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# User Manual

For

# Automatic Banking Machine

Version 2.0

Prepared by

Group Name: *Tron Inc.*

Group Number 302

Rohan Shah  
Suraj Bhardwaj  
Yaseen Ali

**Instructor:** Kamran Sartipi

**Course:** Software Engineering 3K04

**Lab Section:** L03

**Teaching Assistant:** *Mehran Najafi*

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## 1 Purpose

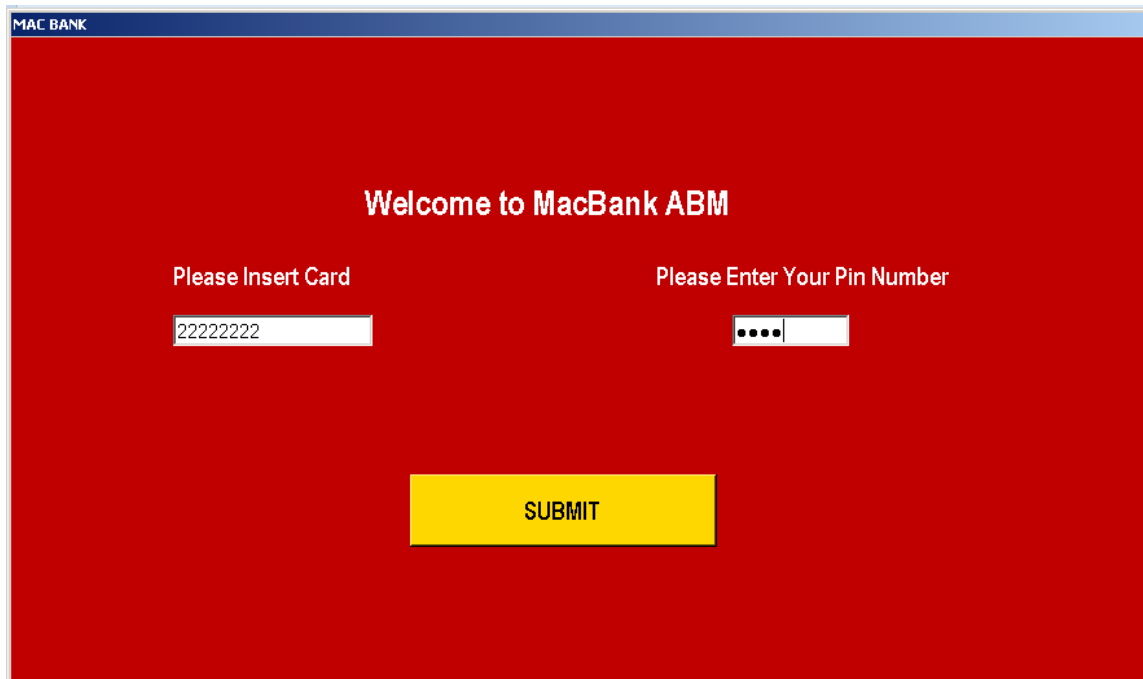
The purpose of this user manual is to educate customers on the correct procedures for using the MacBank™ ABM software. It also provides a section for troubleshooting errors.

## 2 How to use this document

When using this document for the first time customers should read through the entire document and become familiar with all the functions of the software and how to use them. If the user is experiencing an error while using the software they can easily refer to the Error troubleshooting section of this document for quick referencing of errors.

## 3 Logging in

When the user approaches the ABM machine they will see the welcome screen in which they will have to enter a valid card number and a pin number. If the verification of both numbers are successful then they will be directed to the transaction menu. If they are invalid an error for invalid card (or pin) will appear. If invalid numbers are entered more than 3 times the user will be locked out of their account as a security measure and will have to contact the Bank Staff for help.



