();
                    }
             });
             acdt.getL10().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //delete account
                          DeleteAccount del=new DeleteAccount("iBanking");
                          new DelAccntCntrl(del, del).control();
                          acdt.dispose();
                    }
             });
             acdt.getBtnSrch().addActionListener((a)->{
                    if(acdt.getTfAccId().getText().trim().length()==0)
                    {
                          new ErrMsg("Please Enter The Account No");
                    }
                    else
                    long accno=Long.parseLong(acdt.getTfAccId().getText().trim());
                    for(i=0;i<acc.size();i++)</pre>
                          if(acc.get(i).getAccountid()==accno)
                                 acdt.getlblUid().setText(acc.get(i).getUid());
                                 acdt.getLblHldrNm().setText(acc.get(i).getHoldername());
                                 acdt.getJcmType().setSelectedItem(acc.get(i).getType());
      acdt.getLblBal().setText(Double.toString(acc.get(i).getBalance()));
                                 if(acc.get(i).getType().equals("Savings Account"))
                                 {
                                        acdt.getLblMinBl2().setText("Minimum Balance The
Account Should Have:-");
      acdt.getTfMinBl().setText(Double.toString(acc.get(i).getMinimum_amount()));
                                 else if(acc.get(i).getType().equals("Current Account"))
```

//log out

```
{
                                        acdt.getLblMinBl2().setText("The Over Draft Limit of
The account is:-");
      acdt.getTfMinBl().setText(Double.toString(acc.get(i).getMinimum_amount()));
                                        if(acc.get(i).getBalance()<0)</pre>
                                        {
                                               JOptionPane.showMessageDialog(null, "The Balance
Shows in Negetive Fig. that amount is already OverDrafted",
"Information", JOptionPane.INFORMATION_MESSAGE);
                                 sh++;
                                 break;
                           }
                    if(sh==0)
                    {
                          new ErrMsg("There is No Such Account");
                    try {
                          AccountReaderWritter.writter(acc);
                    } catch (Exception e) {
                           // TODO Auto-generated catch block
                          new ErrMsg("Can't Edit The Account Details");
                    }
             }});
             acdt.getTfAccId().addKeyListener(new KeyAdapter() {
                    @Override
                    public void keyTyped(java.awt.event.KeyEvent a) {
                           // TODO Auto-generated method stub
                          char key=a.getKeyChar();
      if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACKSPACE)||(key==KeyEvent.VK_DELETE))
                                 a.consume();
                          }
                    }
             });
             acdt.getTfMinBl().addKeyListener(new KeyAdapter() {
                    public void keyTyped(java.awt.event.KeyEvent a) {
                           // TODO Auto-generated method stub
                          char key=a.getKeyChar();
      if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACKSPACE)||(key==KeyEvent.VK_DELETE))
                          {
                                 a.consume();
                          }
                    }
             });
             acdt.getBtnDn().addActionListener((a)->{
                    if(acdt.getTfAccId().getText().trim().length()==0)
                          new ErrMsg("Please Enter The Account No");
                    }
                    else
                    long accno=Long.parseLong(acdt.getTfAccId().getText().trim());
                    try {
                           acc=(ArrayList<Savings_Account>)AccountReaderWritter.read();
                    } catch (Exception e) {
                           // TODO Auto-generated catch block
                          new ErrMsg("There is a Problem While Reading from File");
```

```
for(i=0;i<acc.size();i++)</pre>
                    if(acc.get(i).getAccountid()==accno)
acc.get(i).setType(acdt.getJcmType().getSelectedItem().toString());
acc.get(i).setMinimum_amount(Double.parseDouble(acdt.getTfMinBl().getText().trim()));
                           sh++;
                           break;
                    }
             if(sh==0)
             {
                    new ErrMsg("There is No Such Account");
             try {
                    AccountReaderWritter.writter(acc);
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("There some Error Occured");
             }
      }
});
}
```

```
package bank.controller;

public class InsufficientBalanceException extends Exception
{
    private static final long serialVersionUID = 1L;//Not mandatory

    public InsufficientBalanceException(String arg0) {
        super(arg0);
        // TODO Auto-generated constructor stub
    }
}
```

```
package bank.controller;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import prj.*;
import bank.model.*;
import bank.view.*;
public class DelAccntCntrl extends AccntDetailsContrl
{
      private DeleteAccount da;
      private ArrayList<Savings_Account> svacc=new ArrayList<Savings_Account>();
      private int Count=0;
      public DelAccntCntrl(AccntDetails acdt,
                    DeleteAccount da) {
             super(acdt);
             this.da = da;
             try {
      svacc=AccountReaderWritter.read();
} catch (FileNotFoundException e) {
      // TODO Auto-generated catch block
      new ErrMsg("File Not Found in Location");
} catch (IOException e) {
      // TODO Auto-generated catch block
      new ErrMsg("There is some error occured while reading from ");
}
      public void control()
             super.control();
             da.getBtnDelete().addActionListener((a)->{
                    if(da.getTfAccId().getText().trim().length()==0)
                    {
                          new WarMsg("Please Enter ");
                    }
                    else
                           long accntno=Long.parseLong(da.getTfAccId().getText());
                          for(int i=0;i<svacc.size();i++)</pre>
                           {
                                 if(svacc.get(i).getAccountid()==accntno)
                                 {
                                        svacc.remove(i);
                                        Count++;
                                        try {
                                               AccountReaderWritter.writter(svacc);
                                               new InfMsg("Account Successfully Deleted");
                                               AccountantHome ahm=new
AccountantHome("iBanking");
                                               new AccountantHomeContrl(ahm).control();
                                        } catch (Exception e) {
                                               // TODO Auto-generated catch block
                                               new ErrMsg("Unable Delete The Account");
                                        }
                                 }
                          }
```

```
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
```

```
import javax.swing.JTable;
import bank.model.*;
import bank.view.*;
import prj.*;
public class CreatAccntMnCntrl
{
      private CreatAccntM crm;
      private JTable jtbl;
      private String [] head2={"AccountNo", "AccountHolder's UID", "AccountHolder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private int sha,ka;
      private AccntDetails ad;
      private ArrayList<Savings_Account> dat;
      private ArrayList<Savings_Account> cre;
      private ArrayList<Customer> cus;
      private int cnt1,cnt2;
      public CreatAccntMnCntrl(CreatAccntM crm) {
             this.crm = crm;
             try {
                    cre=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                   new ErrMsg("Respective File Not Found in Location");
             } catch (IOException e) {
                   // TODO Auto-generated catch block
                    new ErrMsg("There is some Error Occurred while reading from file");
             try {
                    cus=CustomerReaderWritter.read();
             } catch (FileNotFoundException e)
                    // TODO Auto-generated catch block
                    new ErrMsg("Respective File Not Found in Location");
             } catch (IOException e)
```

```
{
             // TODO Auto-generated catch block
             new ErrMsg("There is some Error Occurred while reading from file");
      }
      try {
             dat=AccountReaderWritter.read();
      } catch (FileNotFoundException e) {
             // TODO Auto-generated catch block
             new ErrMsg("File Not Found in Location");
      } catch (IOException e) {
             // TODO Auto-generated catch block
             new ErrMsg("Error Occured While Reading Account Details");
      sha=dat.size();
      data2=new String [sha][5];
public void control()
      crm.getB1().addActionListener((a)->{
             CreatAccnt cracc=new CreatAccnt("iBanking");
             new AccntCreatCntrl(cracc).control();
             crm.dispose();
      });
      crm.getL1().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                    AccntDetails ad=new AccntDetails("iBanking");
                    new AccntDetailsContrl(ad).control();
                    crm.dispose();
                    //account details
             }
      });
      crm.getL2().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                                               //deposite money
                    AccountDeposite acdep=new AccountDeposite("iBanking");
                    new AccntDepositeCntrl(acdep, acdep).control();
                    crm.dispose();
             }
      });
      crm.getL3().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                                               //withdraw money
                    AccountWithdraw acwt=new AccountWithdraw("iBanking");
                    new AccntWithdrawCntrl(acwt,acwt).control();
                    crm.dispose();
             }
      });
      crm.getL4().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                                              //transfer money
                    AccTransferMoney actfm=new AccTransferMoney("iBanking");
                    new AccntTransferCntrl(actfm).control();
                    crm.dispose();
             }
      });
      crm.getL5().addMouseListener(new MouseAdapter() {
             public void mouseClicked(MouseEvent arg0) {
                                               //see all account
                    if(sha>0)
```

```
{
                                 for(ka=0;ka<sha;ka++)</pre>
                                        data2[ka][0]=Long.toString(dat.get(ka).getAccountid());
                                        data2[ka][1]=dat.get(ka).getUid();
                                        data2[ka][2]=dat.get(ka).getHoldername();
                                        data2[ka][3]=dat.get(ka).getType();
                                        data2[ka][4]=Double.toString(dat.get(ka).getBalance());
                                 jtbl=new JTable(data2,head2);
                                 AccntTableVew atbv=new AccntTableVew("iBanking", jtbl);
                                 new AccntTableViewCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
Bank");
                                 crm.dispose();
                           }
                           else
                           {
                                 new ErrMsg("Sorry There is No Account in This Bank");
                           }
                    }
             });
             crm.getL6().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //log out
                           SecndPage snd=new SecndPage("iBanking");
                           new SndPgController(snd).control();
                           crm.dispose();
                    }
             });
             crm.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0)
                                                      //transction details
                           AccntTrans act=new AccntTrans("iBanking");
                           new AccTransCntrl(act).control();
                           crm.dispose();
                    }
             });
             crm.getL9().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //edit account
                           AccntEdit aced=new AccntEdit("iBanking");
                           new AccntEditCntrl(aced).control();
                           crm.dispose();
                    }
             });
             crm.getL10().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //delete account
                           DeleteAccount del=new DeleteAccount("iBanking");
                           new DelAccntCntrl(del, del).control();
                           crm.dispose();
                    }
             });
             crm.getTfAmnt().addKeyListener(new KeyAdapter() {
                    @Override
                    public void keyTyped(KeyEvent a) {
                           // TODO Auto-generated method stub
```

