# User-Manual

Bank Account Management System (C++ with singly Linked List)

1. **Introduction**

The Bank Account Management System is a console based C++ program designed to manage customer bank accounts, it applies Object-Oriented Programming (OOP) principles and uses a singly Linked List for dynamic storage of accounts.

This system allows users:

* Create and manage multiple accounts.
* Perform deposit and withdrawals.
* Search for accounts by account number.
* Delete accounts when no longer needed.

1. **System Requirements**

* Software: Any C++ compiler.
* Operating System: Windows, Linux or macOS.
* Hardware: at least 2GB RAM and 100MB free disk space.

1. **Features**
2. Add New Account- Create new account with unique account number, customer name, and initial balance.
3. Display All Accounts- View a list of all existing accounts.
4. Deposit Money- Add funds to an account.
5. Withdraw Money- Remove funds with valid ……… to prevent overdrafts.
6. Search Account- Locate an account using the account number.
7. Delete Account- Permanently remove an account from the system.
8. Exit- Safely close the program.
9. **How to use the program**

When the program starts, a menu will appear:

---MENU---  
1. Add Account  
2. Display Accounts  
3. Deposit  
4. Withdraw  
5. Delete Account  
6. Exit

Enter choice:

***Step-by-Step-Instructions***

* 1. **Add Account**
* Select option 1.
* Enter the account number (must be unique).
* Enter the customer’s full name.
* Enter the initial deposit balance.
* The system confirms with “Account added”.
  1. **Display Accounts**
* Select option 2.
* The system shows all accounts in the format:
* Account No: 1001; Name: John Doe; Balance: 5000
  1. **Deposit Money**
* Select option 3.
* Enter the account number.
* Enter the deposit amount (must be positive).
* System updates and shows the new balance.
  1. **Withdraw Money**
* Select option 4.
* Enter the account number.
* Enter the withdrawal amount.
* Withdrawal only succeeds if sufficient funds are available.
  1. **Delete Account**
* Select option 5.
* Enter the account number.
* The system removes the account and confirms with the message: “Account deleted”.
  1. **Exit Program**
* Select option 6.
* The system displays: “Exiting….” and closes safely.

1. **Error Handling**

* Duplicate Accounts → System prevents adding an account if the number already exists.
* Invalid Deposits/Withdrawals → Negative values are not allowed.
* Insufficient Funds → Withdrawal fails if the requested amount exceeds balance.
* Account Not Found → Any operation on non-existent account displays an error.