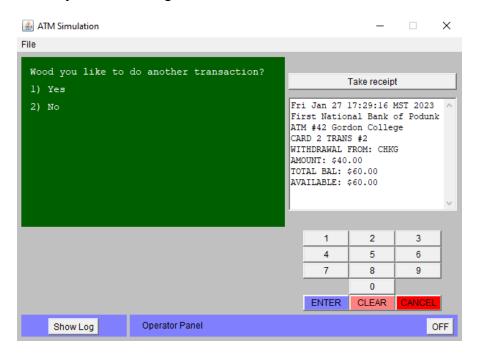
Bug Defect Report

Bug: Test Case #14

The bug is found in the withdrawal function. The bug was that the system fails to dispense the amount of cash wanted by the user, as well as System does not print out the correct receipt showing the correct amount and correct updated balance. In addition, the system does not record correctly in the back log.



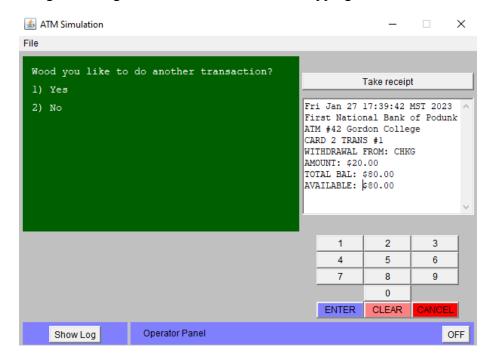
Input: We choose to withdraw 20 dollars from the machine.

Expected Output: System dispenses this amount of cash and the system prints a correct receipt showing amount and correct updated balance, and the system records transaction correctly in the log.

Actual/ Faulty Output: Our system has dispensed 20 dollars more than the amount of cash chosen to withdraw and in turn the system prints the wrong receipt showing the wrong amount and wrong updated balance and the system record transaction does not correctly log.

Test Reproducibility Instructions: Initially the system is displaying the menu of withdrawal amounts, we will choose an amount that the system currently has and which is not greater than the account balance and test.

The bug is found in the withdrawal function. The bug is that the withdrawal of an amount of money over the account balance is processed. The system displays an incorrect message/amount and goes through the transaction instead of stopping the transaction due to insufficient funds.



Input: We have imputed an amount of twenty 20 dollar bills and want to withdraw 500\$ from the checking account of card 1. We selected 500\$ from the menu.

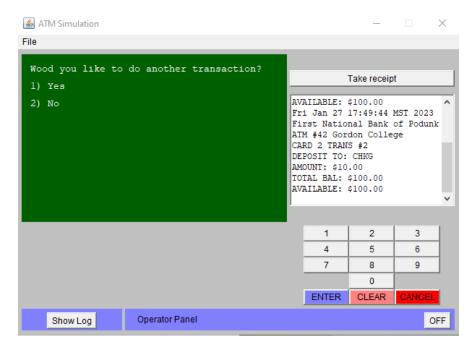
Expected Output: System should display an appropriate message and offer customers the option of choosing to do another transaction or not.

Actual/ Faulty Output: Our system displays an incorrect message/amount of the ATM and goes through with processing a withdrawal of 20\$ instead of 500\$. Since the card 1 checking account should only have 100\$ this should prompt an error message

Test Reproducibility Instructions:

Initially the system is requesting a withdrawal amount after selecting the card, we will then choose an amount that is over 100\$ because that is all the funds in card 1 checking account.

This bug is in the deposit function. The system accepts the deposit envelope, but the system prints an incorrect receipt showing an incorrect updated balance. As well the log shows that it has received the deposit but does not update correctly.



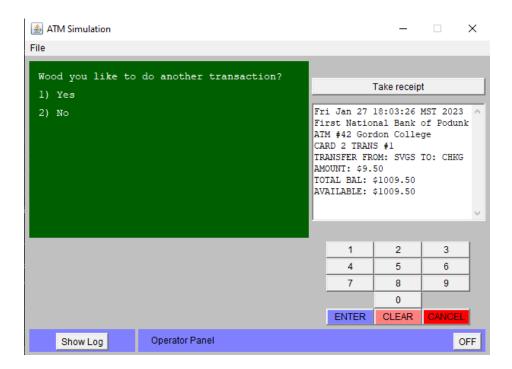
Input: Inserting an envelope with an amount attached to it.

