

Delhi Technological University (Formerly Delhi college of engineering)



Department of Software engineering

Final report for MTE

on

Banking Management system

Course: Database management system

2nd year, 4th semester

Submitted by:

- 1. Jacob Ajak Makuach Abuol
(2k20/SE/63)**
- 2. Samuel Nabiyu (2k20/SE/84)**

Submitted to:

- 1. Prof. Rahul**

Contents

| | |
|---------------------------------|-----------|
| Introduction----- | 2 |
| Objective----- | 3 |
| Feasibility study----- | 3 |
| System requirements----- | 4 |
| System design----- | 5 |
| Database structure----- | 7 |
| Implementation----- | 8 |
| Results----- | 9 |
| Conclusion----- | 10 |
| References----- | 11 |

INTRODUCTION

The main objective of the project is to develop a Banking system for banks. In present system all banking work is done manually. User have to visit bank to Withdrawal or Deposit amount. In present bank system it is also difficult to find account information of account holder. In this bank management system, we will automate all the banking process. In our bank management system user can check his balance online and he can also transfer money to other account online. In this Software you can keep record for daily Banking transactions. The main purpose of developing bank management system is to design an application, which could store bank data and provide an interface for retrieving customer related details with maximum accuracy.

This bank management system also allow user to add new customer account, delete account and user can also modify existing user account information. Using this system user can also search any individual account in few seconds. Using our bank management system user can also check any transaction in any account. Our system also provides security check to reduce fraud. The system will check the user's existence in the database and provide the set of services with respect to the role of the user.

OBJECTIVES

The main object of this system is to provide a secure system. Our system is password protected and it only allows authorized user to access various functions available in the system.

Our system will help the user to Locate any A/C wanted by the user. It will Reduced manual work as most of the work done by computer. As all the manual work will be done automatically so it will increase work speed and reduce time consumption to complete any bank related work. It will also increase the work efficiency as few employees can handle more customers. This will reduce the manual workload and give information instantly.

The Project Banking system has been made to automate the Banking system. Through this bank management system user can manage all bank account activity like deposit money, withdraw money, transfer money from one account to another account, online payment etc. Using this bank management system user can check his account detail online like balance in account, bank statement etc. The Administrator can check bank account with a login can work out with A/C holders of the bank can withdraw/ deposit cash / cheque /DD to/from their accounts. This system is also help bank user to create new

account easily. The project makes a sincere effort to provide all the below-mentioned features to meet the requirements of the bank.

In this project we have automate the bank process like Account Opening, Daily Transactions, Account Maintenance. In this bank management system user can also search record of a particular Account Holder.

FEASIBILITY STUDY

The only tangible benefit provided by the proposed system is that the work is reduced to the minimum and hence the reduction in cost incurred on stationery and its storage. The system provides many benefits that can't be measured in terms of money for example user's friendliness, more user response being more efficient.

Technical feasibility

The proposed system is technically feasible as it can be developed easily with the help of available technology. The proposed system requires code blocks and DEV C++ for programming and back-end as MySQL server for storing and maintaining database. The database can easily be interconnected using MySQL server.

Operational feasibility

Automation makes our life easy. The system is highly user friendly and is much easily able to interact with the system. Therefore, the users will readily accept the system as data entry and making queries can be easily done

System requirements

Hardware specifications:

Hardware is a set of physical components, which performs the functions of applying appropriate, predefined instructions. In other words, one can say that the electronic and mechanical parts of computer constitute hardware. This package is designed on powerful programming language C++. It is a powerful graphical user interface. The backend is access, which is used to maintain database. It can run on almost all the popular microcomputers. Minimum hardware specifications for a personal computer to run this package are as

follow:

- It minimum contains P-III
- Processor with 128 MB RAM

We used the above hardware tools for increased speed, reduced complexity and for improved productivity.

Software requirements:

The software is a set of procedures of coded information or a program which when fed into the computer hardware, enables the computer to perform the various tasks. Software is like a current inside the wire which can't be seen but its effect can be felt.

Operating system: windows

Application Software:

Application software uses frontend built in C++ and backend MySQL server for database access, DEV C++, XAMPP etc.

System Design

System design is an essential activity in the system development life cycle. System design is the general specification of the computer-based solution that was selected analysis. Design specification forms the basis for the system development.

