

PROJECT DETAILS

PROJECT NAME : BANK MANAGEMENT APPLICATION

Slot number - 11

Group number – 07

Team Leader: Rajat Chaturvedi -140050027

Other members: 1) Sowmya M -140050072

2) Suman Swaroop -140050032

Purpose:

a) To manage the huge database of customer accounts with high security.

b) It provides customers with facilities of:

- 1) Opening account
- 2) Deposit money
- 3) Withdrawal of money
- 4) Display details
- 5) Modify details
- 6) Loan facility
- 7) Fixed Deposit
- 8) Closing Account

Function specifications:

1) Opening account -

The customer will be asked to provide details such as Name, Password, Address, Age, mobile number and balance to be deposited at the opening of account.

The customer will be provided with an account number.

2) Deposit -

After logging in to his/her account, the customer will be able to deposit a given sum of money in his/her account.

3) Withdrawal -

After logging in to his/her account, the user will be able to withdraw money from his/her account, as long as the balance after withdrawal remains above Rs 1000. If the amount remaining is less than Rs 1000, the user will be notified of the same.

4) Display details -

After logging in, the user will be allowed to view his/her account details including current balance, etc.

5) Modify details -

The user will be allowed to modify his/her account detail such as address, mobile numbers, etc.

6) Loan facility:

The user can sanction loan from the bank under the terms and conditions of the bank. The interest rate will be 10% for a term of 5 years.

7) Fixed Deposit:

The user can have a Fixed Deposit in the bank under the terms and conditions of the bank. The interest rate will be 8% for a term of 3 years.

8) Delete account -

Upon confirmation of password from the user, the user will be allowed to delete his/her account from our bank, and the remaining balance will be returned to the customer.

Software specifications :

1) In this program, we will use classes to create and manage accounts of customers.

2) We will use the fstream header file to apply the concepts of file handling to store and access this data.

3) GTKMM GUI library will be used while running the program to display the entire contents of this software.

GTKMM Graphics : GTKMM is a cross-platform application framework that is widely used for developing application software that can be run on various software and hardware platforms with little or no change in the codebase, while having the power and speed of native applications.

Being used for making the dialog boxes and buttons i.e. the graphical user interface part of the application.

File handling: File handling in c++ is being used to maintain the accounts database using the fstream library.

Work distribution:

1) Rajat Chaturvedi:

- File handling
- Create, Deposit, Withdraw, View, Modify, Delete functions
- Final documentation of Project Details, User Manual

2) Sowmya M:

- Coding for Loan and Fixed Deposit functions
- Stage 1 documentations.

3) Suman Swaroop:

- GTKMM Graphics and its coding
- Login function
- Integrating graphics in the program
- SRS documentation

Challenges faced:

- We were not able to include the transfer function, due to errors in the code.
- We were not able to include paying up of loan as well as paying premium in FD, as it included the usage of current date and date of taking loan. This was due to increasing complexity of code as well as shortage of time.

- We were not able to include error handling in some cases, eg, entering text in place of integer did not show error but will cause run time errors.

Acknowledgement:

- To Professor Supratik Chakraborty sir and Professor D. B. Phatak sir for initiating us to this project, which helped us learn a lot.
- To teaching assistant Priyanka, for helping us during the project, whenever we were stuck.
- To cplusplus.com, from where we learnt to use various functions and was a great reference tool.
- To GNOME developers, from where we learnt the usage of GTKMM codes.