# Exploratory Testing:

<table>
<tr><td colspan="2"><strong>[SCRUM-15] <u>Depositing does not update the amount of immediately available money</u></strong> Created: 31/Jan/25  Updated: 08/Feb/25</td></tr>
<tr><td><strong>Status:</strong></td><td>To Do</td></tr>
<tr><td><strong>Project:</strong></td><td><u>SENG438-Assignmment1</u></td></tr>
<tr><td><strong>Components:</strong></td><td>None</td></tr>
<tr><td><strong>Affects versions:</strong></td><td>None</td></tr>
<tr><td><strong>Fix versions:</strong></td><td>None</td></tr>
</table>

| | | | |
|---|---|---|---|
| **Type:** | Bug | **Priority:** | Medium |
| **Reporter:** | Mohamad Hussein | **Assignee:** | Masroor |
| **Resolution:** | Unresolved | **Votes:** | 0 |
| **Labels:** | ET | | |
| **Remaining Estimate:** | Not Specified | | |
| **Time Spent:** | Not Specified | | |
| **Original estimate:** | Not Specified | | |

| | |
|---|---|
| **Rank:** | 0|i0002v: |
| **Sprint:** | |
| **Story point estimate:** | 2 |

## Description

**Function Being Tested:**
Deposit Function – Balance Update

**Steps to Reproduce:**

1. Launch the ATM system.
2. Click the "On" button to start the machine.
3. Click the "Click to Insert Card" button.
4. Enter a valid card number (e.g., `1`) and press Enter.
5. Enter the correct PIN (e.g., `42`) using the keypad and press Enter.
6. Select the deposit option by pressing `2` on the keypad.
7. Choose an account type (e.g., Checking or Savings).
8. Enter a deposit amount (e.g., `$100`) and confirm.

9. Check the account balance immediately after the deposit.

**Expected Behavior:**
The deposited amount should be reflected in the available balance immediately after the transaction.

**Actual Behavior:**
The deposited amount is not added to the available balance right away. The balance remains unchanged until a later point, such as after logging out and logging back in or performing another transaction.

## [SCRUM-14] Cancelling a transaction has typo for "Wood you like to do another transaction?" Created: 31/Jan/25 Updated: 08/Feb/25

| Status: | To Do |
| --- | --- |
| Project: | SENG438-Assignmment1 |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| Type: | Bug | Priority: | Medium |
| --- | --- | --- | --- |
| Reporter: | Mohamad Hussein | Assignee: | Masroor |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | ET | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i0002n: |
| --- | --- |
| Sprint: | |
| Story point estimate: | 2 |

### Description

**Function Being Tested:**
Transaction Cancellation Message

**Steps to Reproduce:**

1. Launch the ATM system.
2. Click the "On" button to start the machine.
3. Click the "Click to Insert Card" button.
4. Enter a valid card number (e.g., `1`) and press Enter.
5. Enter the correct PIN (e.g., `42`) using the keypad and press Enter.
6. Select any transaction type (e.g., Withdrawal, Deposit, Transfer).
7. Cancel the transaction at the confirmation screen.

**Expected Behavior:**
The system should display a properly formatted message:
*"Would you like to do another transaction?"*

**Actual Behavior:**
The system displays a typo in the prompt:
**"Wood you like to do another transaction?"**

## [SCRUM-13] GUI hangs after pressing show log and hide log, getting out this state requires to press a button Created: 31/Jan/25  Updated: 08/Feb/25

| | |
|---|---|
| **Status:** | To Do |
| **Project:** | SENG438-Assignmment1 |
| **Components:** | None |
| **Affects versions:** | None |
| **Fix versions:** | None |

| | | | |
|---|---|---|---|
| **Type:** | Bug | **Priority:** | Medium |
| **Reporter:** | Mohamad Hussein | **Assignee:** | Masroor |
| **Resolution:** | Unresolved | **Votes:** | 0 |
| **Labels:** | ET | | |
| **Remaining Estimate:** | Not Specified | | |
| **Time Spent:** | Not Specified | | |
| **Original estimate:** | Not Specified | | |

| | |
|---|---|
| **Rank:** | 0\|i0002f: |
| **Sprint:** | |
| **Story point estimate:** | 2 |

## Description

**Function Being Tested:**
Log Display Function

**Steps to Reproduce:**

1. Launch the application.
2. Navigate to the log section.
3. Click the **"Show Log"** button.
4. Click the **"Hide Log"** button.
5. Observe the GUI behavior.
6. Attempt to interact with other UI elements.