Expected Output: We expect the system to accept the envelope and print a correct receipt showing the amount and correct updated balance. As well the system records the transaction correct in the log and on the banking receipt

Actual/ Faulty Output: The system did accept the envelope but a deposit of 10 dollars made the system print out an incorrect update balance on the receipt, but the back log showed that the amount was deposited. With the checking account of card 1 having 100\$, after the deposited amount the balance should be 110\$, but remains 100.

Test Reproducibility Instructions: The initial state of the program is that the system is requesting that the customer insert an envelope after selecting an amount to deposit. Click on the Insert the envelope button and check for the receipt that the bank prints out.

This bug was found in the Transfer use case, testing the transferring of money to different account types. The System prints a receipt that shows the incorrect amount and incorrect updated balance. The System also logs the incorrect transaction information.



Input : Entering a dollar amount to be transferred to a different account. Our input was 10\$ dollars but the transfer was made to be 9.50\$.

Expected Output : The system should print out a receipt that displays the correct amount transferred as well as the correct updated balance of the account. The System log should also have the correct transaction information.

Actual/ Faulty Output: The system prints out a receipt that contains the wrong amount transferred as well as the incorrect updated balance of the account. The System log also recorded the wrong transaction information (amount of money that was transferred).

Test Reproducibility Instructions: Initially the program is displaying a request for the customer to type a dollar amount. We would then input an amount that we are transferring from the accounts that we choose. After the system executes, a receipt should be printing the correct amount and updated balance.

This bug was found in the Invalid PIN Extension use case, testing the re-entry of the correct PIN. Inserting a card prompts the user to then enter their PIN for the card that was just entered. Entering the wrong PIN followed by re-entering the right PIN will not take the user to the correct page.

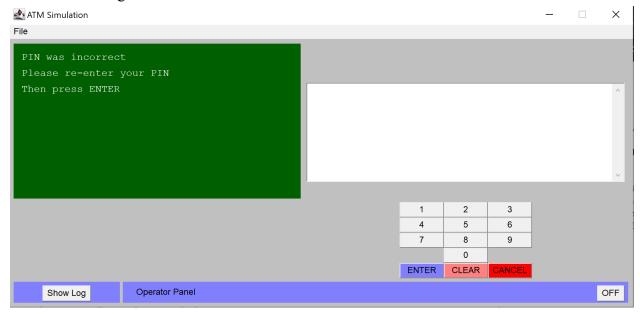
Input: Enter correct PIN when System prompts for re-entering of PIN. For card number 1, entering the number "20" as the incorrect PIN, then entering number "42" as the correct PIN.

Expected Output : The user should be able to access all of the account transactional functions after re-entering the correct PIN.

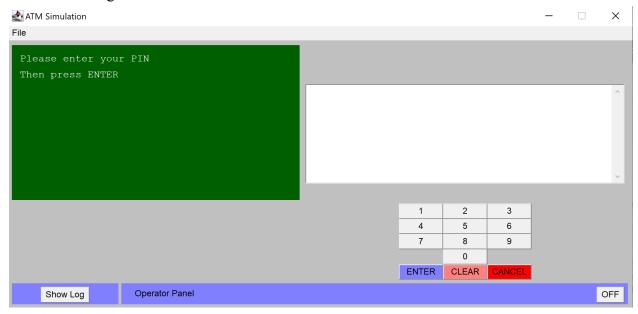
Actual/ Faulty Output: After entering the correct PIN, the System displays a message calling for the entering of the PIN once again. This is faulty because after the entering of the correct PIN, the System should have directed the user to the functional page where the user is able to process transactions.

Test Reproducibility Instructions : Insert a card and enter the wrong PIN. The System will then ask for a re-entry. The re-entry attempt is where we will enter the correct PIN.

Before re-entering correct PIN:



After re-entering correct PIN:



This bug was found in the Invalid PIN Extension use case, testing the re-entry of the correct PIN on the second attempt. Inserting a card prompts the user to then enter their PIN for the card that was just entered. Entering the wrong PIN followed by the right PIN will not take the user to the correct page.

