

Project Report on "BANK MANAGEMENT SYSTEM" Relational Database Management System

B.Tech (CSE IV Semester Mini Project) 2023-24

(Branch - CSE)

Submitted To:

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CERTIFICATE

Certified that Anshu Pandey (Roll No.- 2218403) has developed a mini project on "Bank

Management System" for the CS IV Semester Mini Project Lab in Graphic Era Hill University, Dehradun. The project carried out by Students is their work to the best of my knowledge.

Date: 20/07/2023

Mr. Rahul Chauhan

Class Co-Ordinator

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GEHU Dehradun

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We wish to express our sincere gratitude to God for his protection, providence, guidance and above all, for sustaining us.

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Finally, we wish to express our appreciation to our parents for their love and support.

Anshu Pandey

Introduction

The "Bank Account Management System" project is a model Internet Banking Site. This site enables the customers to perform the basic banking transactions by sitting at their office or at homes through PC or laptop. The system provides the access to the customer to create an account, deposit/withdraw the cash from his account, also to view reports of all accounts present. The customers can access the banks website for viewing their Account details and perform the transactions on account as per their requirements. With Internet Banking, the brick and mortar structure of the traditional banking gets converted into a click and portal model, thereby giving a concept of virtual banking a real shape. Thus, today's banking is no longer confined to branches. E-banking facilitates banking transactions by customers round the clock globally.

The primary aim of this "Bank Account Management System" is to provide an improved design methodology, which envisages the future expansion, and modification, which is necessary for a core sector like banking. This necessitates the design to be expandable and modifiable and so a modular approach is used in developing the application software.

Anybody who is an Account holder in this bank can become a member of Bank Account Management System. He has to fill a form with his personal details and Account Number. Bank is the place where customers feel the sense of safety for their property. In the bank, customers deposit and withdraw their money. Transaction of money also is a part where customer takes shelter of the bank. Now to keep the belief and trust of customers, there is the positive need for management of the bank, which can handle all this with comfort and ease. Smooth and efficient management affects the satisfaction of the customers and staff members, indirectly. And of course, it encourages management committee in taking some needed decision for future enhancement of the bank.

Now a day's, managing a bank is tedious job up to certain limit. So software that reduces the work is essential. Also, today's world is a genuine computer world and is getting faster and faster day-by-day. Thus, considering above necessities, the software for bank management has become necessary which would be useful in managing the bank more efficiently. All transactions are carried out online by transferring from accounts in the same Bank or international bank. The software is meant to overcome the drawbacks of the manual system.

AIM of this project

The main aim of designing and developing this Internet banking System Java primarily based Engineering project is to provide secure and efficient net banking facilities to the banking customers over the internet. Apache Server Pages, MYSQL database used to develop this bank application where all banking customers can login through the secured web page by their account login id and password. Users will have all options and features in that application like get money from western union, money transfer to others, and send cash or money to inter banking as well as other banking customers by simply adding them as payees.

Main Purpose

The Traditional way of maintaining details of a user in a bank was to enter the details and record them. Every time the user needs to perform some transactions he has to go to bank and perform the necessary actions, which may not be so feasible all the time. It may be a hard-hitting task for the users and the bankers too. The project gives real life understanding of Online Banking System and activities performed by various roles in the supply chain. Here, we provide automation for banking system through Internet. Online Banking System project captures activities performed by different roles in real life banking which provides enhanced techniques for maintaining the required information up-to-date, which results in efficiency. The project gives real life understanding of Online Banking System and activities performed by various roles in the supply chain

Main Goal

1. Goal- Our Goal is to develop a software program for managing the entire bank process related to Administration accounts customer accounts and to keep each every track about their property and their various transaction processes efficiently.

Hereby, our main objective is the customer's satisfaction considering today's faster in the world.

- **2.** Customer Satisfaction: Client can do his operations comfortably without any risk or losing of his privacy. Our software will perform and fulfill all the tasks that any customer would desire.
- **3. Saving Customer Time**: Client doesn't need to go to the bank to do small operation.
- **4. Protecting the Customer:** It helps the customer to be satisfied and comfortable in his choices, this protection contains customer's account, money and his privacy.
- **5. Transferring Money:** Help client transferring money to/or another bank or country.