**Expected Behavior:**
The GUI should function normally after toggling the log display, allowing the user to continue interacting with other features without issue.

**Actual Behavior:**
The GUI becomes unresponsive after toggling **"Show Log"** and **"Hide Log."** The system remains in this frozen state until the user presses another button, which restores functionality.

## [SCRUM-11] Inquiry for card #1 displays incorrect account type Money Market, choosing it gives "Unknown error" and dispenses 500$ Created: 31/Jan/25 Updated: 08/Feb/25

| | |
|---|---|
| **Status:** | To Do |
| **Project:** | SENG438-Assignmment1 |
| **Components:** | None |
| **Affects versions:** | None |
| **Fix versions:** | None |

| | | | |
|---|---|---|---|
| **Type:** | Bug | **Priority:** | Medium |
| **Reporter:** | Mohamad Hussein | **Assignee:** | Masroor |
| **Resolution:** | Unresolved | **Votes:** | 0 |
| **Labels:** | ET | | |
| **Remaining Estimate:** | Not Specified | | |
| **Time Spent:** | Not Specified | | |
| **Original estimate:** | Not Specified | | |

| | |
|---|---|
| **Rank:** | 0|i00027: |
| **Sprint:** | |
| **Story point estimate:** | 2 |

## Description

**Function Being Tested:**
Account Inquiry

**Steps to Reproduce:**

1. Launch the ATM system.
2. Click the "On" button to start the machine.
3. Click the "Click to Insert Card" button.
4. Enter card number 1 and press Enter.
5. Enter the correct PIN and press Enter.
6. Select the account inquiry option.
7. Observe that "Money Market" appears as an available account type.
8. Select "Money Market."

**Expected Behavior:**

- The system should only display valid account types linked to card #1.

- If "Money Market" is not a valid account type for this card, it should not be listed.
- If selected, the system should either display the correct balance or provide a meaningful error message without affecting the balance.

**Actual Behavior:**

- The system incorrectly displays "Money Market" as an available account type.
- Selecting it results in an "Unknown error" message.
- Unexpectedly, the ATM dispenses $500 without confirmation.

## [SCRUM-10] Inquiry for card #2 Money Market returns "Invalid acccount type" Created: 31/Jan/25 Updated: 08/Feb/25

| | |
|---|---|
| **Status:** | To Do |
| **Project:** | SENG438-Assignmment1 |
| **Components:** | None |
| **Affects versions:** | None |
| **Fix versions:** | None |

| | | | |
|---|---|---|---|
| **Type:** | Bug | **Priority:** | Medium |
| **Reporter:** | Mohamad Hussein | **Assignee:** | Masroor |
| **Resolution:** | Unresolved | **Votes:** | 0 |
| **Labels:** | ET | | |
| **Remaining Estimate:** | Not Specified | | |
| **Time Spent:** | Not Specified | | |
| **Original estimate:** | Not Specified | | |

| | |
|---|---|
| **Rank:** | 0|i0001z: |
| **Sprint:** | |
| **Story point estimate:** | 2 |

### Description

**Function Being Tested:**
Account Inquiry

**Steps to Reproduce:**

1. Launch the ATM system.
2. Click the "On" button to start the machine.
3. Click the "Click to Insert Card" button.
4. Enter card number 2 and press Enter.
5. Enter the correct PIN and press Enter.
6. Select the account inquiry option.
7. Choose the "Money Market" account type.