```
char key=a.getKeyChar();
      if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACK_SPACE)||(key==KeyEvent.VK_DELETE))
                                 a.consume();
                    }
             });
             crm.getTfMinA().addKeyListener(new KeyAdapter() {
                    @Override
                    public void keyPressed(KeyEvent a) {
                           // TODO Auto-generated method stub
                          char key=a.getKeyChar();
      if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACK_SPACE)||(key==KeyEvent.VK_DELETE))
                                 a.consume();
                           }
                    }
             });
             crm.getUid().addActionListener((a)->{
                    String uid=crm.getUid().getSelectedItem().toString();
                    for(int h=0;h<cus.size();h++)</pre>
                    {
                          if(uid.equals(cus.get(h).getUid()))
                                 crm.getLbHold().setText(cus.get(h).getName());
                                 cnt1++;
                    if(cnt1==0)
                          new ErrMsg("User ID Not Found");
             });
             crm.getJcb().addActionListener((a)->{
                    crm.getTfAmnt().setText("");
                    crm.getTfMinA().setText("");
             crm.getJcb().addActionListener((a)->{
                    String actype=crm.getJcb().getSelectedItem().toString();
                    if(actype.equals("Savings Account"))
                    {
                           crm.getLbMin2().setText("Enter The Minimum Balance");
                    else if(actype.equals("Current Account"))
                           crm.getLbMin2().setText("Enter The Overdraft Limit of this
Account");
                    }
             });
             crm.getBtnCreate().addActionListener((a)->{
                    if(crm.getTfAmnt().getText().trim().length()==0 ||
crm.getTfMinA().getText().trim().length()==0)
                    {
                          new WarMsg("Please Enter Amount And Minimum Balance");
                    else if(crm.getLbHold().getText().trim().length()==0)
                          new WarMsg("Please Select A UID");
                    }
                    else
                    {
                           long acid=Long.parseLong(crm.getLblAccn().getText());
```

```
String hnm=crm.getLbHold().getText();
                   double bal=Double.parseDouble(crm.getTfAmnt().getText().trim());
                   String uid=crm.getUid().getSelectedItem().toString();
                   String type=crm.getJcb().getSelectedItem().toString();
                   double min=Double.parseDouble(crm.getTfMinA().getText().trim());
                   cre.add(new Savings_Account(acid, hnm, uid, bal, type, min));
                   try {
                          AccountReaderWritter.writter(cre);
                          new InfMsg("Account Successfully Created");
                          AccountantHome ahm=new AccountantHome("iBanking");
                          new AccountantHomeContrl(ahm).control();
                    } catch (Exception e) {
                          // TODO Auto-generated catch block
                          new ErrMsg("Can't Create the Account Some error Occured");
                   }
             }
      });
}
```

```
package bank.controller;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import javax.swing.*;
import java.awt.*;
import prj.*;
import bank.model.*;
import bank.view.*;
public class AccTransCntrl
{
      private JTable jtbl;
      private String [] head2={"AccountNo","AccountHolder's UID","AccountHolder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private int sha,ka;
      private AccntDetails ad;
      private ArrayList<Savings_Account> dat;
      private AccntTrans actrns;
      private int sh=0;
      public AccTransCntrl( AccntTrans actrns) {
             this.actrns = actrns;
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Account Details");
             sha=dat.size();
             data2=new String [sha][5];
      }
      public void control()
             actrns.getB1().addActionListener((a)->{
                    CreatAccnt cracc=new CreatAccnt("iBanking");
                    new AccntCreatCntrl(cracc).control();
                    actrns.dispose();
             });
             actrns.getL1().addMouseListener(new MouseAdapter() {
                   @Override
                    public void mouseClicked(MouseEvent arg0) {
                          AccntDetails ad=new AccntDetails("iBanking");
                          new AccntDetailsContrl(ad).control();
                          actrns.dispose();
```

```
}
             });
             actrns.getL2().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //deposite money
                          AccountDeposite acdep=new AccountDeposite("iBanking");
                          new AccntDepositeCntrl(acdep, acdep).control();
                           actrns.dispose();
                    }
             });
             actrns.getL3().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //withdraw money
                          AccountWithdraw acwt=new AccountWithdraw("iBanking");
                          new AccntWithdrawCntrl(acwt,acwt).control();
                           actrns.dispose();
                    }
             });
             actrns.getL4().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //transfer money
                          AccTransferMoney actfm=new AccTransferMoney("iBanking");
                          new AccntTransferCntrl(actfm).control();
                          actrns.dispose();
                    }
             });
             actrns.getL5().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //see all account
                          if(sha>0)
                           {
                                 for(ka=0;ka<sha;ka++)</pre>
                                        data2[ka][0]=Long.toString(dat.get(ka).getAccountid());
                                        data2[ka][1]=dat.get(ka).getUid();
                                        data2[ka][2]=dat.get(ka).getHoldername();
                                        data2[ka][3]=dat.get(ka).getType();
                                        data2[ka][4]=Double.toString(dat.get(ka).getBalance());
                                 jtbl=new JTable(data2,head2);
                                 AccntTableVew atbv=new AccntTableVew("iBanking", jtbl);
                                 new AccntTableViewCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
Bank");
                                 actrns.dispose();
                          }
                          else
                          {
                                 new ErrMsg("Sorry There is No Account in This Bank");
                           }
                    }
             });
             actrns.getL6().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //log out
                           SecndPage snd=new SecndPage("iBanking");
                           new SndPgController(snd).control();
                           actrns.dispose();
                    }
```

//account details

```
actrns.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0)
                                                     //transction details
                          AccntTrans act=new AccntTrans("iBanking");
                          new AccTransCntrl(act).control();
                          actrns.dispose();
                    }
             });
             actrns.getL9().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //edit account
                          AccntEdit aced=new AccntEdit("iBanking");
                          new AccntEditCntrl(aced).control();
                           actrns.dispose();
                    }
             });
             actrns.getL10().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //delete account
                          DeleteAccount del=new DeleteAccount("iBanking");
                          new DelAccntCntrl(del, del).control();
                          actrns.dispose();
                    }
             });
             actrns.getBtnSrch().addActionListener((a)->{
                    if(actrns.getTf().getText().trim().length()==0)
                    {
                          new ErrMsg("Please Enter Account No");
                    }
                    else
                          long accno=Long.parseLong(actrns.getTf().getText().trim());
                          ArrayList<Savings_Account> acc=new ArrayList<Savings_Account>();
                          try {
                                 acc=(ArrayList<Savings Account>)AccountReaderWritter.read();
                           } catch (Exception e) {
                                 // TODO Auto-generated catch block
                                 new ErrMsg("There is a Problem While Reading from File");
                          for(int i=0;i<acc.size();i++)</pre>
                                 if(acc.get(i).getAccountid()==accno)
                                 {
                                        ArrayList<Trans> trns=new ArrayList<Trans>();
                                        trns=acc.get(i).getTrn();
                                        int j=trns.size();
                                        String [][] data=new String[j][5];
                                        String [] head={"Type of
Transactions","Date","Time","Amount Dep./WtDrw.","Available Balance"};
                                        for(int k=0;k<j;k++)</pre>
                                               data[k][0]=trns.get(k).getType();
                                               data[k][1]=trns.get(k).getDt();
                                               data[k][2]=trns.get(k).getTi();
                                               data[k][3]=Double.toString(trns.get(k).getAmt());
                                               data[k][4]=Double.toString(trns.get(k).getBal());
                                        JTable jt=new JTable(data,head);
```

});

```
jt.getColumnModel().getColumn(0).setPreferredWidth(200);
                                        AccntTableVew atv=new AccntTableVew("iBanking", jt);
                                        new AccntTableViewCntrl(atv).control();
                                        actrns.dispose();
                                        atv.setVisible(true);
                                        if(acc.get(i).getType().equals("Savings Account"))
                                               atv.getLbl().setText("Showing Transaction Details
of Savings Account:-"+acc.get(i).getAccountid());
                                        }
                                        else
                                        {
                                               atv.getLbl().setText("Showing Transaction Details
of Current Account:-"+acc.get(i).getAccountid());
                                               if(acc.get(i).getBalance()<0)</pre>
                                                      JOptionPane.showMessageDialog(null, "The
Balance Shows in Negative Fig. that amount is already OverDrafted",
"Information", JOptionPane. INFORMATION_MESSAGE);
                                        sh++;
                                        break;
                                  }
                           if(sh==0)
                                  new ErrMsg("No Such Record Found");
                           }
                    }
             });
             actrns.getTf().addKeyListener(new KeyAdapter() {
                    @Override
                    public void keyTyped(KeyEvent a) {
                           // TODO Auto-generated method stub
                           char key=a.getKeyChar();
      if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACK_SPACE)||(key==KeyEvent.VK_DELETE))
                                  a.consume();
                           }
                    }
             });
      }
}
```

```
package bank.controller;
import java.awt.event.*;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import javax.swing.*;
import bank.view.*;
import bank.model.*;
import prj.*;
public class AccountantHomeContrl {
      private AccountantHome acthm;
      private JTable jtbl;
      private String [] head2={"AccountNo", "AccountHolder's UID", "AccountHolder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private int sha,ka;
      private AccntDetails ad;
      private ArrayList<Savings_Account> dat;
      public AccountantHomeContrl(AccountantHome acthm) {
             this.acthm = acthm;
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Account Details");
             sha=dat.size();
             data2=new String [sha][5];
      public void control()
             acthm.getB1().addActionListener((a)->{
                   CreatAccnt cracc=new CreatAccnt("iBanking");
                    new AccntCreatCntrl(cracc).control();
                    acthm.dispose();
             });
             acthm.getL1().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                          AccntDetails ad=new AccntDetails("iBanking");
                          new AccntDetailsContrl(ad).control();
                          acthm.dispose();
                          //account details
                    }
             });
             acthm.getL2().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //deposite money
                          AccountDeposite acdep=new AccountDeposite("iBanking");
                          new AccntDepositeCntrl(acdep, acdep).control();
                          acthm.dispose();
             });
             acthm.getL3().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //withdraw money
                          AccountWithdraw acwt=new AccountWithdraw("iBanking");
                          new AccntWithdrawCntrl(acwt,acwt).control();
```