Methods

- We need to be able to generate an account number
- Account types: Savings or Current Account
- Maintain/update Balance
- Open/Close Account
- Withdraw/Deposit

Administrative Modules

Here in my project there are two types of modules. This module is the main module which performs all the main operations in the system. The major operations in the system are:

Admin Module

Admin can access this project there is an authorization process. If you login as an Admin then you will be redirected to the Admin Home Page and if you are a simple user you will be redirected to your Account Home Page. This performs the following functions: Create Individual Accounts, manage existing accounts, View all transactions, Balance enquiry, Delete/close account etc.

- 1- Admin login
- 2- Add/delete/update account
- 3- Withdrawal/deposit/statements transaction
- 4- Account Information
- 5- User details list
- 6- Active/Inactive account
- 7- View transaction histories

User Module

A simple user can access their account and can deposit/withdraw money from their account. User can also transfer money from their account to any other bank account. User can see their transaction report and balance enquiry too.

- 1- User login, use PIN system
- 2- Creating/open new account registration
- 3- Funds transfer (local/international/domestic)
- 4- View statements transaction
- 5- User account details
- 6- Change Password and Pin

Benefits of online banking

Many of us lead busy lives. Some of us are up before the crack of dawn, getting ourselves prepared so we can in turn get our families ready for the day. We rush to work, rush to get the kids to school, and at the end of the day we rush home only to brace ourselves for the next day. After a hectic day, the last thing you want to do is spend time waiting in line at the bank, or even the post office. That's where Online Banking comes in. Many of the benefits of doing our banking online are obvious:

- 1- You don't have to wait in line.
- 2- You don't have to plan your day around the bank's hours.
- 3- You can look at your balance whenever you want, not just when you get a statement.

There are some hidden benefits too. As a young bank customer, you're just learning how to manage your money and observe your spending patterns.

Online banking allows you to watch your money on a daily basis if you want to. By keeping close tabs on your funds, you'll always be aware of what's happening in your bank account. For those experienced spenders, this option is far more appealing than the sudden discovery that you're broke!

It's also helpful to watch how much interest you're gathering on investments and savings or what service charges you have incurred.

Most available benefits

- 1. Online banking with key bank is fast, secure, convenient and free.
- 2. Quick, simple, authenticated access to accounts via the web application.
- 3. Simply scalable to grow with changing system requirement.
- 4. Global enterprise wide access to information.
- 5. Improved data security, restricting unauthorized access.
- 6. Minimize Storage Space.

Future Look

The "Banking Online System is a big and ambitious project. I am thankful for being provided this great opportunity to work on it. As already mentioned, this project has gone through extensive research work. On the basis of the research work, we have successfully designed and implemented banking online System. To know what the future of online banking looks like, it's probably worth looking at the present – online banking isn't new. When you think of online banking, you probably think about a computer (either a desktop or laptop), a three or four step security process and then an interface that lets you view the balance of your various bank accounts and credit cards, whilst permitting you to transfer money and pay bills. And you're not wrong either. The most valuable future looks are following below:

- 1- More branches of the bank, maybe it will be international, that means more ATM machines outside.
- 2- Customer issues development based on their needs, so the help desk will be aware of their needs and easy to use.
- 3- Developing a mobile App for banking system that help users to do the obtained his operations without go to the bank only he needs to sign in using his A/C NO. And password and then use your own PIN. Finally the system will update automatically.

Conclusion

This project is developed to nurture the needs of a user in a banking sector by embedding all the tasks of transactions taking place in a bank. Future version of this project will still be much enhanced than the current version. Writing and depositing checks are perhaps the most fundamental ways to move money in and out of a checking account, but advancements in technology have added ATM and debit card transactions. All banks have rules about how long it takes to access your deposits, how many debit card transactions you're allowed in a day, and how much cash you can withdraw from an ATM. Access to the balance in your checking account can also be limited by businesses that place holds on your funds.