**Expected Behavior:**
The system should display the balance for the Money Market account associated with card #2.

**Actual Behavior:**
The system returns an error message stating **"Invalid account type"** instead of displaying the balance.

# [SCRUM-9] Transfer gives incorrect amount, removes 0.50$ from chosen amount, if <0.50$ then it will remove money from the balance (consistent across account types) Created: 31/Jan/25  Updated: 08/Feb/25

| Status: | To Do |
|---|---|
| Project: | SENG438-Assignmment1 |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| | | | |
|---|---|---|---|
| Type: | Bug | Priority: | Medium |
| Reporter: | Mohamad Hussein | Assignee: | Masroor |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | ET | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i0001r: |
|---|---|
| Sprint: | |
| Story point estimate: | 2 |

## Description

**Function Being Tested:**
Transfer Function

**Steps to Reproduce:**

1. Launch the ATM system.
2. Click the "On" button to start the machine.
3. Click the "Click to Insert Card" button.
4. Enter a valid card number (e.g., 1) and press Enter.
5. Enter the correct PIN (e.g., 42) using the keypad and press Enter.
6. Select the transfer option by pressing the corresponding key.
7. Choose the source and destination accounts.
8. Enter a transfer amount and confirm:
   - Transfer $50 → Observe that only $49.50 is transferred.
   - Transfer $1 → Observe that only $0.50 is transferred.

- o Transfer $0.25 → Observe that $0.25 is deducted from the balance instead of being transferred.

**Expected Behavior:**
The system should transfer the exact amount entered by the user.

**Actual Behavior:**
The system consistently deducts $0.50 from the entered transfer amount. If the amount is less than $0.50, the system instead removes the difference from the account balance. This issue occurs across all account types.

**[SCRUM-8] Switching typing input from keyboard to GUI buttons, cannot revert to typing input on keyboard in the same action** Created: 31/Jan/25 Updated: 08/Feb/25

| Status: | To Do |
|---|---|
| Project: | SENG438-Assignmment1 |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| Type: | Bug | Priority: | Medium |
|---|---|---|---|
| Reporter: | Mohamad Hussein | Assignee: | Masroor |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | ET | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i0001j: |
|---|---|
| Sprint: | |
| Story point estimate: | 2 |

**Description**

**Function Being Tested:**
Input Switching (Keyboard ↔ GUI Buttons)

**Steps to Reproduce:**

1. Launch the ATM system.
2. Click the "On" button to start the machine.
3. Click the "Click to Insert Card" button.
4. Enter a valid card number using the keyboard and press Enter.
5. Use the GUI buttons to enter the PIN instead of the keyboard.
6. Attempt to switch back to using the keyboard for further input (e.g., account selection or transaction type).

**Expected Behavior:**
The system should allow users to switch freely between keyboard input and GUI button input within the same transaction.

**Actual Behavior:**
Once the user switches to GUI buttons, the system no longer accepts keyboard input for the rest of the action, requiring cancellation or restarting the transaction to regain keyboard functionality.

**[SCRUM-7] Depositing removes 10$ from chosen amount, if <10$ then it will remove money from the balance (consistent across account types)** Created: 31/Jan/25  Updated: 08/Feb/25

| | |
|---|---|
| **Status:** | To Do |
| **Project:** | SENG438-Assignmment1 |
| **Components:** | None |
| **Affects versions:** | None |
| **Fix versions:** | None |

| | | | |
|---|---|---|---|
| **Type:** | Bug | **Priority:** | Medium |
| **Reporter:** | Mohamad Hussein | **Assignee:** | Masroor |
| **Resolution:** | Unresolved | **Votes:** | 0 |
| **Labels:** | ET | | |
| **Remaining Estimate:** | Not Specified | | |
| **Time Spent:** | Not Specified | | |
| **Original estimate:** | Not Specified | | |

| | |
|---|---|
| **Rank:** | 0|i0001b: |
| **Sprint:** | |
| **Story point estimate:** | 2 |