```
acthm.dispose();
                    }
             });
             acthm.getL4().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //transfer money
                          AccTransferMoney actfm=new AccTransferMoney("iBanking");
                          new AccntTransferCntrl(actfm).control();
                          acthm.dispose();
                    }
             });
             acthm.getL5().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                     //see all account
                           if(sha>0)
                                 for(ka=0;ka<sha;ka++)</pre>
                                 {
                                        data2[ka][0]=Long.toString(dat.get(ka).getAccountid());
                                        data2[ka][1]=dat.get(ka).getUid();
                                        data2[ka][2]=dat.get(ka).getHoldername();
                                        data2[ka][3]=dat.get(ka).getType();
                                        data2[ka][4]=Double.toString(dat.get(ka).getBalance());
                                 }
                                 jtbl=new JTable(data2,head2);
                                 AccntTableVew atbv=new AccntTableVew("iBanking", jtbl);
                                 new AccntTableViewCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
Bank");
                                 acthm.dispose();
                          }
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in This Bank");
                           }
                    }
             });
             acthm.getL6().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                                                      //log out
                          SecndPage snd=new SecndPage("iBanking");
                          new SndPgController(snd).control();
                           acthm.dispose();
                    }
             });
             acthm.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0)
                                                     //transction details
                          AccntTrans act=new AccntTrans("iBanking");
                          new AccTransCntrl(act).control();
                          acthm.dispose();
                    }
             });
             acthm.getL9().addMouseListener(new MouseAdapter() {
                    public void mouseClicked(MouseEvent arg0) {
                                                      //edit account
                          AccntEdit aced=new AccntEdit("iBanking");
                          new AccntEditCntrl(aced).control();
                           acthm.dispose();
```

```
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.util.ArrayList;
import javax.swing.JOptionPane;
import prj.AccountReaderWritter;
import bank.model.*;
import bank.view.*;
public class AccntWithdrawCntrl extends AccntDetailsContrl
{
      private AccountWithdraw acdp;
      private int sh=0,i;
      private ArrayList<Savings_Account> acc;
      public AccntWithdrawCntrl(AccntDetails acdt,
                   AccountWithdraw acdp) {
             super(acdt);
             this.acdp = acdp;
             try {
                    acc=(ArrayList<Savings_Account>)AccountReaderWritter.read();
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("There is a Problem While Reading from File");
             }
      }
      public void control()
             super.control();
             acdp.getBtnWithdraw().addActionListener((a)->{
                    if(acdp.getTfAccId().getText().trim().length()==0)
                    {
                          new ErrMsg("Please Enter The Account No");
                    else if(acdp.getTfWithdAmt().getText().trim().length()==0)
                    {
                          new ErrMsg("Please Enter The Amount");
                    }
                    else
                    long accno=Long.parseLong(acdp.getTfAccId().getText().trim());
```

package bank.controller;

```
for(i=0;i<acc.size();i++)</pre>
                           if(acc.get(i).getAccountid()==accno)
                                 if(acc.get(i).getType().equals("Savings Account"))
                                 {
                                        try {
      acc.get(i).withdraw(Double.parseDouble(acdp.getTfWithdAmt().getText().trim()));
                                        } catch (Exception e) {
                                               // TODO Auto-generated catch block
                                               new ErrMsg("Insufficient Balance");
                                        new InfMsg("Now Available Balance :-
"+Double.toString(acc.get(i).getBalance()));
                                 else if(acc.get(i).getType().equals("Current Account"))
                                 {
                                        try {
      acc.get(i).curWithdraw(Double.parseDouble(acdp.getTfWithdAmt().getText().trim()));
                                        } catch (Exception e) {
                                               // TODO Auto-generated catch block
                                               new ErrMsg("Insufficient Balance");
                                        }
                                        new InfMsg("Now Available Balance :-
"+Double.toString(acc.get(i).getBalance()));
                                 super.clear();
                                 sh++;
                           }
                    if(sh==0)
                           new ErrMsg("Account Not Found");
                    }
             }
                    try {
                           AccountReaderWritter.writter(acc);
                    } catch (Exception e) {
                           // TODO Auto-generated catch block
                           new ErrMsg("There are Some error Occured While WithDrawing The
Balance"):
                    }});
             acdp.getTfWithdAmt().addKeyListener(new KeyAdapter() {
                    @Override
                    public void keyTyped(KeyEvent a) {
                           // TODO Auto-generated method stub
                           char key=a.getKeyChar();
      if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACK_SPACE)||(key==KeyEvent.VK_DELETE))
                                 a.consume();
                           }
                    }
             });
      }
}
```

```
package bank.controller;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import javax.swing.JOptionPane;
import javax.swing.JTable;
import prj.AccountReaderWritter;
import prj.CustomerReaderWritter;
import prj.TempReaderWriter;
import bank.model.Customer;
import bank.model.Savings_Account;
import bank.view.*;
public class UsrTransfrMnyCntrl {
      private UserTransferMn utfm;
      private JTable jtb;
      private String matchUid;
      private String [] head2={"AccountNo","Account Holder's UID","Account Holder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private String [] data;
      private int sha=0,ka,cntfr1=0,cntfr2=0;
      private ArrayList<Savings_Account> dat;
      private ArrayList<Customer> cus;
      private ArrayList<Savings Account> accs=new ArrayList<Savings Account>();
      private int cnt=0,cnt1=0;
      public UsrTransfrMnyCntrl(UserTransferMn utfm) {
             this.utfm = utfm;
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Account Details");
             try {
                   matchUid=TempReaderWriter.read();
                   matchUid=matchUid.trim();
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
             for(int h=0;h<dat.size();h++)</pre>
                    if(dat.get(h).getUid().equals(matchUid))
                    {
```

```
sha++;
                    }
             }
             data=new String[sha];
             for(int h=0;h<dat.size();h++)</pre>
                    if(dat.get(h).getUid().equals(matchUid))
                          data[cntfr1]=Long.toString(dat.get(h).getAccountid());
                          cntfr1++;
                    }
             data2=new String[sha][5];
             try {
                    cus=CustomerReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
             }
             try {
                    accs=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("The File not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("There are some problem with the Reading of the File");
      public void control()
utfm.getB1().addActionListener((a)->{
             });
             utfm.getL1().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Account Data
                          if(sha>0)
                           {
                                 UsrAccntData uad=new UsrAccntData("iBanking", data);
                                 new UsrAccntDataCntrl(uad).control();
                                 utfm.dispose();
                           }
                          else
                          {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                          }
                    }
             });
             utfm.getL3().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                          UserChangePasswrd ucp=new UserChangePasswrd("iBanking");
                          new UserChangePassCntrl(ucp).control();
                          utfm.dispose();
```

```
}
             });
             utfm.getL2().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //See All Account
                          if(sha>0)
                          {
                                 for(ka=0;ka<dat.size();ka++)</pre>
                                        if(dat.get(ka).getUid().equals(matchUid))
      data2[cntfr2][0]=Long.toString(dat.get(ka).getAccountid());
                                               data2[cntfr2][1]=dat.get(ka).getUid();
                                               data2[cntfr2][2]=dat.get(ka).getHoldername();
                                               data2[cntfr2][3]=dat.get(ka).getType();
      data2[cntfr2][4]=Double.toString(dat.get(ka).getBalance());
                                               cntfr2++;
                                 jtb=new JTable(data2,head2);
                                 UserTabl atbv=new UserTabl("iBanking", jtb);
                                 new UserTableCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
User");
                                 utfm.dispose();
                          }
                          else
                          {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                          }
                    }
             });
             utfm.getL4().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Transfer Money
                          if(sha>0)
                          {
                                 UserTransferMn utfm=new UserTransferMn("iBanking", data);
                                 new UsrTransfrMnyCntrl(utfm).control();
                                 utfm.dispose();
                          }
                          else
                          {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                          }
                    }
             });
             utfm.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                          // TODO Auto-generated method stub
                           //Transaction Details
                          if(sha>0)
                                 UsrTransctnDetls utsd=new UsrTransctnDetls("iBanking", data);
                                 new UsrTransctnCntrl(utsd).control();
                                 utfm.dispose();
```

```
}
                           else
                                  new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             utfm.getL9().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Edit Your Details
                           UserEditDetails usedd=new UserEditDetails("iBanking");
                           new UsrEditCntrl(usedd).control();
                           for(int u=0;u<cus.size();u++)</pre>
                                  if(cus.get(u).getUid().equals(matchUid))
                                  {
                                         usedd.getLblUid().setText(cus.get(u).getUid());
                                         usedd.getLblGender().setText(cus.get(u).getGender());
                                         usedd.getTfAddres().setText(cus.get(u).getAddress());
                                         usedd.getTfDob().setText(cus.get(u).getDob());
                                         usedd.getTfEmail().setText(cus.get(u).getEmailid());
                                         usedd.getTfName().setText(cus.get(u).getName());
                                         usedd.getTfPhno().setText(cus.get(u).getPhno());
                                         usedd.getTfPin().setText(cus.get(u).getPinno());
                                  }
                           utfm.dispose();
                    }
             });
             utfm.getL6().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Log Out
                           SecndPage snd=new SecndPage("iBanking");
                           new SndPgController(snd).control();
                           utfm.dispose();
                    }
             });
             utfm.getTf1().addKeyListener(new KeyAdapter() {
                    @Override
                    public void keyTyped(KeyEvent a) {
                           // TODO Auto-generated method stub
                           char key=a.getKeyChar();
      if(!(Character.isDigit(key))||(key==KeyEvent.\textit{VK\_BACK\_SPACE})||(key==KeyEvent.\textit{VK\_DELETE}))
                                  a.consume();
                           }
                    }
             });
             utfm.getBtnTransf().addActionListener((a)->{
                    if(utfm.getTf1().getText().trim().length()==0)
                    {
                           new WarMsg("Please Enter The Reciever's Account No:-");
                    }
                    else
                    {
                           long ano1=Long.parseLong(utfm.getTf1().getText().trim());
                           for(int i=0;i<accs.size();i++)</pre>
```