Banks are providing internet banking services also so that the customers can be attracted. By asking the bank employs we came to know that maximum numbers of internet bank account holders are youth and business man. Online banking is an innovative tool that is fast becoming a necessity. It is a successful strategic weapon for banks to remain profitable in a volatile and competitive marketplace of today. If proper training should be given to customer by the bank employs to open an account will be beneficial secondly the website should be made friendlier from where the customers can directly make and access their accounts.

Thus, the Bank Management System it is developed and executed successfully.

Reference

1. Code for Interview YouTube Channel

(https://www.youtube.com/playlist?list=PL5BFcXE899zxVrWaO3Ul6ly2SVJMnJFOr)

2. Online Bank Account Management System

Website: http://www.slideshare.net (Collect some info for report documents)

3. Learning MYSQL, JavaScript, jQuery, PHP, HTML, CSS3, Website:

http://www.w3schools.com 4. PHP and MySQL video tutorials

Website: http://www.freehinditutorial.com, http://www.youtube.com

5. Veneeva, V. (2006), "E-Banking (Online Banking) and Its Role in Today's Society",

Ezine articles 6. JavaScript validation for empty input field

Website: http://stackoverflow.com/questions/3937513/javascript-validation-for-empty-input field and the state of the sta

,

7. JavaScript form validation: Validate Password, Validate Email, Validate Phone Number, http://webcheatsheet.com/javascript/form validation.php

Source Code

Deposit.java

```
package ASimulatorSystem;
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import java.util.*;
public class Deposit extends JFrame implements ActionListener{
  JTextField t1,t2;
  JButton b1,b2,b3;
  JLabel 11,12,13;
  String pin;
  Deposit(String pin){
  this.pin = pin;
    ImageIcon i1 = new
  ImageIcon(ClassLoader.getSystemResource("ASimulatorSystem/icons/atm.jpg"));
    Image i2 = i1.getImage().getScaledInstance(1000, 1180, Image.SCALE_DEFAULT);
    ImageIcon i3 = new ImageIcon(i2); JLabel
     13 = \text{new JLabel(i3)};
     13.setBounds(0, 0, 960, 1080);
    add(13);
    11 = new JLabel("ENTER AMOUNT YOU WANT TO DEPOSIT");
    11.setForeground(Color.WHITE);
    11.setFont(new Font("System", Font.BOLD, 16));
```

```
t1 = new JTextField();
 t1.setFont(new Font("Raleway", Font.BOLD, 22));
  b1 = new JButton("DEPOSIT");
 b2 = new JButton("BACK");
  setLayout(null);
  11.setBounds(190,350,400,35); 13.add(11);
  t1.setBounds(190,420,320,25); 13.add(t1);
  b1.setBounds(390,588,150,35); 13.add(b1);
  b2.setBounds(390,633,150,35); 13.add(b2);
  b1.addActionListener(this); b2.addActionListener(this);
  setSize(960,1080); setUndecorated(true);
  setLocation(500,0); setVisible(true);
public void actionPerformed(ActionEvent ae){
  try{
    String amount = t1.getText();
    Date date = new Date();
    if(ae.getSource()==b1){
    if(t1.getText().equals("")){
```

}

```
JOptionPane.showMessageDialog(null, "Please enter the Amount to you want to
      Deposit");
          }else{
            Conn c1 = new Conn();
            c1.s.executeUpdate("insert into bank values(""+pin+"", ""+date+"", 'Deposit',
            ""+amount+"")");
            JOptionPane.showMessageDialog(null, "Rs. "+amount+" Deposited Successfully");
            setVisible(false); new Transactions(pin).setVisible(true);
          }
       }else
                        if(ae.getSource()==b2){
          setVisible(false);
       new Transactions(pin).setVisible(true);
       }
     }catch(Exception e){
       e.printStackTrace();
     }
  }
  public static void main(String[] args){ new
     Deposit("").setVisible(true);
  }
}
Signup.java
```

package ASimulatorSystem;