**Description**

**Function Being Tested:**
Deposit Function

**Steps to Reproduce:**

1. Launch the ATM system.
2. Click the "On" button to start the machine.
3. Click the "Click to Insert Card" button.
4. Enter a valid card number (e.g., 1) and press Enter.
5. Enter the correct PIN (e.g., 42) using the keypad and press Enter.
6. Select the deposit option by pressing 2 on the keypad.
7. Choose an account type (e.g., Checking or Savings) by pressing the corresponding key.
8. Enter a deposit amount and confirm:
   o Deposit $50 → Observe that only $40 is added to the balance.
   o Deposit $10 → Observe that $0 is added to the balance.
   o Deposit $5 → Observe that the balance decreases by $5 instead of increasing.

**Expected Behavior:**
The system should add the full deposited amount to the account balance.

**Actual Behavior:**
The system consistently deducts $10 from the entered deposit amount. If the deposit is less than $10, the system instead subtracts the remaining difference from the account balance. This issue affects all account types.

**[SCRUM-6] Withdrawing gives incorrect amount, gives the amount an index ahead of the value (consistent across all accounts types) e.g. 20 gives 40, 40 gives 60, 60 gives 100, 100 gives 200, 200 gives 20** Created: 31/Jan/25  Updated: 08/Feb/25

| Status: | To Do |
|---|---|
| Project: | SENG438-Assignmment1 |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| Type: | Bug | Priority: | Medium |
|---|---|---|---|
| Reporter: | Mohamad Hussein | Assignee: | Masroor |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | ET | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i00013: |
|---|---|
| Sprint: | |
| Story point estimate: | 2 |

## Description

**Function Being Tested:**
Withdrawal Function

**Steps to Reproduce:**

1. Launch the ATM system.
2. Click the "On" button to start the machine.
3. Click the "Click to Insert Card" button.
4. Enter a valid card number (e.g., 1) and press Enter.
5. Enter the correct PIN (e.g., 42) using the keypad and press Enter.
6. Select the withdrawal option by pressing 1 on the keypad.
7. Choose an account type (e.g., Checking or Savings) by pressing the corresponding key.
8. Select a withdrawal amount:
    o Press 1 for $20 → Observe that $40 is dispensed.
    o Press 2 for $40 → Observe that $60 is dispensed.
    o Press 3 for $60 → Observe that $100 is dispensed.

- o  Press 4 for $100 → Observe that $200 is dispensed.
- o  Press 5 for $200 → Observe that $20 is dispensed.

**Expected Behavior:**
The system should dispense the exact amount requested by the user.

**Actual Behavior:**
The system consistently dispenses an amount corresponding to the next index in the list of withdrawal options rather than the selected amount. This occurs across all account types.

## [SCRUM-5] GUI hangs after sending SIGINT to terminal <span>Created: 31/Jan/25 Updated: 08/Feb/25</span>

| Status: | To Do |
|---|---|
| Project: | SENG438-Assignmment1 |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| Type: | Bug | Priority: | Medium |
|---|---|---|---|
| Reporter: | Mohamad Hussein | Assignee: | Masroor |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | ET | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i0000v: |
|---|---|
| Sprint: | |
| Story point estimate: | 2 |

### Description

**Function Being Tested:**
GUI Responsiveness

**Steps to Reproduce:**

1. Launch the application.
2. Open a terminal and navigate to the application directory.
3. Start the application by running the executable or command.
4. While the application is running, send a `SIGINT` signal to the terminal (e.g., using `Ctrl+C`).
5. Observe the GUI behavior.

**Expected Behavior:**
The application should handle the `SIGINT` signal gracefully, either by displaying an error message, allowing the user to quit cleanly, or continuing operation without freezing.

**Actual Behavior:**
The GUI becomes unresponsive and hangs after receiving the $\texttt{SIGINT}$ signal, requiring a forceful termination to close the application.

