BANK MANAGEMENT SYSTEM

A Course Based Project Submitted in Partial Fulfilment of the Requirement for the Award of the degree of

BACHELOR OF TECHNOLOGY

COMPUTER SCIENCE AND ENGINEERING - ARTIFICIAL INTELLIGENCE & DATA SCIENCE

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(An Autonomous Institute, NAAC Accredited With ‘A++’ Grade, NBA Accredited, Approved by AICTE, New Delhi, Affiliated to JNTUH)

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CERTIFICATE

This is to Certify A V Karthikeya (21071A7201), Abhinav Gaddi (21071A7202), Abhishek Rao Puram (21071A7203), Kommineni Varun (21071A7233) and Pranava Akshara Dachepally (21071A7257) that they have successfully completed their project work at CSE CYS, DS & (AI & DS) Department of VNRVJIET, Hyderabad entitled “BANK MANAGEMENT SYSTEM” in partial fulfilment of the requirements for the award of the Bachelor of Technology degree during the Academic year 2022-2023.

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DECLARATION

This is to certify that the project work entitled "BANK MANAGEMENT SYSTEM" submitted in VNR Vignana Jyothi Institute of Engineering & Technology in partial fulfilment of requirement for the award of Bachelor of Technology in Computer Science and Engineering. It is a Bonafide report of the work carried out by us under the guidance and supervision of Mrs. E. Lalitha (Assistant Professor), Department of CSE-CYS, DS, AI&DS, VNRVJIET. To the best of our knowledge, this report has not been submitted in any form to any university or institution for the award of any degree or diploma.

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ACKNOWLEGDEMENT

Behind every achievement lies the heartfelt gratitude to those who activated in completing the project. To them we lay the words of gratitude within us.

We are indebted to our venerable principal Dr. C. D. NAIDU for this inflicting devotion, which led us to complete this project. The support, encouragement given by him and his motivation led us to complete the project.

We express our sincere thanks to internal guide Mrs. E. Lalitha and also Head of the Department Dr. M. RAJA SHEKHAR for having provided us with a lot of facilities to undertake the project work and guide us to complete the project.

We take the opportunity to express thanks to our faculty of the Dept. of COMPUTER SCIENCE AND ENGINEERING – ARTIFICIAL INTELLIGENCE AND DATA SCIENCE and remaining members of our college VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY who extended their valuable support in helping us to complete the project in time.

ABSTRACT

The Bank Account Management System is an application for maintaining a person's account in a bank. In this project I tried to show the working of a banking account system and cover the basic functionality of a Bank Account Management System. To develop a project for solving financial applications of a customer in a banking environment in order to nurture the needs of an end banking user by providing various ways to perform banking tasks. Also, to enable the user's workspace to have additional functionalities which are not provided under a conventional banking project.

The Bank Account Management System undertaken as a project is based on relevant technologies. The main aim of this project is to develop software for the Bank Account Management System. This project has been developed to carry out the processes easily and quickly, which is not possible with the manual systems, which are overcome by this software. This project is developed using Java language. Creating and managing requirements is a challenge of IT, systems and product development projects or indeed for any activity where you have to manage a contractual relationship. Organisations need to effectively define and manage requirements to ensure they are meeting needs of the customer, while proving compliance and staying on the schedule and within budget.

The impact of a poorly expressed requirement can bring a business out of compliance or even cause injury or death. Requirements definition and management is an activity that can deliver a high, fast return on investment. The project analyses the system requirements and then comes up with the requirements specifications. It studies other related systems and then comes up with system specifications. The system is then designed in accordance with specifications to satisfy the requirements. The system design is then implemented with Java. The system is designed as an interactive and content management system. The content management system deals with data entry, validation confirmation and updating while the interactive system deals with system interaction with the administration and users. Thus, the above features of this project will save transaction time and therefore increase the efficiency of the system.

CONTENTS

AIM OF THE 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.