import

java.awt.*;

```
import java.awt.event.*; import
      javax.swing.*; import java.sql.*; import
com.toedter.calendar.JDateChooser; import
java.util.*;
public class Signup extends JFrame implements ActionListener {
  JLabel 11,12,13,14,15,16,17,18,19,110,111,112,113,114,115;
  JTextField t1,t2,t3,t4,t5,t6,t7;
  JRadioButton r1,r2,r3,r4,r5;
  JButton b;
  JDateChooser dateChooser;
  Random ran = new Random(); long first4 =
  (ran.nextLong() % 9000L) + 1000L;
  String first = "" + Math.abs(first4);
  Signup(){
    setTitle("NEW ACCOUNT APPLICATION FORM");
    ImageIcon i1 = new
    ImageIcon(ClassLoader.getSystemResource("ASimulatorSystem/icons/logo.jpg"));
    Image i2 = i1.getImage().getScaledInstance(100, 100, Image.SCALE_DEFAULT);
    ImageIcon i3 = new ImageIcon(i2); JLabel
    111 = \text{new JLabel(i3)}; 111.\text{setBounds(20, 0,}
     100, 100);
    add(111);
```

```
11 = new JLabel("APPLICATION FORM NO. "+first);
11.setFont(new Font("Raleway", Font.BOLD, 38));
12 = new JLabel("Page 1: Personal Details"); 12.setFont(new
Font("Raleway", Font.BOLD, 22));
13 = new JLabel("Name:");
13.setFont(new Font("Raleway", Font.BOLD, 20));
14 = new JLabel("Father's Name:");
14.setFont(new Font("Raleway", Font.BOLD, 20));
15 = new JLabel("Date of Birth:");
15.setFont(new Font("Raleway", Font.BOLD, 20)); 16
= new JLabel("Gender:");
16.setFont(new Font("Raleway", Font.BOLD, 20));
17 = new JLabel("Email Address:"); 17.setFont(new
Font("Raleway", Font.BOLD, 20));
18 = new JLabel("Marital Status:");
18.setFont(new Font("Raleway", Font.BOLD, 20));
19 = new JLabel("Address:");
19.setFont(new Font("Raleway", Font.BOLD, 20));
110 = new JLabel("City:");
110.setFont(new Font("Raleway", Font.BOLD, 20));
```

```
111 = new JLabel("Pin Code:");
111.setFont(new Font("Raleway", Font.BOLD, 20));
112 = new JLabel("State:");
112.setFont(new Font("Raleway", Font.BOLD, 20));
113 = new JLabel("Date"); 113.setFont(new
Font("Raleway", Font.BOLD, 14));
114 = new JLabel("Month"); 114.setFont(new
Font("Raleway", Font.BOLD, 14)); 115 = new JLabel("Year");
115.setFont(new Font("Raleway", Font.BOLD, 14));
t1 = new JTextField(); t1.setFont(new
Font("Raleway", Font.BOLD, 14));
t2 = new JTextField();
t2.setFont(new Font("Raleway", Font.BOLD, 14));
t3 = new JTextField();
t3.setFont(new Font("Raleway", Font.BOLD, 14));
t4 = new JTextField();
t4.setFont(new Font("Raleway", Font.BOLD, 14));
```

```
t5 = new JTextField();
t5.setFont(new Font("Raleway", Font.BOLD, 14));
t6 = new JTextField();
t6.setFont(new Font("Raleway", Font.BOLD, 14));
t7 = new JTextField(); t7.setFont(new
Font("Raleway", Font.BOLD, 14));
b = new JButton("Next");
b.setFont(new Font("Raleway", Font.BOLD, 14));
b.setBackground(Color.BLACK);
b.setForeground(Color.WHITE);
r1 = new JRadioButton("Male"); r1.setFont(new
Font("Raleway",
                      Font.BOLD, 14)); r1.setBackground(Color.WHITE);
r2 = new JRadioButton("Female"); r2.setFont(new
Font("Raleway",
                      Font.BOLD, 14)); r2.setBackground(Color.WHITE);
ButtonGroup groupgender = new ButtonGroup(); groupgender.add(r1);
groupgender.add(r2);
r3 = new JRadioButton("Married"); r3.setFont(new
Font("Raleway",
                       Font.BOLD,
                                          14));
r3.setBackground(Color.WHITE);
```

```
r4
                     JRadioButton("Unmarried");
            new
r4.setFont(new Font("Raleway", Font.BOLD, 14));
r4.setBackground(Color.WHITE);
r5 = new JRadioButton("Other"); r5.setFont(new
Font("Raleway",
                      Font.BOLD, 14)); r5.setBackground(Color.WHITE);
ButtonGroup groupstatus = new ButtonGroup();
groupstatus.add(r3); groupstatus.add(r4);
groupstatus.add(r5);
dateChooser = new JDateChooser();
  //dateChooser.setBorder(new LineBorder(new Color(0, 0, 0), 1, true));
  dateChooser.setForeground(new
                                      Color(105,
                                                      105,
                                                               105));
  dateChooser.setBounds(137, 337, 200, 29); add(dateChooser);
setLayout(null);
11.setBounds(140,20,600,40); add(11);
12.setBounds(290,80,600,30);
add(12);
13.setBounds(100,140,100,30);
add(13);
t1.setBounds(300,140,400,30); add(t1);
14.setBounds(100,190,200,30); add(14);
```

```
t2.setBounds(300,190,400,30);
add(t2);
15.setBounds(100,240,200,30); add(15);
dateChooser.setBounds(300, 240, 400, 30);
16.setBounds(100,290,200,30); add(16);
r1.setBounds(300,290,60,30); add(r1);
r2.setBounds(450,290,90,30); add(r2);
17.setBounds(100,340,200,30); add(17);
t3.setBounds(300,340,400,30); add(t3);
18.setBounds(100,390,200,30); add(18);
r3.setBounds(300,390,100,30);
add(r3);
r4.setBounds(450,390,100,30);
add(r4);
r5.setBounds(635,390,100,30); add(r5);
```

