

ATM Interface in Java (Console Based Application)

Wireframe Documentation

Overview

This document outlines the wireframe and features of an ATM Interface implemented as a console-based Java application. The interface will allow users to perform the following operations:

1. View Account Balance
2. Deposit Money
3. Withdraw Money
4. View Transaction History
5. Exit

Wireframe Design

i. Main Menu:

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ATM MAIN MENU

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1. View Balance
2. Deposit Money
3. Withdraw Money
4. Transaction History
5. Exit

=====

Enter your choice: _

ii. View Balance:

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ACCOUNT BALANCE

=====

Your current balance is: \$<balance>

=====

Press Enter to return to the main menu.

iii. Deposit Money:

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DEPOSIT MONEY

=====

Enter the amount you want to deposit: \$ _

=====

Deposit successful! Your new balance is: \$<new_balance>

=====

Press Enter to return to the main menu.

iv. Withdraw Money:

=====

WITHDRAW MONEY

=====

Enter the amount you want to withdraw: \$ _

=====

Withdrawal successful! Your new balance is: \$<new_balance>

=====

Insufficient funds! Please try again.

=====

Press Enter to return to the main menu.

Transaction History:

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TRANSACTION HISTORY

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1. Deposit: \$50.00 | New Balance: \$550.00
 2. Withdrawal: \$20.00 | New Balance: \$530.00
 3. Deposit: \$100.00 | New Balance: \$630.00
- =====

Press Enter to return to the main menu

Exit:

THANK YOU FOR USING OUR ATM

Feature Details

1. View Account Balance

- Retrieve and display the user's current account balance from the database or a temporary storage variable.

2. Deposit Money

- Prompt the user to input the deposit amount.
- Validate the input (non-negative values only).
- Update the balance and record the transaction.

3. Withdraw Money

- Prompt the user to input the withdrawal amount.
- Validate the input (must not exceed the available balance).
- Deduct the amount from the balance and record the transaction.

4. Transaction History

- Maintain a list of transactions.
- Display the list with details of each transaction (type, amount, and resulting balance).

5. Exit

- End the program gracefully with a thank-you message.

Java Code Modules

Main Class:

- **Contains the main menu loop.**
- **Calls respective methods for each menu option.**

Methods:

- 1. viewBalance()**
- 2. depositMoney()**
- 3. withdrawMoney()**
- 4. viewTransactionHistory()**
- 5. exitATM()**

Data Structures:

- **Balance: double balance**
- **Transaction History: ArrayList<String>**