# Manual-Scripted Screen:

| | |
|---|---|
| **[SCRUM-4] MFT- Test 29 Incorrect Balance Update After Transfer from Checking to Savings** Created: 31/Jan/25  Updated: 06/Feb/25  Resolved: 06/Feb/25 | |
| **Status:** | Resolved |
| **Project:** | SENG438-Assignmment1 |
| **Components:** | None |
| **Affects versions:** | None |
| **Fix versions:** | None |

| | | | |
|---|---|---|---|
| **Type:** | Bug | **Priority:** | Medium |
| **Reporter:** | Mohamad | **Assignee:** | Unassigned |
| **Resolution:** | Done | **Votes:** | 0 |
| **Labels:** | MFT | | |
| **Remaining Estimate:** | Not Specified | | |
| **Time Spent:** | Not Specified | | |
| **Original estimate:** | Not Specified | | |

| | |
|---|---|
| **Rank:** | 0|i0000n: |
| **Sprint:** | SCRUM Sprint 1 |

**Description**

**This bug was resolved in version 1.1**
**Description:**
When a user performs a **fund transfer** from their **checking account to savings account**, the system incorrectly updates the total and available balances. The transferred amount is not properly deducted from the checking account or added to the savings account, leading to incorrect balance calculations.

**Steps to Reproduce:**

1. Run the JAR file for the ATM system.
2. Turn on the machine by clicking the "On" button.
3. Enter a number for the available $20 bills and press Enter.
4. Click the **"Click to Insert Card"** button.
5. Enter card number **1** and press Enter.
6. Enter a valid PIN (**42**) using the keypad and press Enter.
7. Select **Transfer Transaction (3)**.

8. Choose **Checking Account (1) as the source**.
9. Choose **Savings Account (2) as the destination**.
10. Enter any transfer amount (e.g., **10.00**).
11. Confirm the transfer.
12. Observe that the balances are **incorrectly updated**—the checking account is not properly debited, and/or the savings account is not correctly credited.

**Expected Behavior:**
The transferred amount should be **deducted from the checking account** and **added to the savings account** correctly.

**Actual Behavior:**
The total and available balances are miscalculated, leading to incorrect financial records for the user.

**Impact:**
Users may see incorrect account balances, leading to confusion and potential financial mismanagement due to inaccurate fund transfers.

## [SCRUM-3] MFT- TEST Incorrect Balance Update After Deposit Transaction to Checking Account Created: 31/Jan/25 Updated: 06/Feb/25

| Status: | To Do |
|---|---|
| Project: | SENG438-Assignmment1 |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| Type: | Bug | Priority: | Medium |
|---|---|---|---|
| Reporter: | Mohamad | Assignee: | Mohamad |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | MFT | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i0000f: |
|---|---|
| Sprint: | SCRUM Sprint 1 |

### Description

**Retested in Version 1.1. The defect still exists however the balance is 10 cents less for each deposit compared to the expected balance amount.**

When a user performs a deposit transaction, the system incorrectly updates the total and available balances. The deposited amount is not correctly added to the total balance, leading to discrepancies in the account summary.

**Steps to Reproduce:**

- Run the JAR file for the ATM system.
- Turn on the machine by clicking the "On" button.
- Enter a number for the available $20 bills and press Enter.
- Click the "Click to Insert Card" button.
- Enter card number **1** and press Enter.
- Enter a valid PIN (**42**) using the keypad and press Enter.
- Select **Deposit Transaction (2)**.
- Choose **Checking Account (1)**.
- Enter any deposit amount (e.g., **4.44**).
- Click the **"Click to Insert Envelope"** button.

- Observe that the **total balance is incorrectly updated** to **94.44 instead of 104.44**, and the available balance is also incorrect.

**Expected Behavior:**
The deposited amount should be correctly added to the total and available balances.
**Actual Behavior:**
The total and available balances do not reflect the deposited amount accurately, leading to incorrect account information.
**Impact:**
Users may experience financial discrepancies and incorrect balance reporting, which could affect their trust in the ATM system.