```
{
                                  if(accs.get(i).getAccountid()==ano1)
                                        cnt1++;
                                        long
ano=Long.parseLong(utfm.getJcb().getSelectedItem().toString().trim());
                                        for(int j=0;j<accs.size();j++)</pre>
                                               if(accs.get(j).getAccountid()==ano)
                                                      double
amt=Double.parseDouble(utfm.getTf3().getText().trim());
                                                      if(accs.get(j).getType().equals("Savings
Account"))
                                                      {
                                                             try {
      accs.get(j).acctrnsfer(accs.get(i), amt);
      JOptionPane.showMessageDialog(null, "The Balance Successfully Transfered",
"Information", JOptionPane. INFORMATION_MESSAGE);
                                                             } catch (Exception e) {
                                                                   // TODO Auto-generated catch
block
                                                                   new ErrMsg("Insufficient
Balance in Your's Account");
                                                             }
                                                      }
                                                      else
if(accs.get(j).getType().equals("Current Account"))
                                                             try {
      accs.get(j).curAcctrnsfer(accs.get(i), amt);
      JOptionPane.showMessageDialog(null, "The Balance Successfully Transfered",
"Information", JOptionPane. INFORMATION_MESSAGE);
                                                             } catch (Exception e) {
                                                                    // TODO Auto-generated catch
block
                                                                    new ErrMsg("Insufficient
Balance in Sender's Account");
                                                             }
                                                      }
                                                      cnt++;
                                               }
                                        }
                                        if(cnt==0)
                                               new ErrMsg("The Sender's Account No is not
Valid");
                                        }
                                  }
                           if(cnt1==0)
                           {
                                  new ErrMsg("The Reciever's Account No is not Valid");
                           }
                           try {
                                 AccountReaderWritter.writter(accs);
                           } catch (Exception e) {
                                  // TODO Auto-generated catch block
                                  new ErrMsg("Can't Transfer The Amount");
                           }
                    }
```

});
}

```
package bank.controller;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import javax.swing.JOptionPane;
import javax.swing.JTable;
import prj.AccountReaderWritter;
import prj.CustomerReaderWritter;
import prj.TempReaderWriter;
import bank.model.Customer;
import bank.model.Savings_Account;
import bank.model.Trans;
import bank.view.AccntTableVew;
import bank.view.ErrMsg;
import bank.view.SecndPage;
import bank.view.UserChangePasswrd;
import bank.view.UserEditDetails;
import bank.view.UserHome;
import bank.view.UserTabl;
import bank.view.UserTransferMn;
import bank.view.UsrAccntData;
import bank.view.UsrTransctnDetls;
public class UsrTransctnCntrl{
      private UsrTransctnDetls ustsd;
      private JTable jtb;
      private String matchUid;
      private String [] head2={"AccountNo","Account Holder's UID","Account Holder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private String [] data;
      private int sha=0,ka,cntfr1=0,cntfr2=0;
      private ArrayList<Savings Account> dat;
      private ArrayList<Customer> cus;
      private int sh=0;
      public UsrTransctnCntrl(UsrTransctnDetls ustsd) {
             this.ustsd = ustsd;
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Account Details");
             try {
                    matchUid=TempReaderWriter.read();
                    matchUid=matchUid.trim();
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
             for(int h=0;h<dat.size();h++)</pre>
```

```
{
                    if(dat.get(h).getUid().equals(matchUid))
                          sha++;
                    }
             data=new String[sha];
             for(int h=0;h<dat.size();h++)</pre>
             {
                    if(dat.get(h).getUid().equals(matchUid))
                    {
                          data[cntfr1]=Long.toString(dat.get(h).getAccountid());
                           cntfr1++;
                    }
             data2=new String[sha][5];
             try {
                    cus=CustomerReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
             }
      }
      public void control()
ustsd.getB1().addActionListener((a)->{
             });
             ustsd.getL1().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                          // TODO Auto-generated method stub
                           //Account Data
                          if(sha>0)
                                 UsrAccntData uad=new UsrAccntData("iBanking", data);
                                 new UsrAccntDataCntrl(uad).control();
                                 ustsd.dispose();
                          }
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             ustsd.getL3().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                          UserChangePasswrd ucp=new UserChangePasswrd("iBanking");
                          new UserChangePassCntrl(ucp).control();
                          ustsd.dispose();
                    }
             });
             ustsd.getL2().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                          // TODO Auto-generated method stub
```

```
//See All Account
                           if(sha>0)
                                 for(ka=0;ka<dat.size();ka++)</pre>
                                        if(dat.get(ka).getUid().equals(matchUid))
      data2[cntfr2][0]=Long.toString(dat.get(ka).getAccountid());
                                               data2[cntfr2][1]=dat.get(ka).getUid();
                                               data2[cntfr2][2]=dat.get(ka).getHoldername();
                                               data2[cntfr2][3]=dat.get(ka).getType();
      data2[cntfr2][4]=Double.toString(dat.get(ka).getBalance());
                                               cntfr2++;
                                 jtb=new JTable(data2,head2);
                                 UserTabl atbv=new UserTabl("iBanking", jtb);
                                 new UserTableCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
User");
                                 ustsd.dispose();
                           }
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             ustsd.getL4().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Transfer Money
                           if(sha>0)
                           {
                                 UserTransferMn utfm=new UserTransferMn("iBanking", data);
                                 new UsrTransfrMnyCntrl(utfm).control();
                                 ustsd.dispose();
                           }
                           else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             ustsd.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Transaction Details
                           if(sha>0)
                           {
                                 UsrTransctnDetls utsd=new UsrTransctnDetls("iBanking", data);
                                 new UsrTransctnCntrl(utsd).control();
                                 ustsd.dispose();
                           }
                           else
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
```

```
}
             });
             ustsd.getL9().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Edit Your Details
                           UserEditDetails usedd=new UserEditDetails("iBanking");
                           new UsrEditCntrl(usedd).control();
                           for(int u=0;u<cus.size();u++)</pre>
                           {
                                 if(cus.get(u).getUid().equals(matchUid))
                                 {
                                        usedd.getLblUid().setText(cus.get(u).getUid());
                                        usedd.getLblGender().setText(cus.get(u).getGender());
                                        usedd.getTfAddres().setText(cus.get(u).getAddress());
                                        usedd.getTfDob().setText(cus.get(u).getDob());
                                        usedd.getTfEmail().setText(cus.get(u).getEmailid());
                                        usedd.getTfName().setText(cus.get(u).getName());
                                        usedd.getTfPhno().setText(cus.get(u).getPhno());
                                        usedd.getTfPin().setText(cus.get(u).getPinno());
                                 }
                           }
                           ustsd.dispose();
                    }
             });
             ustsd.getL6().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Log Out
                           SecndPage snd=new SecndPage("iBanking");
                           new SndPgController(snd).control();
                           ustsd.dispose();
                    }
             });
             ustsd.getBtnTransctn().addActionListener((a)->{
                    if(ustsd.getJcmacc().getSelectedItem().toString().trim().length()==0)
                    {
                           new ErrMsg("Please Enter Account No");
                    }
                    else
                    {
                           long
accno=Long.parseLong(ustsd.getJcmacc().getSelectedItem().toString().trim());
                           ArrayList<Savings_Account> acc=new ArrayList<Savings_Account>();
                           try {
                                 acc=(ArrayList<Savings_Account>)AccountReaderWritter.read();
                           } catch (Exception e) {
                                 // TODO Auto-generated catch block
                                 new ErrMsg("There is a Problem While Reading from File");
                           for(int i=0;i<acc.size();i++)</pre>
                                 if(acc.get(i).getAccountid()==accno)
                                 {
                                        ArrayList<Trans> trns=new ArrayList<Trans>();
                                        trns=acc.get(i).getTrn();
                                        int j=trns.size();
                                        String [][] data=new String[j][5];
                                        String [] head={"Type of
Transactions","Date","Time","Amount Dep./WtDrw.","Available Balance"};
                                        for(int k=0;k<j;k++)</pre>
```

```
{
                                               data[k][0]=trns.get(k).getType();
                                               data[k][1]=trns.get(k).getDt();
                                               data[k][2]=trns.get(k).getTi();
                                               data[k][3]=Double.toString(trns.get(k).getBal());
                                               data[k][4]=Double.toString(trns.get(k).getBal());
                                        JTable jt=new JTable(data,head);
      jt.getColumnModel().getColumn(0).setPreferredWidth(200);
                                        UserTabl atv=new UserTabl("iBanking", jt);
                                        new UserTableCntrl(atv).control();
                                        ustsd.dispose();
                                        atv.setVisible(true);
                                        if(acc.get(i).getType().equals("Savings Account"))
                                               atv.getLbl().setText("Showing Transaction Details
of Savings Account:-"+acc.get(i).getAccountid());
                                        }
                                        else
                                        {
                                               atv.getLbl().setText("Showing Transaction Details
of Current Account:-"+acc.get(i).getAccountid());
                                               if(acc.get(i).getBalance()<0)</pre>
                                               {
                                                      JOptionPane.showMessageDialog(null, "The
Balance Shows in Negetive Fig. that amount is already OverDrafted",
"Information", JOptionPane. INFORMATION_MESSAGE);
                                        }
                                        sh++;
                                        break;
                                  }
                           if(sh==0)
                                  new ErrMsg("No Such Record Found");
                           }
                    }
             });
      }
}
```

