MINI PROJECT REPORT

Submitted by: *DIVYA SINGH*
St.id=200121172

Guided by: *CSE-G-III-Sem*

Ms. Sonali Gupta *Session: 2021-2022*

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

GRAPHIC ERA HILL UNVERSITY, DEHRADUN

BANKING MANAGEMENT SYSTEM

The bank management system is an application for maintaining a person's account in a bank .

BANK MANAGEMENT SYSTEM ensures smooth operation of the Real-Estate management task as well as keep the information about the users and their balance .

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 presents .

AIM :-

To develop a software for solving financial applications of a customer in 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 software.

PROBLEM STATEMENT:

In the recent years, computers are included in almost all kind of works and jobs everyone come across in the routine. The availability of the software's for almost every process or every system has taken the world in its top-gear and fastens the day-to-day life. So, I have tried my best to develop the project for the Bank Management System where all the tasks to manage the bank system are performed easily

and efficiently. It manages all the transactions like new account entry, deposit as well as withdraw entry, transaction of money for various processes, loan entry, managing bills cash or cheque, etc. Thus, above features of this project will save transaction time and therefore increase the efficiency of the system.

FEATURES AND DETAILS OF PROJECT:

1. There are two types of logins:
    a. admin login: This refer to bank side (bank employees)
    b. user login: This refer to bank's account holders
2. The project acts as interface between bank and user and help running e-bank
3. The project ensures the security of a user's account. He/she is authenticated on the basis of account number and password before using any facility. Also, to ensure unique login, every user on account creation is allotted with unique self-generated account number.
4. Similarly, the project also ensures the security of an admin's account. He/she is authenticated on the basis of admin number and password before using any facility. Also, to ensure unique login, every admin on registration on platform is allotted with unique self-generated admin number.
5. Any random visitor on platform cannot create admin account ensuring security of bank.
6. Every entity is represented as object in program ensuring abstraction, encapsulation and data security.
7. Data is written or read from text files as object again enhancing the system's security.
8. Admin is authorized to checkout bank details without revealing the private credentials of users like password. Admin can perform following functions:
    a. View all user details (without password)
    b. View all deleted accounts

c. Un-delete a user account (without getting its full access /password)
d. View all admin details (without password)
e. Create a new admin
f. View own details
g. Change own password and phone number

9. User is authorised to checkout his details and perform banking operations. User can perform following functions:
    a. View his/her account details
    b. Deposit/withdraw money
    c. View his passbook
    d. Change his/her phone number or password
    e. Delete his/her account

MODULES / COMPONENTS :-

1. **Header Files (user-defined):**
    a. login_functions.h : provide login options for admin and user. Also provide authorized facilities.
    b. bankAccount.h : provides class for user/account object and its methods
    c. Admin.h : provides class for admin and its methods
    d. accountNumber.h: provides class for account number and generate a unique account number with its methods.
    e. adminNumber.h: provides class for admin number and generate a unique admin number with its methods.
    f. passbook.h : provides class for representing transaction
2. **Text Files:**
    a. accounts.txt : Hold details of all users
    b. admins.txt : Hold details of all admins
    c. Numbers.txt : use to generate account number for new user

d. adminNumbers.txt : use to generate admin number for new admin
e. * Every user has a file named with his/her account number to store its transaction history

3. **Program Files:**
   a. Init.cpp : Setup environment for project by creating required text files and first admin
   b. Main.cpp: Main executable file used to run project

LANGUAGE USED-

The whole concept is designed via **C++**

This Banking Management System is a simple console application built in C++ without the use of graphics.

This project help in understanding-

→Use of stream class
→File handeling in C++ programing language.

PROCESSING ENVIRONMENT - HARDWARE AND SOFTWARE:

❖ Operating system is a platform on which the specified application will be used. Once it has been complete, the software we are about to make, will execute on both client machine and server machine.

❖ Configuration:-

- O/S –Windows XP.
- C++ Environment .

BIBLIOGRAPHY / REFERENCES -

BOOKS:- C++ in depth

Website:- GEEKSFORGEEKS

Youtube.