MINOR PROJECT REPORT
ON
BANKING SYSTEM

in partial fulfilment for the award of the degree of

Bachelors of Computer Applications

SUBJECT – DATA STRUCTURES

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ABSTRACT

Introduction:

The C++ Bank Management System project is designed to simulate basic banking operations, providing users with the functionality to open an account, deposit money, withdraw money, and check account details. This project aims to familiarize users with how real-world banking processes are managed programmatically. It utilizes object-oriented programming (OOP) concepts to create a robust and user-friendly system that encapsulates banking functionalities within a simple interface.

The program is suitable for educational purposes, as it provides a practical understanding of C++ programming, especially in applying classes, objects, and methods. It can be further expanded to include more advanced banking features, offering flexibility for future enhancements.

Technique:

The project uses C++ programming, focusing on the following key techniques:

- **Object-Oriented Programming (OOP):** The project is implemented using OOP concepts, encapsulating data and methods within the Bank class. This makes the program modular, easier to understand, and maintain.
- **Encapsulation:** The Bank class encapsulates attributes such as the account holder's name, address, account type, and balance. Public methods allow for controlled interaction with these private attributes, ensuring data security and integrity.
- **Standard Input/Output:** The program utilizes standard input/output (I/O) streams (cin, cout) to interact with the user, making the interface straightforward and accessible.

Operating System:

- The C++ Bank Management System program can be executed on multiple operating systems, including:
- **Windows**
- **Linux/Unix**
- **macOS**
- To run the program, a C++ compiler is required, such as:
- **GCC (GNU Compiler Collection)** for Linux/Unix-based systems
- **MinGW (Minimalist GNU for Windows)** for Windows systems
- **Clang** for macOS
- Integrated Development Environments (IDEs) like **Visual Studio Code, Code::Blocks, or Dev-C++** can also be used for ease of coding and debugging.

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SUMMARY

Input:

Open Account:

- The program asks for the following inputs:
  - **Name:** The full name of the account holder.
  - **Address:** The residential address of the account holder.
  - **Account Type:** The type of account to open, either Savings (S) or Current (C).
  - **Initial Deposit Amount:** The amount the user wants to deposit while creating the account.

Process:

Open Account:

- Collects user details (name, address, account type, and deposit amount) and creates a new account.

Deposit Money:

- Adds the user-specified amount to the existing balance and updates it.

Withdraw Money:

- Deducts the user-specified amount from the balance if sufficient funds are available.

Display Account:

- Retrieves and shows account details including name, address, account type, and balance.

Output:

```mathematica
Enter your full name: Aman Jhurani
Enter your address: Surat
What type of account you want to open saving(S) or Current(C): S
Enter how much money you want to deposit: 8000
```