## [SCRUM-2] MFT- TEST 37 Correct PIN Entry Fails After Invalid Attempt

Created: 31/Jan/25  Updated: 06/Feb/25

| Status: | To Do |
|---|---|
| Project: | SENG438-Assignmment1 |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| Type: | Bug | Priority: | Medium |
|---|---|---|---|
| Reporter: | Mohamad | Assignee: | Mohamad |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | MFT | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i00007: |
|---|---|
| Sprint: | SCRUM Sprint 1 |

### Description

**This Bug still exists in version 1.1**

When a user enters an invalid PIN during the ATM login process, an exception is correctly thrown. However, if the user subsequently enters the correct PIN, the system does not authenticate the card and instead continues prompting for the PIN. This issue prevents users from accessing their accounts even after entering the correct credentials

**Steps to Reproduce:**

1. Run the JAR file for the ATM system.
2. Turn on the machine by clicking the "On" button.
3. Enter a number greater than 10 for the available $20 bills and press Enter.
4. Click the "Click to Insert Card" button.
5. Enter card number 1 and press Enter.
6. Enter any invalid Pin using the keypad and press Enter.
7. Invalid pin execption is thrown but if you try to re-enter the Correct pin again it won't work and will ask you to enter the pin again.

**Expected Behavior:**

After an invalid PIN attempt, the system should allow the user to re-enter the correct PIN and proceed with authentication.

**Actual Behavior:**
The ATM does not accept the correct PIN after an invalid attempt and keeps prompting for a PIN entry.
**Impact:**
Users who mistype their PIN initially are unable to log in, even when entering the correct PIN afterward.

## [SCRUM-1] Withdrawl Bug- Withdrawal of $200 Incorrectly Processed as $20

Created: 26/Jan/25  Updated: 08/Feb/25

| Status: | To Do |
|---|---|
| Project: | SENG438-Assignmment1 |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| Type: | Bug | Priority: | Medium |
|---|---|---|---|
| Reporter: | Mohamad | Assignee: | Mohamad |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | None | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i0000r: |
|---|---|
| Sprint: | |
| Story point estimate: | 2 |

### Description

Currently, when attempting to withdraw $200 from the checking account, the system incorrectly processes the transaction as a withdrawal of $20.
**Function being tested:**
Withdrawl Function.
**Steps to Reproduce:**

1. Run the JAR file for the ATM system.
2. Turn on the machine by clicking the "On" button.
3. Enter a number greater than 10 for the available $20 bills and press Enter.
4. Click the "Click to Insert Card" button.
5. Enter card number 1 and press Enter.
6. Enter the PIN 42 using the keypad and press Enter.
7. Select the withdrawal option by pressing 1 on the keypad.
8. Choose the checking account by pressing 1 on the keypad.
9. Select the $200 withdrawal option by pressing 5 on the keypad.
10. Observe that only $20 is withdrawn from the checking account instead of $200.

**Expected Behavior:**
The system should withdraw the correct amount of $200 from the checking account when the $200 option is selected.

**Actual Behavior:**
The system withdraws $20 instead of $200.

## [SCRUM-19] Test 6 Invalid Card Exception Not Triggered Immediately Created: 06/Feb/25 Updated: 07/Feb/25

| Status: | To Do |
|---|---|
| Project: | SENG438-Assignmment1 |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| Type: | Bug | Priority: | Medium |
|---|---|---|---|
| Reporter: | Mohamad | Assignee: | Unassigned |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | None | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i0003r: |
|---|---|
| Sprint: | SCRUM Sprint 1 |

### Description

**This Bug Still Exists in Version 1.1**
When testing the ATM system, an issue was observed where entering an **invalid card number (22)** does **not immediately throw an "Invalid Card" exception**. Instead, the system **prompts for a PIN entry first** and only throws the error after entering the PIN

**Steps to Reproduce:**

- Run the **JAR file** for the ATM system.
- Turn on the ATM by clicking the **"On"** button.
- Enter a number **greater than 10** for the available **$20 bills** and press **Enter**.
- Click the **"Click to Insert Card"** button.
- Enter an **invalid card number (22)** and press **Enter**.
- Observe that the system **asks for a PIN instead of throwing an invalid card exception**.
- Enter any PIN and press **Enter**.
- Only after entering the PIN, the system throws the **Invalid Card** exception.