MAC BANK

Welcome to MacBank ABM

Please Insert Card

Please Enter Your Pin Number

22222222

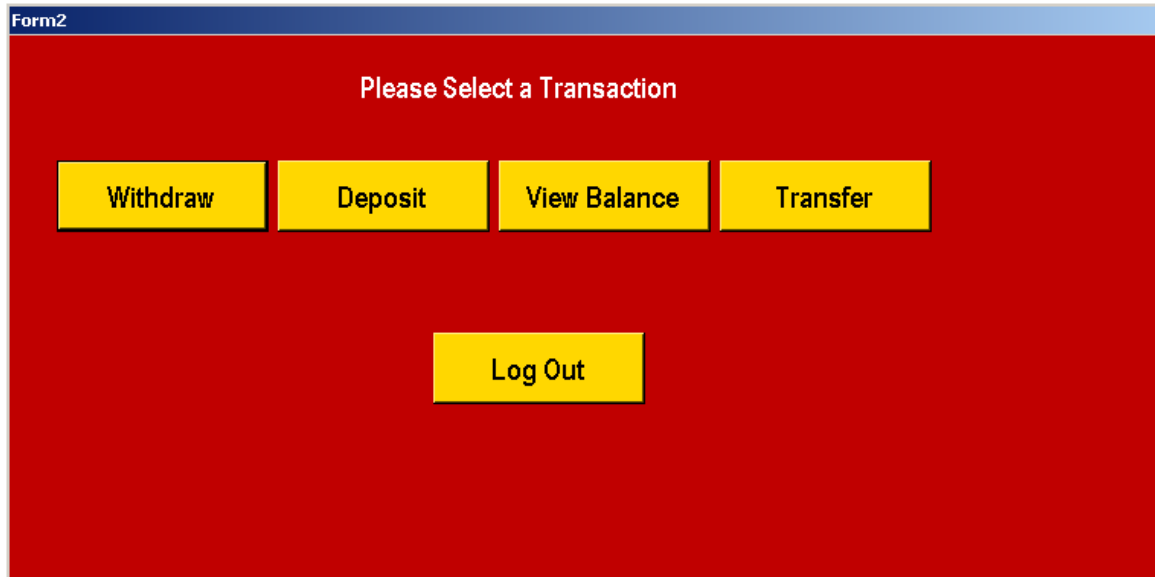
....

SUBMIT

Figure 1: Log in screen

## 4 Transaction Screen

After the user's pin has been verified they will come to the transaction screen. At this screen they will have the option to choose between four different options as shown below. These are deposit, withdraw, transfer and balance inquiry. These will be discussed in detail in the following subsections. After each transaction is completed successfully A receipt is shown (as seen below) and the user is asked if they want to continue banking. If yes is selected they are redirected to the transaction screen and if no then to the log in screen.



The image shows a screenshot of a transaction screen. The window title is "Form2". The background is red. At the top center, the text "Please Select a Transaction" is displayed in white. Below this text, there are four yellow buttons with black text: "Withdraw", "Deposit", "View Balance", and "Transfer". These buttons are arranged in a horizontal row. Below this row, centered, is a single yellow button with black text: "Log Out".

Figure 2: Transaction Screen

## 4.1 Deposit

When this option is chosen the deposit screen will be shown as below. The user will be required to select several options. They need to indicate whether the deposit is in cash or is a cheque. They also need to enter the amount of the deposit and to which account the deposit is going into.

The screenshot shows a red-themed web form titled "Form5". It is divided into three main sections: "Please Enter Deposit Amount", "Please Select the Account", and "Cash or Check?".

- Please Enter Deposit Amount:** A text input field contains the number "100". Below it are two yellow buttons: "SUBMIT" and "Clear".
- Please Select the Account:** Three yellow buttons are stacked vertically: "Checking", "Savings", and "Credit". Below these buttons are two empty text input fields, each containing a "0".
- Cash or Check?:** Two yellow buttons are stacked vertically: "Cash" and "Check".

At the bottom of the form are two yellow buttons: "Log Out" and "CANCEL".

Figure 3 : Deposit screen

## 4.2 Withdraw

At the withdraw screen the user needs to indicate which account they would like to withdraw money from as well as the amount they would like to withdraw. The user cannot withdraw more than \$500.00 in one session. If they attempt to perform this operation they will receive an error saying "The amount exceeds the limit please select another amount". If the bank vault is below \$10 000, a low vault error will appear and redirect the user to the transaction screen. The other error which could appear while trying to withdraw is if the user attempts to withdraw more than they have in the selected account. The error "insufficient funds" appears in this case.

The screenshot shows a red-themed web form titled "Form3". It is divided into two main sections: "Please Select The Amount You Would Like to Withdraw" and "Please Select the Account".