```
package bank.controller;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import javax.swing.JTable;
import prj.*;
import bank.model.*;
import bank.view.*;
public class UsrEditCntrl {
      private UserEditDetails usedd;
      private JTable jtb;
      private String matchUid;
      private String [] head2={"AccountNo","Account Holder's UID","Account Holder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private String [] data;
      private int sha=0,ka,cntfr1=0,cntfr2=0;
      private ArrayList<Savings_Account> dat;
      private ArrayList<Customer> cus2;
      private ArrayList<Customer> cus;
      private String mthuid;
      public UsrEditCntrl( UserEditDetails usedd) {
             this.usedd = usedd;
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Account Details");
             try {
                    matchUid=TempReaderWriter.read();
                    matchUid=matchUid.trim();
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
             for(int h=0;h<dat.size();h++)</pre>
                    if(dat.get(h).getUid().equals(matchUid))
                    {
                          sha++;
```

```
}
             }
             data=new String[sha];
             for(int h=0;h<dat.size();h++)</pre>
                    if(dat.get(h).getUid().equals(matchUid))
                          data[cntfr1]=Long.toString(dat.get(h).getAccountid());
                          cntfr1++;
             data2=new String[sha][5];
             try {
                    cus=CustomerReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
             }
             try {
                    cus2=CustomerReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("There Some Error Ouccred while Reading from File");
             try {
                    mthuid=TempReaderWriter.read();
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("There Some Error Ouccred while Reading from File");
             }
      public void control()
      {
             usedd.getTfName().addKeyListener(new KeyAdapter() {
                    @Override
                    public void keyTyped(KeyEvent a) {
                           // TODO Auto-generated method stub
                           char key=a.getKeyChar();
      if(!(Character.isLetter(key)||(key==KeyEvent.VK_BACK_SPACE)||(key==KeyEvent.VK_SPACE)||(
a.getKeyCode()==KeyEvent.VK_SPACE)))
                                 a.consume();
                          }
                    }
             });
             usedd.getB1().addActionListener((a)->{
             });
             usedd.getL1().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Account Data
                          if(sha>0)
                           {
                                 UsrAccntData uad=new UsrAccntData("iBanking", data);
```

```
new UsrAccntDataCntrl(uad).control();
                                 usedd.dispose();
                           }
                           else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             usedd.getL3().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                          UserChangePasswrd ucp=new UserChangePasswrd("iBanking");
                           new UserChangePassCntrl(ucp).control();
                           usedd.dispose();
                    }
             });
             usedd.getL2().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //See All Account
                           if(sha>0)
                           {
                                 for(ka=0;ka<dat.size();ka++)</pre>
                                        if(dat.get(ka).getUid().equals(matchUid))
      data2[cntfr2][0]=Long.toString(dat.get(ka).getAccountid());
                                               data2[cntfr2][1]=dat.get(ka).getUid();
                                               data2[cntfr2][2]=dat.get(ka).getHoldername();
                                               data2[cntfr2][3]=dat.get(ka).getType();
      data2[cntfr2][4]=Double.toString(dat.get(ka).getBalance());
                                               cntfr2++;
                                 jtb=new JTable(data2,head2);
                                 UserTabl atbv=new UserTabl("iBanking", jtb);
                                 new UserTableCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
User");
                                 usedd.dispose();
                           }
                           else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             usedd.getL4().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Transfer Money
                           if(sha>0)
                           {
                                 UserTransferMn utfm=new UserTransferMn("iBanking", data);
                                 new UsrTransfrMnyCntrl(utfm).control();
                                 usedd.dispose();
                           }
```

```
else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             usedd.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Transaction Details
                           if(sha>0)
                           {
                                 UsrTransctnDetls utsd=new UsrTransctnDetls("iBanking", data);
                                 new UsrTransctnCntrl(utsd).control();
                                 usedd.dispose();
                           else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             usedd.getL9().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Edit Your Details
                           UserEditDetails usedd=new UserEditDetails("iBanking");
                           new UsrEditCntrl(usedd).control();
                           for(int u=0;u<cus.size();u++)</pre>
                           {
                                 if(cus.get(u).getUid().equals(matchUid))
                                 {
                                        usedd.getLblUid().setText(cus.get(u).getUid());
                                        usedd.getLblGender().setText(cus.get(u).getGender());
                                        usedd.getTfAddres().setText(cus.get(u).getAddress());
                                        usedd.getTfDob().setText(cus.get(u).getDob());
                                        usedd.getTfEmail().setText(cus.get(u).getEmailid());
                                        usedd.getTfName().setText(cus.get(u).getName());
                                        usedd.getTfPhno().setText(cus.get(u).getPhno());
                                        usedd.getTfPin().setText(cus.get(u).getPinno());
                                 }
                           usedd.dispose();
                    }
             });
             usedd.getL6().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Log Out
                           SecndPage snd=new SecndPage("iBanking");
                           new SndPgController(snd).control();
                           usedd.dispose();
                    }
             });
             usedd.getTfPhno().addKeyListener(new KeyAdapter() {
                    @Override
                    public void keyTyped(KeyEvent a) {
```

```
// TODO Auto-generated method stub
                    char key=a.getKeyChar();
if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACK_SPACE)||(key==KeyEvent.VK_DELETE))
                           a.consume();
                    }
             }
      });
      usedd.getTfPin().addKeyListener(new KeyAdapter() {
             @Override
             public void keyTyped(KeyEvent a) {
                    // TODO Auto-generated method stub
                    char key=a.getKeyChar();
if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACK_SPACE)||(key==KeyEvent.VK_DELETE))
                           a.consume();
                    }
             }
      });
      usedd.getBtnDone().addActionListener((a)->{
             for(int u=0;u<cus2.size();u++)</pre>
             {
                    if(cus2.get(u).getUid().equals(mthuid))
                           cus2.get(u).setAddress(usedd.getTfAddres().getText().trim());
                           cus2.get(u).setDob(usedd.getTfDob().getText().trim());
                           cus2.get(u).setEmailid(usedd.getTfEmail().getText().trim());
                           cus2.get(u).setName(usedd.getTfName().getText().trim());
                           cus2.get(u).setPhno(usedd.getTfPhno().getText().trim());
                           cus2.get(u).setPinno(usedd.getTfPin().getText().trim());
                    }
             }
             try {
                    CustomerReaderWritter.write(cus2);
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Some Error Occured While Updating your Details");
             }
      });
}
```

```
package bank.controller;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import javax.swing.JTable;
import prj.*;
import bank.model.*;
import bank.view.*;
public class UsrAccntDataCntrl
{
      private UsrAccntData uad;
      private JTable jtb;
      private String matchUid;
      private String [] head2={"AccountNo","Account Holder's UID","Account Holder's
Name","Account Type","Balance"};
    private String [][] data2;
      private String [] data;
      private int sha=0,ka,cntfr1=0,cntfr2=0;
      private ArrayList<Savings_Account> dat;
      private ArrayList<Customer> cus;
      private ArrayList<Savings_Account> sav=new ArrayList<Savings_Account>();
      private long ac;
      private int cnt=0;
      public UsrAccntDataCntrl(UsrAccntData uad) {
             this.uad = uad;
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Account Details");
             }
             try {
                    matchUid=TempReaderWriter.read();
                    matchUid=matchUid.trim();
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
             for(int h=0;h<dat.size();h++)</pre>
                    if(dat.get(h).getUid().equals(matchUid))
                    {
                           sha++;
                    }
             data=new String[sha];
             for(int h=0;h<dat.size();h++)</pre>
             {
```

```
if(dat.get(h).getUid().equals(matchUid))
                          data[cntfr1]=Long.toString(dat.get(h).getAccountid());
                          cntfr1++;
                    }
             data2=new String[sha][5];
             try {
                    cus=CustomerReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
             }
             try {
                    sav=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("The File is Not Present in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("There is some Problem Occured while Reading data from File");
             }
      public void control()
uad.getB1().addActionListener((a)->{
uad.getL3().addMouseListener(new MouseAdapter() {
      @Override
      public void mouseClicked(MouseEvent arg0) {
             // TODO Auto-generated method stub
             UserChangePasswrd ucp=new UserChangePasswrd("iBanking");
             new UserChangePassCntrl(ucp).control();
             uad.dispose();
      }
});
             uad.getL1().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                          // TODO Auto-generated method stub
                          //Account Data
                          if(sha>0)
                          {
                                 UsrAccntData uad=new UsrAccntData("iBanking", data);
                                 new UsrAccntDataCntrl(uad).control();
                                 uad.dispose();
                          }
                          else
                          {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                          }
             });
             uad.getL2().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                          // TODO Auto-generated method stub
```

```
//See All Account
                           if(sha>0)
                                 for(ka=0;ka<dat.size();ka++)</pre>
                                        if(dat.get(ka).getUid().equals(matchUid))
      data2[cntfr2][0]=Long.toString(dat.get(ka).getAccountid());
                                               data2[cntfr2][1]=dat.get(ka).getUid();
                                               data2[cntfr2][2]=dat.get(ka).getHoldername();
                                               data2[cntfr2][3]=dat.get(ka).getType();
      data2[cntfr2][4]=Double.toString(dat.get(ka).getBalance());
                                               cntfr2++;
                                 jtb=new JTable(data2,head2);
                                 UserTabl atbv=new UserTabl("iBanking", jtb);
                                 new UserTableCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
User");
                                 uad.dispose();
                           }
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             uad.getL4().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Transfer Money
                           if(sha>0)
                           {
                                 UserTransferMn utfm=new UserTransferMn("iBanking", data);
                                 new UsrTransfrMnyCntrl(utfm).control();
                                 uad.dispose();
                           }
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             uad.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Transaction Details
                           if(sha>0)
                           {
                                 UsrTransctnDetls utsd=new UsrTransctnDetls("iBanking", data);
                                 new UsrTransctnCntrl(utsd).control();
                                 uad.dispose();
                           }
                           else
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
```