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 the 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 the Online Banking System and activities performed by various roles in the supply chain. Here, we provide automation for the banking system through the 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. Motto- Our motto 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 fastest 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 fulfil all the tasks that any customer would desire.

3. Saving Customer Time: Clients don't need to go to the bank to do small operations.

4. Protecting the Customer: It helps the customer to be satisfied and comfortable in his choices, this protection contains the customer's account, money and his privacy.

5. Transferring Money: Help clients transferring money to/or another bank or country.

MODULES

Here in my project there are two types of modules. Each Module has a different function. The Modules and their Functions are as follows :

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. Users can also transfer money from their account to any other bank account. Users 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

BANKS TERMS

1. All requests received from customers are logged for backend fulfilment and are effective from the time they are recorded at the branch.

2. Rules and regulations applicable to normal banking transactions in India will be applicable mutatis mutandis for the transactions executed through this site.

3. The BAMS Bank service cannot be claimed as a right. The bank may also convert this into a discretionary service anytime.

4. Dispute between the customer and the Bank in this service is subject to the jurisdiction of the courts in the Republic of India and governed by the laws prevailing in India.

5. The Bank reserves the right to modify the services offered or the Terms of service of BAMS Bank. The changes will be notified to the customers through a notification on the Site

CUSTOMER OBLIGATIONS

1. The customer has an obligation to maintain secrecy in regard to Username & Password registered with the Bank. The bank presupposes that login using valid Username and Password is a valid session initiated by none other than the customer.

2. Transactions executed through a valid session will be construed by RR to have emanated from the registered customer and will be binding on him/her.

3. The customer will not attempt or permit others to attempt accessing the BAMS Bank through any unlawful means.

BENEFITS

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 banks 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 requirements.
4. Global enterprise wide access to information.
5. Improved data security, restricting unauthorised access.
6. Minimise Storage Space.

FUTURE SCOPE

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 a 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 helps users to do the obtained operations without going 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.

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 l1,l2,l3;
String pin;
Deposit(String pin) {
this.pin = pin;
Image i1 = newImageIcon(ClassLoader.getSystemResource("ASimulatorSystem/icons/atm.jpg"));
Image i2 = i1.getImage().getScaledInstance(1000, 1180, Image.SCALE_DEFAULT);
ImageIcon i3 = new ImageIcon(i2);
JLabel l3 = new JLabel(i3);
l3.setBounds(0, 0, 960, 1080);
add(l3)
l1 = new JLabel("ENTER AMOUNT YOU WANT TO DEPOSIT");
l1.setForeground(Color.WHITE);
l1.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);

l1.setBounds(190,350,400,35);
l3.add(l1);

t1.setBounds(190,420,320,25);
l3.add(t1);

b1.setBounds(390,588,150,35);
l3.add(b1);

b2.setBounds(390,633,150,35);
l3.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 l1,l2,l3,l4,l5,l6,l7,l8,l9,l10,l11,l12,l13,l14,l15;
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");



Image i1 = newImageIcon(ClassLoader.getSystemResource("ASimulatorSystem/icons/logo.jpg"));
Image i2 = i1.getImage().getScaledInstance(100, 100, Image.SCALE_DEFAULT);
ImageIcon i3 = new ImageIcon(i2);
JLabel l11 = new JLabel(i3);
```

```
l11.setBounds(20, 0, 100, 100);
add(l11);

l1 = new JLabel("APPLICATION FORM NO. "+first);
l1.setFont(new Font("Raleway", Font.BOLD, 38));

l2 = new JLabel("Page 1: Personal Details");
l2.setFont(new Font("Raleway", Font.BOLD, 22));

l3 = new JLabel("Name:");
l3.setFont(new Font("Raleway", Font.BOLD, 20));

l4 = new JLabel("Father's Name:");
l4.setFont(new Font("Raleway", Font.BOLD, 20));

l5 = new JLabel("Date of Birth:");
l5.setFont(new Font("Raleway", Font.BOLD, 20));