The design is a solution the translation of requirement into ways of meeting them in the process the end user requirements were translated into specification for a computer-based information system. System design consists of two phases:

Logical design

In logical design the detailed specification of the new system is described i.e., output, the input and the database, all in the manner that meets project requirement. The activity following logical design, are the procedures followed in the physical design of a system takes the logical design blueprint & produces the program specification, physical file or database definition with the help of this blue print, e.g., producing programs, software, and files and working

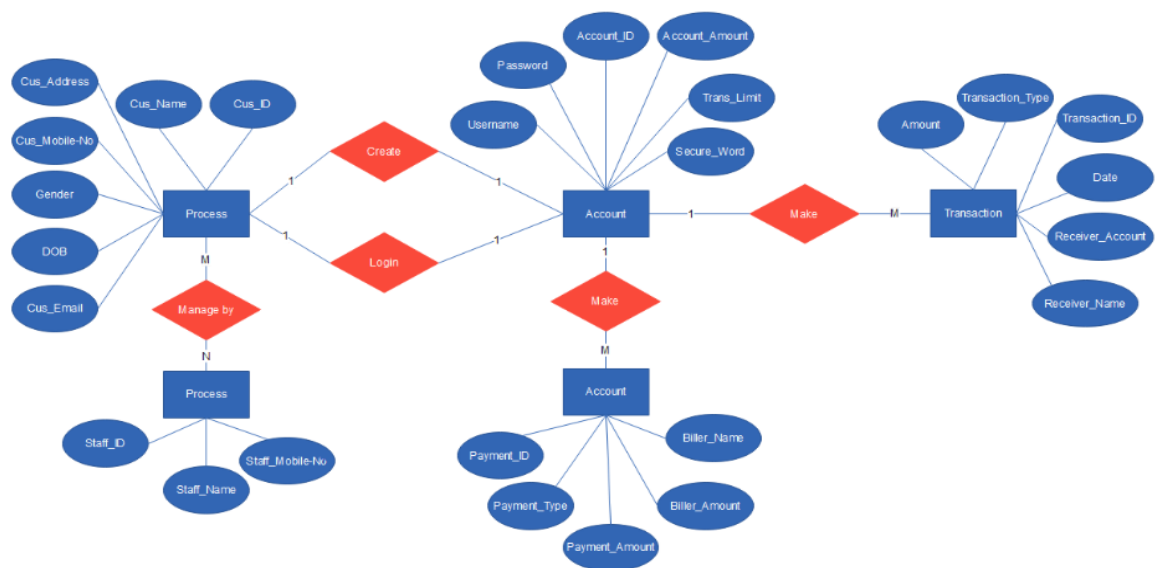
system.

Physical design

Here our approach is to develop an interactive system, which accepts inputs, options and provides the user with the required outputs. After some give and take, the design goals suggest that the user have the following features:

- The system should have good interface.
- To facilitate the user, a number of messages should be designed which guide the action.
- Care should be taken to keep the user input simple to ensure accuracy of input.
- The system should be flexible.

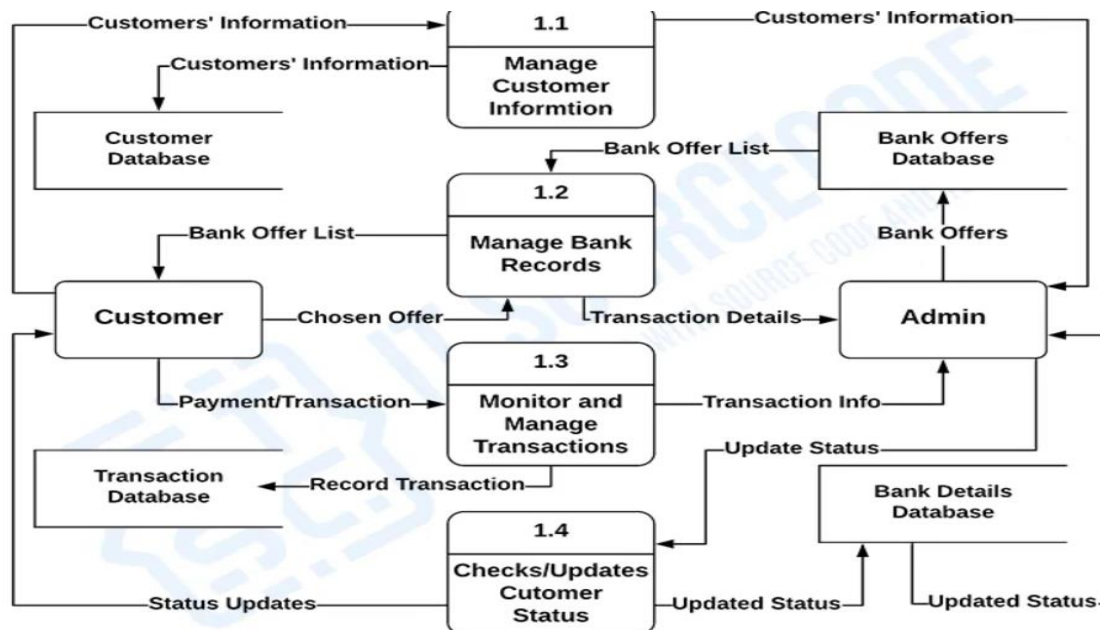
Entity relationship diagram for Bank Management