```
});
      uad.getL9().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                    // TODO Auto-generated method stub
                    //Edit Your Details
                    UserEditDetails usedd=new UserEditDetails("iBanking");
                    new UsrEditCntrl(usedd).control();
                    for(int u=0;u<cus.size();u++)</pre>
                    {
                           if(cus.get(u).getUid().equals(matchUid))
                           {
                                 usedd.getLblUid().setText(cus.get(u).getUid());
                                 usedd.getLblGender().setText(cus.get(u).getGender());
                                 usedd.getTfAddres().setText(cus.get(u).getAddress());
                                 usedd.getTfDob().setText(cus.get(u).getDob());
                                 usedd.getTfEmail().setText(cus.get(u).getEmailid());
                                 usedd.getTfName().setText(cus.get(u).getName());
                                 usedd.getTfPhno().setText(cus.get(u).getPhno());
                                 usedd.getTfPin().setText(cus.get(u).getPinno());
                           }
                    uad.dispose();
             }
      });
      uad.getL6().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                    // TODO Auto-generated method stub
                    //Log Out
                    SecndPage snd=new SecndPage("iBanking");
                    new SndPgController(snd).control();
                    uad.dispose();
             }
      });
      uad.getJcmb().addActionListener((a)->{
             ac=Long.parseLong(uad.getJcmb().getSelectedItem().toString());
             for(int i=0;i<sav.size();i++)</pre>
             {
                    if(sav.get(i).getAccountid()==ac)
                           uad.getLblHolUid().setText(sav.get(i).getUid());
                           uad.getLblHolderNm().setText(sav.get(i).getHoldername());
                           uad.getLblType().setText(sav.get(i).getType());
uad.getLblBal().setText(Double.toString(sav.get(i).getBalance()));
uad.getLblMinBal().setText(Double.toString(sav.get(i).getMinimum_amount()));
                           cnt++;
                    }
             if(cnt==0)
                    new ErrMsg("There is No Such Account");
             }
      });
}
```

```
package bank.controller;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import javax.swing.JTable;
import prj.AccountReaderWritter;
import prj.CustomerReaderWritter;
import prj.TempReaderWriter;
import bank.model.Customer;
import bank.model.Savings_Account;
import bank.view.*;
public class UserTableCntrl
{
      private UserTabl utb;
      private JTable jtb;
      private String matchUid;
      private String [] head2={"AccountNo","Account Holder's UID","Account Holder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private String [] data;
      private int sha=0,ka,cntfr1=0,cntfr2=0;
      private ArrayList<Savings Account> dat;
      private ArrayList<Customer> cus;
      public UserTableCntrl(UserTabl utb) {
             this.utb = utb;
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Account Details");
             try {
                    matchUid=TempReaderWriter.read();
                    matchUid=matchUid.trim();
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
             for(int h=0;h<dat.size();h++)</pre>
                    if(dat.get(h).getUid().equals(matchUid))
                           sha++;
                    }
             data=new String[sha];
             for(int h=0;h<dat.size();h++)</pre>
                    if(dat.get(h).getUid().equals(matchUid))
                    {
                           data[cntfr1]=Long.toString(dat.get(h).getAccountid());
                           cntfr1++;
                    }
```

```
}
             data2=new String[sha][5];
             try {
                    cus=CustomerReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
             }
      public void control()
             utb.getB1().addActionListener((a)->{
             });
             utb.getL3().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                          UserChangePasswrd ucp=new UserChangePasswrd("iBanking");
                          new UserChangePassCntrl(ucp).control();
                          utb.dispose();
                    }
             });
             utb.getL1().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Account Data
                          if(sha>0)
                           {
                                 UsrAccntData uad=new UsrAccntData("iBanking", data);
                                 new UsrAccntDataCntrl(uad).control();
                                 utb.dispose();
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             utb.getL2().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                          // TODO Auto-generated method stub
                          //See All Account
                          if(sha>0)
                          {
                                 for(ka=0;ka<dat.size();ka++)</pre>
                                 {
                                        if(dat.get(ka).getUid().equals(matchUid))
                                        {
      data2[cntfr2][0]=Long.toString(dat.get(ka).getAccountid());
                                               data2[cntfr2][1]=dat.get(ka).getUid();
                                               data2[cntfr2][2]=dat.get(ka).getHoldername();
                                               data2[cntfr2][3]=dat.get(ka).getType();
      data2[cntfr2][4]=Double.toString(dat.get(ka).getBalance());
                                               cntfr2++;
```

```
}
                                 jtb=new JTable(data2,head2);
                                 UserTabl atbv=new UserTabl("iBanking", jtb);
                                 new UserTableCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
User");
                                 utb.dispose();
                           }
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             utb.getL4().addMouseListener(new MouseAdapter() {
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Transfer Money
                           if(sha>0)
                           {
                                 UserTransferMn utfm=new UserTransferMn("iBanking", data);
                                 new UsrTransfrMnyCntrl(utfm).control();
                                 utb.dispose();
                           }
                          else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             utb.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Transaction Details
                           if(sha>0)
                                 UsrTransctnDetls utsd=new UsrTransctnDetls("iBanking", data);
                                 new UsrTransctnCntrl(utsd).control();
                                 utb.dispose();
                           }
                           else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             utb.getL9().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Edit Your Details
                          UserEditDetails usedd=new UserEditDetails("iBanking");
                           new UsrEditCntrl(usedd).control();
                           for(int u=0;u<cus.size();u++)</pre>
                                 if(cus.get(u).getUid().equals(matchUid))
                                        usedd.getLblUid().setText(cus.get(u).getUid());
                                        usedd.getLblGender().setText(cus.get(u).getGender());
```

```
usedd.getTfAddres().setText(cus.get(u).getAddress());
                                 usedd.getTfDob().setText(cus.get(u).getDob());
                                 usedd.getTfEmail().setText(cus.get(u).getEmailid());
                                 usedd.getTfName().setText(cus.get(u).getName());
                                 usedd.getTfPhno().setText(cus.get(u).getPhno());
                                 usedd.getTfPin().setText(cus.get(u).getPinno());
                          }
                    utb.dispose();
             }
      });
      utb.getL6().addMouseListener(new MouseAdapter() {
             @Override
             public void mouseClicked(MouseEvent arg0) {
                   // TODO Auto-generated method stub
                    //Log Out
                    SecndPage snd=new SecndPage("iBanking");
                    new SndPgController(snd).control();
                    utb.dispose();
             }
      });
}
```

```
package bank.controller;
import java.awt.BorderLayout;
import java.awt.Graphics;
import java.awt.Image;
import java.awt.SecondaryLoop;
import java.awt.Toolkit;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import javax.swing.ButtonModel;
import javax.swing.JPanel;
import prj.CustomerReaderWritter;
```

```
import bank.model.Customer;
import bank.view.*;
public class UserRegCntrl{
      private UserReg ur;
      private ArrayList<Customer> cus;
      public UserRegCntrl(UserReg ur) {
             this.ur = ur;
             try {
                    cus=CustomerReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found In Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Some Error Occured While Reading From File");
      public void control()
             ur.getBtnBack().addActionListener((a)->{
                    SecndPage scn=new SecndPage("iBanking");
                    new SndPgController(scn).control();
                    ur.dispose();
             });
             ur.getBtnBack2().addActionListener((a)->{
                    SecndPage scn=new SecndPage("iBanking");
                    new SndPgController(scn).control();
                    ur.dispose();
             });
             ur.getBtnRefrs().addActionListener((a)->{
                    clear();
             });
             ur.getBtnPrs().addActionListener((a)->{
                    if(ur.getTf1().getText().trim().length()==0)
                    {
                          new WarMsg("Please Enter Your Name");
                    else if(ur.getTa1().getText().trim().length()==0)
                    {
                          new WarMsg("Please Enter Your Address");
                    else if(ur.getTf2().getText().trim().length()==0)
                    {
                          new WarMsg("Please Enter Your Pin No");
                    }
                    else if(ur.getTf3().getText().trim().length()==0)
                          new WarMsg("Please Enter Your Email Address");
                    }
                    else if(ur.getTf4().getText().trim().length()==0)
                    {
                          new WarMsg("Please Enter Your Phone No.");
                    }
                    else if(ur.getTf3().getText().trim().matches("[a-zA-Z0-9][\\w.]*@\\w+\\.[a-
z]+\.?[a-z]{2,}?"))
                          ur.getBtnRegister().setEnabled(true);
                          ur.getBtnBack2().setEnabled(true);
                          ur.getPswrd().setEditable(true);
                          ur.getCnfpswrd().setEditable(true);
                          ur.getTa1().setEditable(false);
                          ur.getTf1().setEditable(false);
                          ur.getTf2().setEditable(false);
```

```
ur.getTf3().setEditable(false);
                          ur.getTf4().setEditable(false);
                          ur.getBtnBack().setEnabled(false);
                          ur.getBtnPrs().setEnabled(false);
                          ur.getBtnRefrs().setEnabled(false);
                          String name=ur.getTf1().getText().trim();
                          String phno=ur.getTf4().getText().trim();
                          String email=ur.getTf3().getText().trim();
                          String pin=ur.getTf2().getText().trim();
                          int r=phno.length();
                          String UID=name.substring(0, 2)+phno.substring(r-
2,r)+email.substring(0,2)+pin.substring(0, 2);
                          ur.getLbluid().setText(UID);
                    }
                   else
                    {
                          new ErrMsg("Your Email Id Is Not Valid");
             });
             ur.getBtnRegister().addActionListener((a)->{
                    if(new String(ur.getPswrd().getPassword()).trim().length()==0)
                    {
                          new WarMsg("Please Enter PassWord");
                    }
                    else if(new String(ur.getCnfpswrd().getPassword()).trim().length()==0)
                    {
                          new WarMsg("Please Confirm Your Password");
                    else if(new String(ur.getPswrd().getPassword()).trim().equals(new
String(ur.getCnfpswrd().getPassword()).trim())==false)
                          new WarMsg("You Have Entered Different Password in Cofirm
Password");
                    else if(new
String(ur.getPswrd().getPassword()).trim().matches("((?=.*\\d)(?=.*[a-z])(?=.*[A-
Z])(?=.*[@#$%!&]).{6,20})")==true)
                          String name=ur.getTf1().getText().trim();
                          String address=ur.getTa1().getText().trim();
                          String pin=ur.getTf2().getText().trim();
                          String email=ur.getTf3().getText().trim();
                          String phno=ur.getTf4().getText().trim();
                          String dob=ur.getJdt().getSelectedItem().toString()+"-
"+ur.getJmn().getSelectedItem().toString()+"-"+ur.getJyr().getSelectedItem().toString();
                          String gen=ur.getBgrp().getSelection().getActionCommand();
                          String UID=ur.getLbluid().getText().trim();
                          String Pass=new String(ur.getPswrd().getPassword()).trim();
                          cus.add(new Customer(UID, name, email, Pass, dob, phno, address,
gen, pin));
                          try {
                                 CustomerReaderWritter.write(cus);
                                 UserLogin ul=new UserLogin("iBanking");
                                 new UserLoginControl(ul).control();
                                 ur.dispose();
                          } catch (Exception e) {
                                 // TODO Auto-generated catch block
                                 new ErrMsg("Unable to Create The User Account");
                          }
                    }
                    else
                    {
                          new ErrMsg("You Have Enter Password in Wrong Format");
```