l6 = new JLabel("Gender:");
l6.setFont(new Font("Raleway", Font.BOLD, 20));

l7 = new JLabel("Email Address:");
l7.setFont(new Font("Raleway", Font.BOLD, 20));

l8 = new JLabel("Marital Status:");
l8.setFont(new Font("Raleway", Font.BOLD, 20));

l9 = new JLabel("Address:");
l9.setFont(new Font("Raleway", Font.BOLD, 20));

l10 = new JLabel("City:");
```

```
l10.setFont(new Font("Raleway", Font.BOLD, 20));
l11 = new JLabel("Pin Code:");
l11.setFont(new Font("Raleway", Font.BOLD, 20));

l12 = new JLabel("State:");
l12.setFont(new Font("Raleway", Font.BOLD, 20));

l13 = new JLabel("Date");
l13.setFont(new Font("Raleway", Font.BOLD, 14));

l14 = new JLabel("Month");
l14.setFont(new Font("Raleway", Font.BOLD, 14));

l15 = new JLabel("Year");
l15.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 = new JRadioButton("Unmarried");
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.setForeground(new Color(105, 105, 105));
dateChooser.setBounds(137, 337, 200, 29);
add(dateChooser);

setLayout(null);
l1.setBounds(140,20,600,40);
add(l1);

l2.setBounds(290,80,600,30);
add(l2);

l3.setBounds(100,140,100,30);
add(l3);

t1.setBounds(300,140,400,30);
add(t1);

l4.setBounds(100,190,200,30);
add(l4);

t2.setBounds(300,190,400,30);
```

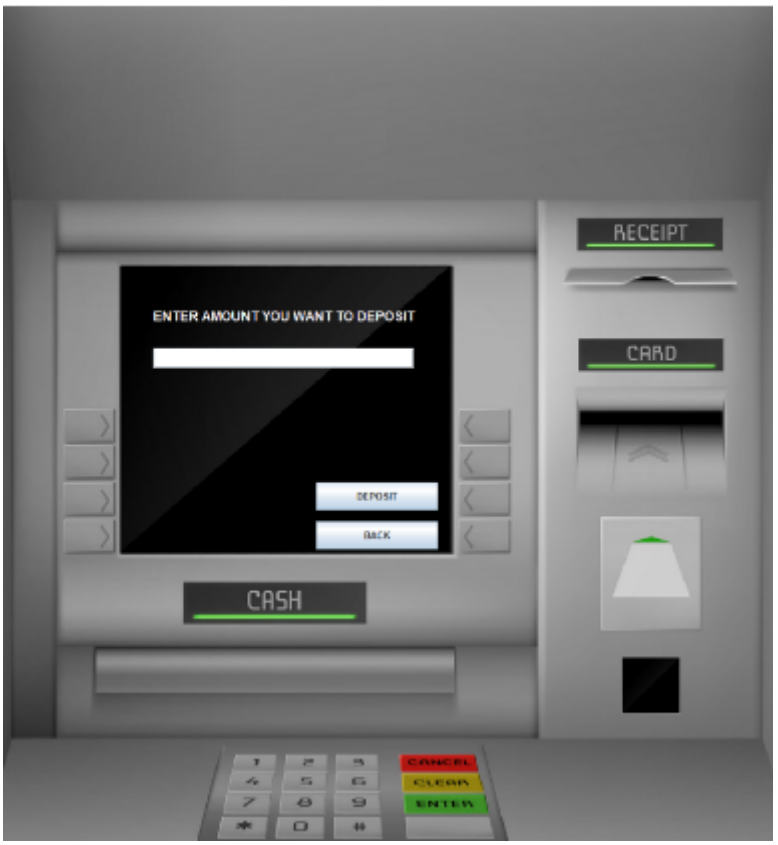
```
add(t2);

l5.setBounds(100,240,200,30);
add(l5);

dateChooser.setBounds(300, 240, 400, 30);

l6.setBounds(100,290,200,30);
add(l6);

r1.setBounds(300,290,60,30);
add(r1);