Data flow diagram for Bank management system

Data flow diagrams are used to represent the flow of data as well as the processes and functions involved to store, manipulate, and distribute data

among various components of the system and between the system and the environment of the system by a specific set of graphical representations. Below are the data flow diagrams of bank management system.



Database Structure

Features of Bank Management System in C++ and MySQL Database are as follow.

- **Add Account Module** – When a new account needs to be added to the system, this activity is required. When a customer establishes a new account, for example, the customer's information is entered into the bank's account records. This option only accepts one parameter: the account holder's name.
- **View Account Module** – Display all of the accessible clients' accounts from the bank management system's database records.
- **Deposit Amount Module** – In this module, the user can also deposit money by just supplying his or her account number, after which the system will display his or her profile and allow the user to enter a quantity.

- **Withdraw Amount Module** – The user can withdraw money in this module by simply entering his or her account number, following which the system will display his or her profile and prompt the user to choose a quantity.
- **Balance Inquiry Module** – In this module, the user can also conduct a balance query, which reveals the account holder's name, account number type, and balance amount.
- **All Account Holder List Module** – The user can also look for a list of all account holders.
- **Close an Account Module** – In this module, The user can also close their account by supplying their account number, as well as change their account information and type if desired.
- **Modify an Account Module** – In this module the user can also modify their account information.

Description of the implementation of the project:

In this C++ and MYSQL project for a Bank Management System, we have built in such a way that a user can do a variety of management actions, such as adding a new account, altering it, and closing it. Users can also view all customer accounts, check account balances, and deposit and withdraw funds from their accounts.

The system automates basic banking functions to aid a bank clerk's day-to-day operations. Additionally, the system's purpose is to allow for the storage of information for a large number of client accounts, as well as the ability to add, retrieve, and edit information for any account. We have also compressed the front-end and back end of the system which will be submitted with document.

Results


```

You are Very Valuable to our Company
*****
      1) Add Account
      2) View Account
      3) Deposit Amount
      4) Withdraw Amount
      5) Balance Inquiry
      6) All Account Holder List
      7) Close an Account
      8) Modify an Account
      9) Logout
     10) Exit
*****
Enter your Choice.....
_

```

```

Enter Account Number : 0000001
| ACCOUNT ID : 0000001|NAME : Sample Name|ACC TYPE : Sample Type|CURRENT BALANCE : 5000|

Enter Amount to deposit : 15000
Data has been uploaded to Server.. :)Data has been uploaded to Server.. :)Press any key to continue

```

```

Enter Account Number : 0000001
| ACCOUNT ID : 0000001|NAME : Sample Name|ACC TYPE : Sample Type|CURRENT BALANCE : 20000|

Enter Amount to withdraw : 500
Data has been uploaded to Server.. :)Data has been uploaded to Server.. :)Press any key to continue

```

```

Enter Account Number : 0000001
=====
| ACCOUNT ID : 0000001|NAME : Sample Name|ACC TYPE : Sample Type|CURRENT BALANCE : 19500|

-----Transaction History-----
| ACCOUNT ID | AMOUNT | STATUS | DATE |
| 1 | 15000 | credited | Tue Mar 22 12:06:41 2022 |
| 1 | 500 | deducted | Tue Mar 22 12:06:41 2022 |
Press any key to continue . . . _

```

Advantages of the system

- The system enables Bank to find out the particular Account.
- This system also helps to know about the deposit and withdraw amount for particular person.
- This system has feature to search customer record by two option one is account number and second is by customer name and also feature to update, delete account.
- In this system we also store employee record and search, modify, delete operations also occurs.
- Reduction of errors and viruses due to non-requirement of the internet.
- This system has feature to see the account detail according to date.
- Updating of data is easy in computerized system.

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 software will still be much enhanced than the current version. Thus, the Bank Management System is developed and executed successfully.

References

Javapoint.com
Codingninjas.com
Programiz.com