```
}
       });
       ur.getTf2().addKeyListener(new KeyAdapter() {
              @Override
              public void keyTyped(KeyEvent a) {
                      // TODO Auto-generated method stub
                     char key=a.getKeyChar();
if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACK_SPACE)||(key==KeyEvent.VK_DELETE))
                             a.consume();
                     }
              }
       });
       ur.getTf4().addKeyListener(new KeyAdapter() {
              @Override
              public void keyTyped(KeyEvent a) {
                      // TODO Auto-generated method stub
                     char key=a.getKeyChar();
if(!(Character.isDigit(key))||(key==KeyEvent.VK_BACK_SPACE)||(key==KeyEvent.VK_DELETE))
                             a.consume();
                     }
              }
       });
}
public void clear()
       ur.getTa1().setText("");
ur.getTf1().setText("");
ur.getTf2().setText("");
       ur.getTf3().setText("");
       ur.getTf4().setText("");
}
```

```
package bank.controller;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import prj.CustomerReaderWritter;
import prj.TempReaderWriter;
import bank.model.*;
import bank.view.*;
public class UserLoginControl
{
      private UserLogin usl;
      private ArrayList<Customer> cus=new ArrayList<Customer>();
      private int cnt=0,k;
      public UserLoginControl(UserLogin usl) {
             super();
             this.usl = usl;
             try {
                    cus=CustomerReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Can't Find The File in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("There is some Error Occured While Reading From File");
             k=cus.size();
      public void control()
             usl.getBtnCreate().addActionListener((a)->{
                    UserReg ur=new UserReg("shambo");
                    new UserRegCntrl(ur).control();
                    usl.dispose();
             usl.getBtnLogin().addActionListener((a)->{
                    if(usl.getTf1().getText().trim().length()==0)
                    {
                          new WarMsg("You Can Not Log In without Entering User ID");
                    }
                    else if(new String(usl.getPs().getPassword()).length()==0)
                    {
                          new WarMsg("You Can Not Log In without Entering Password");
                    }
                    else
                    {
                          String uid=usl.getTf1().getText().trim();
                          String pass=new String(usl.getPs().getPassword());
                          for(int i=0;i<k;i++)</pre>
                                 if(cus.get(i).getUid().equals(uid) &&
cus.get(i).getPassword().equals(pass))
                                        new WarMsg("");
                                        String ab=cus.get(i).getUid();
                                        try {
```

```
TempReaderWriter.write(ab);
                                              UserHome uhm=new UserHome("iBanking");
                                              new UserHomeCntrl(uhm).control();
                                              usl.dispose();
                                        } catch (Exception e) {
                                              // TODO Auto-generated catch block
                                              new ErrMsg("Some Error Occured While Loging In");
                                        cnt++;
                                 }
                          }
if(cnt==0)
                                 new ErrMsg("You Have Entered Wrong User Id or Password");
                          }
                   }
            });
      }
}
```

```
package bank.controller;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import javax.swing.*;
import prj.*;
import java.awt.*;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import bank.model.*;
import bank.view.*;
public class UserHomeCntrl {
      private UserHome uhm;
      private JTable jtb;
      private String matchUid;
      private String [] head2={"AccountNo","Account Holder's UID","Account Holder's
Name", "Account Type", "Balance"};
      private String [][] data2;
      private String [] data;
      private int sha=0,ka,cntfr1=0,cntfr2=0;
      private ArrayList<Savings_Account> dat;
      private ArrayList<Customer> cus;
      public UserHomeCntrl(UserHome uhm) {
             this.uhm = uhm;
             try {
                    dat=AccountReaderWritter.read();
             } catch (FileNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Account Details");
             try {
                    matchUid=TempReaderWriter.read();
                    matchUid=matchUid.trim();
             } catch (Exception e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
             for(int h=0;h<dat.size();h++)</pre>
                    if(dat.get(h).getUid().equals(matchUid))
                           sha++;
                    }
             data=new String[sha];
             for(int h=0;h<dat.size();h++)</pre>
             {
                    if(dat.get(h).getUid().equals(matchUid))
                    {
                           data[cntfr1]=Long.toString(dat.get(h).getAccountid());
                           cntfr1++;
                    }
             data2=new String[sha][5];
                    cus=CustomerReaderWritter.read();
             } catch (FileNotFoundException e) {
```

```
// TODO Auto-generated catch block
                    new ErrMsg("File Not Found in Location");
             } catch (IOException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Error Occured While Reading Customer Details");
      }
      public void control()
      {
             uhm.getB1().addActionListener((a)->{
             });
             uhm.getL1().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Account Data
                           if(sha>0)
                           {
                                 UsrAccntData uad=new UsrAccntData("iBanking", data);
                                 new UsrAccntDataCntrl(uad).control();
                                 uhm.dispose();
                           }
                           else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             uhm.getL2().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //See All Account
                           if(sha>0)
                           {
                                 for(ka=0;ka<dat.size();ka++)</pre>
                                        if(dat.get(ka).getUid().equals(matchUid))
      data2[cntfr2][0]=Long.toString(dat.get(ka).getAccountid());
                                               data2[cntfr2][1]=dat.get(ka).getUid();
                                               data2[cntfr2][2]=dat.get(ka).getHoldername();
                                               data2[cntfr2][3]=dat.get(ka).getType();
      data2[cntfr2][4]=Double.toString(dat.get(ka).getBalance());
                                               cntfr2++;
                                        }
                                 jtb=new JTable(data2,head2);
                                 UserTabl atbv=new UserTabl("iBanking", jtb);
                                 new UserTableCntrl(atbv).control();
                                 atbv.getLbl().setText("Showing All The Accounts of This
User");
                                 uhm.dispose();
                           }
                           else
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
```

```
uhm.getL4().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Transfer Money
                           if(sha>0)
                           {
                                 UserTransferMn utfm=new UserTransferMn("iBanking", data);
                                 new UsrTransfrMnyCntrl(utfm).control();
                                 uhm.dispose();
                           }
                           else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             uhm.getL7().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Transaction Details
                           if(sha>0)
                           {
                                 UsrTransctnDetls utsd=new UsrTransctnDetls("iBanking", data);
                                 new UsrTransctnCntrl(utsd).control();
                                 uhm.dispose();
                           }
                           else
                           {
                                 new ErrMsg("Sorry There is No Account in Opened for this
User");
                           }
                    }
             });
             uhm.getL9().addMouseListener(new MouseAdapter() {
                    @Override
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Edit Your Details
                          UserEditDetails usedd=new UserEditDetails("iBanking");
                           new UsrEditCntrl(usedd).control();
                           for(int u=0;u<cus.size();u++)</pre>
                           {
                                 if(cus.get(u).getUid().equals(matchUid))
                                 {
                                        usedd.getLblUid().setText(cus.get(u).getUid());
                                        usedd.getLblGender().setText(cus.get(u).getGender());
                                        usedd.getTfAddres().setText(cus.get(u).getAddress());
                                        usedd.getTfDob().setText(cus.get(u).getDob());
                                        usedd.getTfEmail().setText(cus.get(u).getEmailid());
                                        usedd.getTfName().setText(cus.get(u).getName());
                                        usedd.getTfPhno().setText(cus.get(u).getPhno());
                                        usedd.getTfPin().setText(cus.get(u).getPinno());
                                 }
                           uhm.dispose();
                    }
             });
             uhm.getL6().addMouseListener(new MouseAdapter() {
                    public void mouseClicked(MouseEvent arg0) {
                           // TODO Auto-generated method stub
                           //Log Out
```

```
SecndPage snd=new SecndPage("iBanking");
                          new SndPgController(snd).control();
                          uhm.dispose();
                   }
             });
             uhm.getL3().addMouseListener(new MouseAdapter() {
                   @Override
                   public void mouseClicked(MouseEvent arg0) {
                          // TODO Auto-generated method stub
                          UserChangePasswrd ucp=new UserChangePasswrd("iBanking");
                          new UserChangePassCntrl(ucp).control();
                          uhm.dispose();
                   }
             });
      }
}
```

```
package bank.controller;
import bank.view.*;
public class SndPgController
{
      private SecndPage sndpg;
      public SndPgController(SecndPage sndpg) {
             this.sndpg = sndpg;
      }
      public void control()
             sndpg.getbAdmin().addActionListener((a)->{
                   AccntantLogIn alc=new AccntantLogIn("iBanking");
                   new AccntLoginCntrl(alc).control();
                    sndpg.dispose();
             });
             sndpg.getbUser().addActionListener((a)->{
                   UserLogin ul=new UserLogin("iBanking");
                   new UserLoginControl(ul).control();
                   sndpg.dispose();
             });
      }
}
```

From package bank.model