r2.setBounds(450,290,90,30);
add(r2);

l7.setBounds(100,340,200,30);
add(l7);

t3.setBounds(300,340,400,30);
add(t3);

l8.setBounds(100,390,200,30);
add(l8);

r3.setBounds(300,390,100,30);
add(r3);

r4.setBounds(450,390,100,30);
add(r4);
```

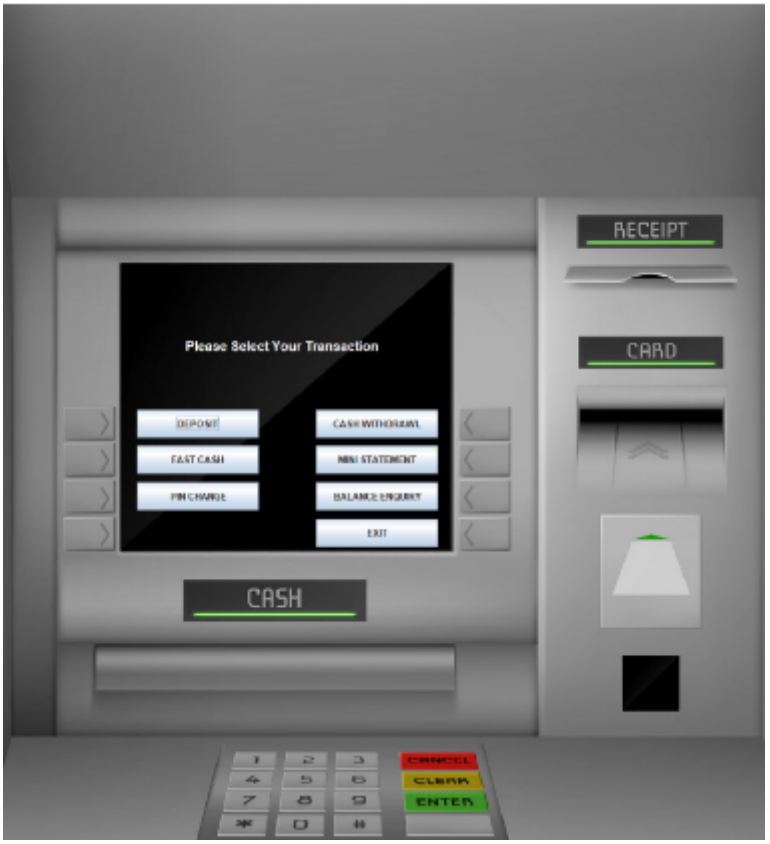
```
r5.setBounds(635,390,100,30);
add(r5);

l9.setBounds(100,440,200,30);
add(l9);

t4.setBounds(300,440,400,30);
add(t4);

l10.setBounds(100,490,200,30);
add(l10);

t5.setBounds(300,490,400,30);
add(t5);

l11.setBounds(100,540,200,30);
add(l11);

t6.setBounds(300,540,400,30);
add(t6);

l12.setBounds(100,590,200,30);
add(l12);

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+","+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);
}
}
```

OUTPUTS


ENTER AMOUNT YOU WANT TO DEPOSIT
DEPOSIT
BACK
RECEIPT
CARD
CASH
CANCEL
CLEAR
ENTER


Please Select Your Transaction
DEPOSIT
CASH WITHDRAWL
FAST CASH
MINI STATEMENT
PIN CHANGE
BALANCE ENQUIRY
EXIT
RECEIPT
CARD
CASH
CANCEL
CLEAR
ENTER


NEW ACCOUNT APPLICATION FORM
APPLICATION FORM NO. 1476
Page 1: Personal Details
Name:
Father's Name:
Date of Birth:
Gender:
Male
Female
Email Address:
Marital Status:
Married
Unmarried
Other
Address:
City:
Pin Code:
State:
Next

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 versions 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 employees we came to know that the maximum number of internet bank account holders are youth and businessmen. 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 is developed and executed successfully.