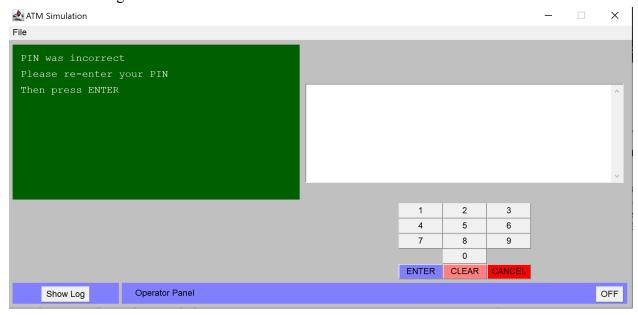
Input: Enter incorrect PIN on first attempt, then re-enter the correct PIN on second attempt. For card number 1, entering the number "30" as the incorrect PIN, then entering number "42" as the correct PIN

Expected Output : The user should be able to access all of the account transactional functions after re-entering the correct PIN.

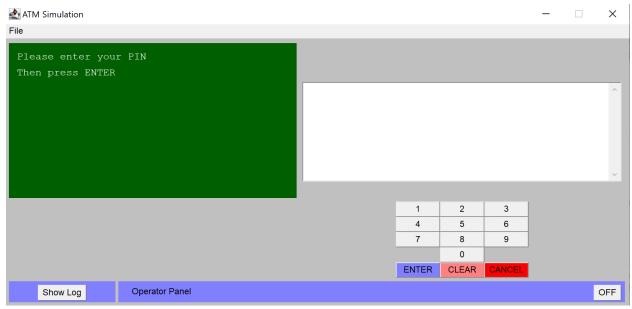
Actual/ Faulty Output: After entering the correct PIN, the System displays a message calling for the entering of the PIN once again. This is faulty because after the entering of the correct PIN, the System should have directed the user to the functional page where the user is able to process transactions.

Test Reproducibility Instructions : Insert a card and enter the wrong PIN. The System will then ask for a re-entry. The re-entry attempt is where we will enter the correct PIN.

Before re-entering correct PIN:



After re-entering correct PIN:



This bug was found in the Invalid PIN Extension use case, testing the re-entry of the correct PIN on the third attempt. Inserting a card prompts the user to then enter their PIN for the card that was just entered. Entering the wrong PIN twice followed by the right PIN will not take the user to the correct page.

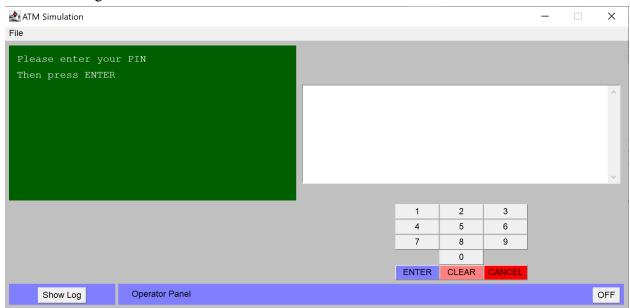
Input: Enter incorrect PIN once, then re-enter incorrect PIN a second time, then re-enter correct PIN on the third attempt. For card number 1, entering the number "1" as the incorrect PIN, then entering number "11" as the second incorrect PIN, followed by the entering number "42" as the correct PIN.

Expected Output : The user should be able to access all of the account transactional functions after re-entering the correct PIN.

Actual/ Faulty Output: After entering the correct PIN, the System displays a message calling for the entering of the PIN once again. This is faulty because after the entering of the correct PIN, the System should have directed the user to the functional page where the user is able to process transactions.

Test Reproducibility Instructions: Insert a card and enter the wrong PIN. The System will then ask for a re-entry, this is where we should enter the wrong PIN again. The System will then ask for a re-entry for the second time. The second re-entry attempt is where we will enter the correct PIN.

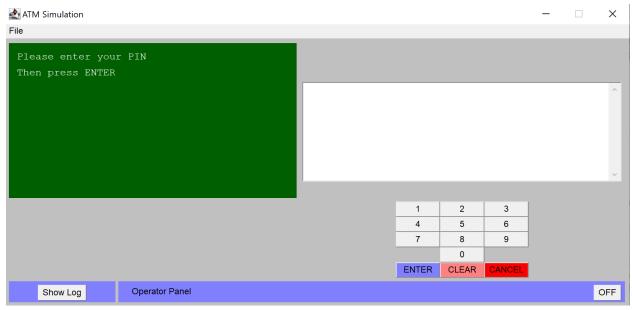
Before entering incorrect PIN:



Before re-entering incorrect PIN:



After re-entering correct PIN:



Report Conclusion

Our group found around 7 bugs/defects to report, and after the regression testing only 4 bugs/defects were still present and are placed in our "In-progress/Under review" container in our Jira bug tracking system, and the rest of the bugs that were resolved were place in our "Bugs Fixed" container on Jira.