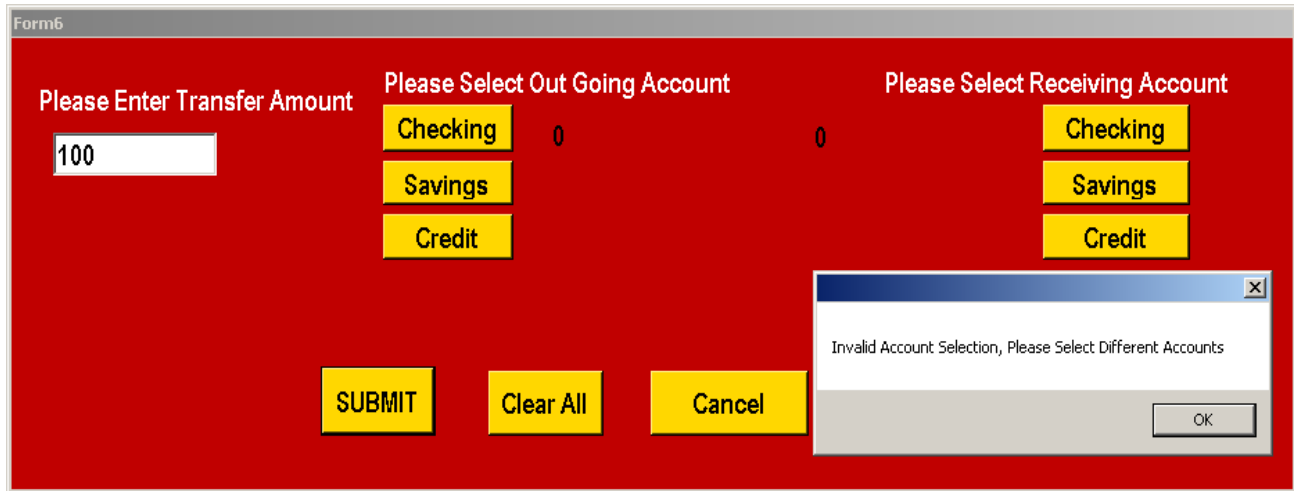
- Please Select The Amount You Would Like to Withdraw:** On the left, four yellow buttons are stacked vertically: "\$20", "\$40", "\$60", and "\$80". In the center, a text input field contains "40". Below it is the text "OR Input # of \$20 Bills" followed by another text input field containing "2". At the bottom are two yellow buttons: "SUBMIT" and "Clear".
- Please Select the Account:** Three yellow buttons are stacked vertically: "Checking", "Savings", and "Credit". To the right of the "Savings" button is a small text input field containing the number "1".

At the bottom center of the form is a yellow button labeled "Cancel".

Figure 4 : Withdraw Screen

### 4.3 Transfer

At the transfer screen the user will have to enter the outgoing account, receiving account and the transfer amount. If a mistake is made the Clear All button clears all the fields. The cancel button takes the user back to the transactions menu. When submit is clicked the transaction is processed and if successful a receipt is printed. If the user selects the same account as receiving and outgoing an error “Invalid account selection, Please select valid account” is displayed.

