

ATM Interface – Documentation

Project 4

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This is a very simple and user-friendly application for performing some basic ATM operations.

Machine Starts

When the machine is started, a welcome message is displayed. The user needs to insert his card in the machine slot and enter his pin on the machine, which is unique to that specific card.

If the pin entered matches with the card, the user is validated and allowed to proceed further with the transactions. In case a wrong pin is entered, the machine displays an error message and restarts automatically in a few seconds.

Selecting Transaction

On validation of the pin, the machine greets the user with his name (eg. Hello Mr. Shivam) and asks the user which transaction he wishes to perform.

- For cash withdrawal, the user needs to enter 1.
- For cash deposit, the user needs to enter 2.
- For viewing current account balance, the user needs to enter 3.

Cash Withdrawal

If the user enters 1 for withdrawing cash, the machine pops up a message to enter the amount to be withdrawn, the user enters the amount and the transaction is either successful or a failure. If the transaction is successful, the user can collect the amount from the slot provided in the machine. Else, there are three kinds of errors that can creep in:

- The user has entered an amount which is not available in denominations of Rs. 100 and Rs. 500 which is available in the machine
- The user has entered an amount which is more than the current account balance in his account.
- The user has entered an amount which is more than the amount present in the machine.

In any of these cases, the appropriate error message is displayed on the screen and the machine restarts after a brief pause.

Cash Deposit

If the user enters 2 for depositing cash, the machine pops up a message to enter the amount to be withdrawn, the user enters the amount and then is asked to enter the requisite amount of cash. On depositing the cash, a success message is flashed on the screen and then the machine restarts.

View Balance

If the user enters 3 for viewing the current available balance in their account, the available balance is shown on the screen, the transaction is success message is flashed and then the machine restarts.

Sample Test Cases

Test Case 1

Welcome

Insert your card and enter your PIN

1234

PIN validated

Hello Mr. Deepak

Select transaction

Cash Withdraw(Enter 1) Cash Deposit(Enter 2) View Balance(Enter 3)

3

Current Account Balance : 5000

Transaction is Successful

Test Case 2

Welcome

Insert your card and enter your PIN

1234

PIN validated

Hello Mr. Deepak

Select transaction

Cash Withdraw(Enter 1) Cash Deposit(Enter 2) View Balance(Enter 3)

2

Enter the amount to be deposited

4000

Put the 4000 cash in the slot

Transaction is Successful

Test Case 3

Welcome

Insert your card and enter your PIN

1234

PIN validated

Hello Mr. Deepak

Select transaction

Cash Withdraw(Enter 1) Cash Deposit(Enter 2) View Balance(Enter 3)

3

Current Account Balance : 9000

Transaction is Successful

Test Case 4

Welcome

Insert your card and enter your PIN

1234

PIN validated

Hello Mr. Deepak

Select transaction

Cash Withdraw(Enter 1) Cash Deposit(Enter 2) View Balance(Enter 3)

1

Enter the amount to be withdrawn

10000

ERROR : Insufficient Balance in Account

Test Case 5

Welcome

Insert your card and enter your PIN

1222

ERROR : Invalid PIN

Test Case 6

Welcome

Insert your card and enter your PIN

1234

PIN validated

Hello Mr. Deepak

Select transaction

Cash Withdraw(Enter 1) Cash Deposit(Enter 2) View Balance(Enter 3)

1

Enter the amount to be withdrawn

2550

ERROR : Only 100 and 500 denominations available in machine