19.setBounds(100,440,200,30); add(19);

```
t4.setBounds(300,440,400,30); add(t4);
  110.setBounds(100,490,200,30); add(110);
  t5.setBounds(300,490,400,30); add(t5);
  111.setBounds(100,540,200,30); add(111);
  t6.setBounds(300,540,400,30); add(t6);
  112.setBounds(100,590,200,30);
  add(112);
 t7.setBounds(300,590,400,30); add(t7);
  b.setBounds(620,660,80,30);
  add(b);
 b.addActionListener(this);
 getContentPane().setBackground(Color.WHITE);
  setSize(850,800);
 setLocation(500,120); setVisible(true);
public void actionPerformed(ActionEvent ae){
  String formno = first;
  String name = t1.getText();
  String fname = t2.getText();
```

}

```
String dob = ((JTextField) dateChooser.getDateEditor().getUiComponent()).getText();
String gender = null; if(r1.isSelected()){ gender = "Male";
}else if(r2.isSelected()){ gender
  = "Female";
String email = t3.getText();
String
       marital
 null;
if(r3.isSelected()){ marital
= "Married";
}else if(r4.isSelected()){ marital
  = "Unmarried";
}else if(r5.isSelected()){ marital
  = "Other";
}
String address = t4.getText(); String city
= t5.getText();
String pincode = t6.getText();
String state = t7.getText();
try{
  if(t6.getText().equals("")){
     JOptionPane.showMessageDialog(null, "Fill all the required fields");
   }else{
     Conn c1 = new Conn(); String
     q1 = "insert into signup
```

```
values (""+formno+"",""+name+"",""+fname+"",""+dob+"",""+gender+"",""+email+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"",""+marital+"","+marital+"","+marital+"","+marital+"","+marital+"","+marital+"","+marital+"","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+marital+","+m
address+"",""+city+"",""+pincode+"",""+state+"")";\\
                                                                  c1.s.executeUpdate(q1);
                                                                 new Signup2(first).setVisible(true);
                                                                 setVisible(false);
                                                   }
                                 }catch(Exception e){
                                                     e.printStackTrace();
                 }
             public static void main(String[] args){
                                 new Signup().setVisible(true);
                 }
```

}

Screenshots