```
package bank.model;
public interface Bank{
}
```

```
package bank.model;
import java.io.Serializable;
import java.text.DateFormat;
import java.util.ArrayList;
import java.util.Date;
import bank.controller.InsufficientBalanceException;
public class Savings_Account implements Serializable,Bank
{
      private long accountid;
      private String holdername;
      private String uid;
      private double balance;
      private String type;
      ArrayList<Trans> trn=new ArrayList<Trans>();
      private double minimum amount;
      Date dt=new Date();
      public Savings_Account(long accountid, String holdername, String uid, double balance,
String type, double minimum_amount) {
             this.accountid = accountid;
             this.holdername = holdername;
             this.uid = uid;
             this.balance = balance;
             this.type = type;
             this.minimum_amount = minimum_amount;
             DateFormat sh=DateFormat.getDateInstance(DateFormat.MEDIUM);
             DateFormat ti=DateFormat.getTimeInstance(DateFormat.MEDIUM);
             trn.add(new Trans("iBanking Welcomes
You",0.0,balance,sh.format(dt),ti.format(dt)));
      public void withdraw(double amt) throws Exception {
             // TODO Auto-generated method stub
             if(this.getBalance()-amt>=minimum_amount)
             {
                   this.setBalance(this.getBalance()-amt);
                   DateFormat sh=DateFormat.getDateInstance(DateFormat.MEDIUM);
                   DateFormat ti=DateFormat.getTimeInstance(DateFormat.MEDIUM);
                   this.trn.add(new Trans("Cash
Withdraw",amt,this.getBalance(),sh.format(dt),ti.format(dt)));
             }
             else
             {
                   throw new InsufficientBalanceException("Sorry Insufficient Balance");
             }
      public void deposite(double amt) {
             this.setBalance(this.getBalance()+amt);
             DateFormat sh=DateFormat.getDateInstance(DateFormat.MEDIUM);
             DateFormat ti=DateFormat.getTimeInstance(DateFormat.MEDIUM);
             this.trn.add(new Trans("Cash
Deposite",amt,this.getBalance(),sh.format(dt),ti.format(dt)));
       public void acctrnsfer(Savings_Account acc, double amt) throws Exception
      {
             if(this.getBalance()-amt>=minimum amount)
             {
                   this.setBalance(this.getBalance()-amt);
                    acc.setBalance(acc.getBalance()+amt);
                   DateFormat sh=DateFormat.getDateInstance(DateFormat.MEDIUM);
                   DateFormat ti=DateFormat.getTimeInstance(DateFormat.MEDIUM);
                   this.trn.add(new Trans("Money Transfer to--
>"+acc.getAccountid(),amt,this.getBalance(),sh.format(dt),ti.format(dt)));
                    acc.trn.add(new Trans("Money Transfer form--
>"+this.getAccountid(),amt,acc.getBalance(),sh.format(dt),ti.format(dt)));
             }
```

```
else
             {
                    throw new InsufficientBalanceException("Sorry Insufficient Balance");
             }
      }
      public double getMinimum amount()
      {
             return minimum amount;
      public void curWithdraw(double amt) throws Exception {
             // TODO Auto-generated method stub
             if(minimum amount>=amt-this.getBalance())
             {
                    this.setBalance(this.getBalance()-amt);
                   DateFormat sh=DateFormat.getDateInstance(DateFormat.MEDIUM);
                   DateFormat ti=DateFormat.getTimeInstance(DateFormat.MEDIUM);
                    this.trn.add(new Trans("Cash
Withdraw",amt,this.getBalance(),sh.format(dt),ti.format(dt)));
             }
             else
             {
                    throw new InsufficientBalanceException("Sorry Insufficient Balance");
             }
      public void curAcctrnsfer(Savings_Account acc, double amt) throws Exception {
             // TODO Auto-generated method stub
             if(minimum amount>=amt-this.getBalance())
             {
                    this.setBalance(this.getBalance()-amt);
                    acc.setBalance(acc.getBalance()+amt);
                   DateFormat sh=DateFormat.getDateInstance(DateFormat.MEDIUM);
                   DateFormat ti=DateFormat.getTimeInstance(DateFormat.MEDIUM);
                    this.trn.add(new Trans("Money Transfer to--
>"+acc.getAccountid(),amt,this.getBalance(),sh.format(dt),ti.format(dt)));
                    acc.trn.add(new Trans("Money Transfer form--
>"+this.getAccountid(),amt,acc.getBalance(),sh.format(dt),ti.format(dt)));
             }
             else
             {
                    throw new InsufficientBalanceException("Sorry Insufficient Balance");
      public void setMinimum_amount(double minimum_amount) {
             this.minimum_amount = minimum_amount;
      public String getType() {
             return type;
      }
      public void setType(String type) {
             this.type = type;
      public double getBalance() {
             return balance;
      public void setBalance(double balance) {
             this.balance = balance;
      public long getAccountid() {
             return accountid;
      public String getHoldername() {
             return holdername;
      public String getUid() {
             return uid;
```

```
}
public ArrayList<Trans> getTrn() {
    return trn;
}
```

```
package bank.model;
import java.io.Serializable;
import java.sql.Date;
public class Customer implements Serializable{
      private String uid;
      private String name;
      private String emailid;
      private String password;
      private String dob;
      private String phno;
      private String address;
      private String gender;
      private String pinno;
      public Customer(String uid, String name, String emailid, String password,
                    String dob, String phno, String address, String gender, String pinno) {
             super();
             this.uid = uid;
             this.name = name;
             this.emailid = emailid;
             this.password = password;
             this.dob = dob;
             this.phno = phno;
             this.address = address;
             this.gender = gender;
             this.pinno = pinno;
      public String getUid() {
             return uid;
      public void setUid(String uid) {
             this.uid = uid;
      public String getName() {
             return name;
      public void setName(String name) {
             this.name = name;
      public String getEmailid() {
             return emailid;
      public void setEmailid(String emailid) {
             this.emailid = emailid;
      }
      public String getPassword() {
             return password;
      public void setPassword(String password) {
             this.password = password;
      public String getDob() {
             return dob;
      public void setDob(String dob) {
             this.dob = dob;
      public String getPhno() {
             return phno;
      public void setPhno(String phno) {
             this.phno = phno;
      public String getAddress() {
```

```
return address;
}
public void setAddress(String address) {
    this.address = address;
}
public String getGender() {
    return gender;
}
public void setGender(String gender) {
    this.gender = gender;
}
public String getPinno() {
    return pinno;
}
public void setPinno(String pinno) {
    this.pinno = pinno;
}
```

}

```
package bank.model;
import java.io.Serializable;
public class Trans implements Serializable
{
      private String type;
      private double amt;
      private double bal;
      private String dt,ti;
      public Trans(String type, double amt2, double d, String dt, String ti) {
             super();
             this.type = type;
             this.amt = amt2;
             this.bal = d;
             this.dt = dt;
             this.ti = ti;
      public String getType() {
             return type;
      public double getAmt() {
             return amt;
      }
      public double getBal() {
             return bal;
      public String getDt() {
             return dt;
      public String getTi() {
             return ti;
      public String Details()
             return type+"\t"+amt+"\t"+bal+"\t"+dt+"\t"+ti;
      }
}
```

```
package bank.model;
import java.io.Serializable;
public class Loan implements Serializable{
}
```

From package prj

```
package prj;
import java.io.*;
import java.util.ArrayList;
import bank.model.*;
import bank.view.*;
public class AccountReaderWritter {
      public static void writter(ArrayList<Savings Account> accd) throws
FileNotFoundException, IOException
             ObjectOutputStream obj=new ObjectOutputStream(new
FileOutputStream("Account.dat"));
             obj.writeObject(accd);
             obj.close();
      @SuppressWarnings({ "unchecked", "finally" })
      public static ArrayList<Savings_Account> read() throws FileNotFoundException,
IOException
      {
             ObjectInputStream objinp=new ObjectInputStream(new
FileInputStream("Account.dat"));
             ArrayList<Savings Account> acc=new ArrayList<Savings Account>();
             try {
                    acc=(ArrayList<Savings Account>)objinp.readObject();
             } catch (ClassNotFoundException e) {
                    // TODO Auto-generated catch block
                    new ErrMsg("Class Not Found");
             finally
                    objinp.close();
                    return acc;
             }
      }
}
```

```
package prj;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.ArrayList;
import bank.controller.*;
import bank.model.*;
import bank.view.*;
public class BankMain {
    public static void main(String[] args) {
        new Front("iBanking");
    }
}
```

```
package prj;
import java.util.ArrayList;
import java.io.*;
import bank.model.*;
import bank.view.*;
public class CustomerReaderWritter {
      public static void write(ArrayList<Customer> cst) throws FileNotFoundException,
IOException
      {
             ObjectOutputStream objout=new ObjectOutputStream(new
FileOutputStream("Bank.dat"));
             objout.writeObject(cst);
             objout.close();
      @SuppressWarnings({ "unchecked", "finally" })
      public static ArrayList<Customer> read() throws FileNotFoundException, IOException
      {
             ObjectInputStream objinp=new ObjectInputStream(new FileInputStream("Bank.dat"));
             ArrayList<Customer> cus=new ArrayList<Customer>();
             try {
                    cus=(ArrayList<Customer>)objinp.readObject();
             } catch (ClassNotFoundException e) {
                   // TODO Auto-generated catch block
                   new ErrMsg("Class Not Found");
             }
             finally
             {
                    objinp.close();
                    return cus;
             }
      }
}
```

Certificate

This is to certify that Mr. Indranil Mukherjee, Mr. Shambo Samanta, Mr. Tamal Saha, Ms. Neha Parween, and Ms. Anamika Maji all of Government College Of Engineering And Textile Technology, Serampore with Registration no. 121100110042, 121100110052,...,121100110046,...respectively has successfully completed a project on Banking System Using JAVA 8 under the guidance of Mrs Munmun Purkayastha

Munmun Purkayastha

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