# **Low Level Document**

Authentication:

User Interface:
The application user interface will be a console-based command-line interface that will provide the following menu options to the customer:
Create new account
View existing account
Deposit money
Withdraw money
Check account balance
Send money
Quit

The application will require customers to enter their account number and PIN to perform any transactions. The authentication process will include the following steps:

The user will enter their account number.

The application will check if the account exists in the system.

If the account exists, the user will be prompted to enter their PIN.

The application will check if the PIN is correct and grant access to the account if the PIN is correct.

#### Account Management:

The application will allow the customer to create new accounts, view existing accounts, and delete accounts. Each account will have a unique account number, account holder name, and balance. Account management will include the following steps:

#### Create a new account:

- a. The user will be prompted to enter their name and an initial deposit amount.
- b. The application will generate a unique account number and store the account details in a database.
- c. The application will display the new account number to the user.

#### View existing account:

- a. The user will be prompted to enter their account number and PIN.
- b. The application will retrieve the account details from the database and display them to the user.

#### Delete existing account:

- a. The user will be prompted to enter their account number and PIN.
- b. The application will delete the account from the database.

#### **Transaction Processing:**

The application will allow the customer to perform transactions such as deposit, withdrawal, and balance inquiry. Deposits and withdrawals will update the balance of the account, and the application will maintain a transaction history for each account. Transaction processing will include the following steps:

## Deposit money:

- a. The user will be prompted to enter their account number and PIN.
- b. The application will retrieve the account details from the database and prompt the user to enter the deposit amount.
- c. The application will update the account balance and transaction history.

## Withdraw money:

- a. The user will be prompted to enter their account number and PIN.
- b. The application will retrieve the account details from the database and prompt the user to enter the withdrawal amount.
- c. The application will check if the account has sufficient funds, update the account balance and transaction history.

#### Check account balance:

- a. The user will be prompted to enter their account number and PIN.
- b. The application will retrieve the account details from the database and display the account balance to the user.

#### **Error Handling:**

The application will handle errors such as invalid account numbers, insufficient funds, and incorrect PINs and provide informative error messages to the user.

## Security:

The application will store sensitive information such as account numbers and PINs in a secure manner and will encrypt data transmissions to prevent unauthorized access.

## Testing:

The application will be thoroughly tested to ensure that it meets functional and performance requirements and that it is user-friendly and error-free.

## Deployment:

The application will be deployed on a secure server and will be accessible to customers through a command-line interface or a webbased interface.