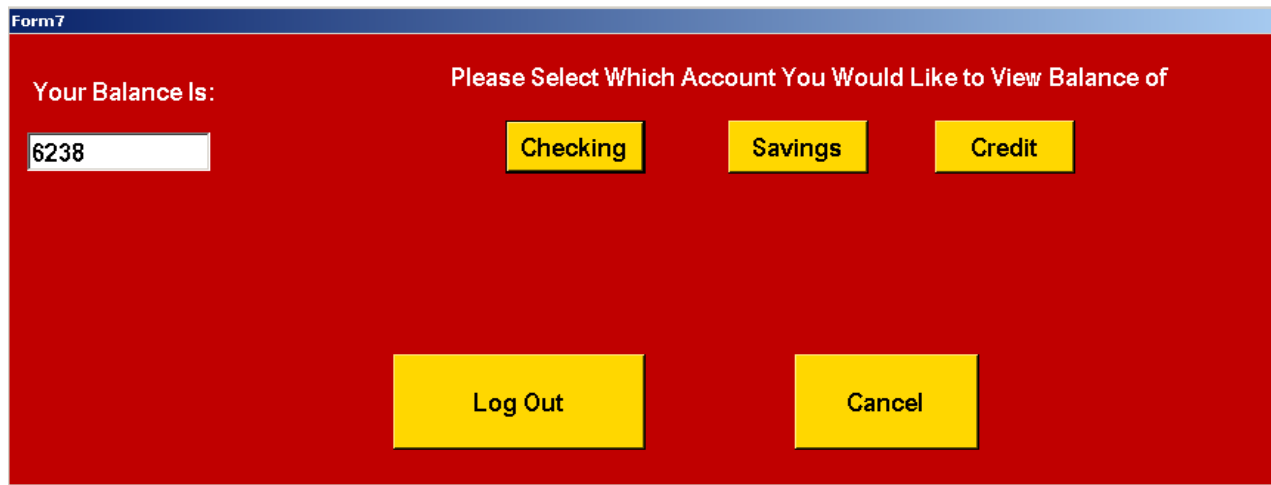


The screenshot shows a web form titled "Form6" with a red background. It contains three main sections: "Please Enter Transfer Amount" with a text input field containing "100"; "Please Select Out Going Account" with three yellow buttons labeled "Checking", "Savings", and "Credit", and a "0" value; and "Please Select Receiving Account" with three yellow buttons labeled "Checking", "Savings", and "Credit", and a "0" value. At the bottom are three yellow buttons: "SUBMIT", "Clear All", and "Cancel". An error dialog box is open in the bottom right corner with the text "Invalid Account Selection, Please Select Different Accounts" and an "OK" button.

Figure 5 : Transfer Screen with example of Invalid account error

## 4.4 Balance Inquiry

When the user selects the View balance screen they are allowed to select the account balance they want to view. They are also able to logout if they so choose or they can return to the transactions menu by selecting the cancel button. The View Balance screen is shown below.



The screenshot shows a user interface for viewing account balances. It features a red background with a blue header bar labeled 'Form7'. The main content area displays 'Your Balance Is:' followed by a white input field containing the number '6238'. To the right, the text 'Please Select Which Account You Would Like to View Balance of' is centered above three yellow buttons labeled 'Checking', 'Savings', and 'Credit'. At the bottom of the screen, there are two more yellow buttons labeled 'Log Out' and 'Cancel'.

Figure 6: View Balance Screen

## 5 Other functionalities

### 5.1 Logging off

When the log off button is clicked on any of the screens it allows to user to be taken back to the Main Menu so another user can log on. The ABM system is designed to one facilitate one user at a given point in time.

### 5.2 Cancelling a Transaction

When Cancel button is clicked the transaction in progress is cancelled and The user is directed to the Transactions screen.

### 5.3 Submit button

This button is on every type of transaction screen and is clicked when the user is sure all the data they entered is correct.

### 5.4 Continue Banking

When the user selects Continue Banking they are directed to the transactions screen.

## 5.5 Printing Receipt

After each successful transaction a receipt is displayed with the date and time as well as the details of the transaction. An example receipt is shown below.

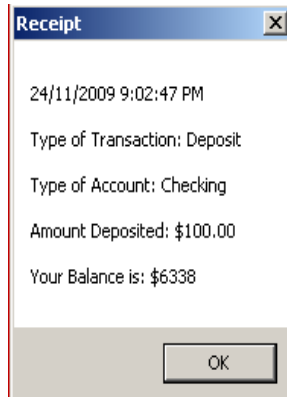


Figure 7: Receipt Example for a Deposit

## 6 Error Troubleshooting

Error	Solution
Insufficient Funds	You are trying to withdraw more than you have in the account. Try withdrawing from another account or withdraw less.
Low vault alert	The Vault amount is below \$10000 dollars. The staff needs to refill the vault.
invalid account selection	You may have selected the same account as outgoing and receiving. Try selecting different accounts.
invalid pin	Try re-entering your pin
invalid card number	Try re-entering your card number
Card blocked	You have entered an invalid number more than 3 times you need the bank staff to reset your account
Withdraw amount exceeds limit	You cannot withdraw more than \$500 at one time.

Table 1 : Troubleshooting Table