**Expected Behavior:**
The system should **immediately** throw an **"Invalid Card"** exception **after entering an invalid card number**.

- The system should **not** proceed to the PIN entry screen for an invalid card.

**Actual Behavior:**
The system **prompts for a PIN entry** after entering an invalid card number.

- The **Invalid Card** exception is only thrown **after the PIN is entered**, causing confusion in the user flow.

**Impact:**
**User Experience Issue:** Users are misled into thinking their invalid card is accepted.

- **Security Risk:** Incorrect handling of invalid card entries could introduce security loopholes.
- **Logic Error:** The validation process for card numbers is not functioning correctly.

## [SCRUM-18] MFT - Incorrect Balance Update After Deposit Transaction to Savings Account Created: 06/Feb/25 Updated: 06/Feb/25

| Status: | To Do |
|---|---|
| Project: | SENG438-Assignmment1 |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| Type: | Bug | Priority: | Medium |
|---|---|---|---|
| Reporter: | Hassan Baig | Assignee: | Unassigned |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | None | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i0003j: |
|---|---|
| Sprint: | SCRUM Sprint 1 |
| Story point estimate: | -2 |

## Description

**Retested in Version 1.1. The defect still exists however the balance is 10 cents less for each deposit compared to the expected balance amount.**

When a user performs a deposit transaction, the system incorrectly updates the total and available balances. The deposited amount is not correctly added to the total balance, leading to discrepancies in the account summary.

**Steps to Reproduce:**

- Run the JAR file for the ATM system.
- Turn on the machine by clicking the "On" button.
- Enter a number for the available $20 bills and press Enter.
- Click the "Click to Insert Card" button.
- Enter card number **1** and press Enter.
- Enter a valid PIN (**42**) using the keypad and press Enter.
- Select **Deposit Transaction (2)**.
- Choose **Checking Account (1)**.
- Enter any deposit amount (e.g., **4.44**).

- Click the **"Click to Insert Envelope"** button.
- Observe that the **total balance is incorrectly updated** to **94.44 instead of 104.44**, and the available balance is also incorrect.
  **Expected Behavior:**
  The deposited amount should be correctly added to the total and available balances.
  **Actual Behavior:**
  The total and available balances do not reflect the deposited amount accurately, leading to incorrect account information.
  **Impact:**
  Users may experience financial discrepancies and incorrect balance reporting, which could affect their trust in the ATM system.

## [SCRUM-17] [MFT- Test 40 Re-entry of correct pin fails after 2 invalid pin entries](#) Created: 06/Feb/25  Updated: 07/Feb/25

| Status: | To Do |
|---|---|
| Project: | [SENG438-Assignmment1](#) |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| Type: | Bug | Priority: | Medium |
|---|---|---|---|
| Reporter: | [Hassan Baig](#) | Assignee: | Unassigned |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | None | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i0003b: |
|---|---|
| Sprint: | SCRUM Sprint 1 |

## Description

**This Bug Still Exists in Version 1.1**
**Description:**
When a user performs a **fund transfer** from their **checking account to savings account**, the system incorrectly updates the total and available balances. The transferred amount is not properly deducted from the checking account or added to the savings account, leading to incorrect balance calculations.

**Steps to Reproduce:**

1. Run the JAR file for the ATM system.
2. Turn on the machine by clicking the "On" button.
3. Enter a number for the available $20 bills and press Enter.
4. Click the **"Click to Insert Card"** button.
5. Enter card number **1** and press Enter.
6. Enter a valid PIN (**42**) using the keypad and press Enter.
7. Select **Transfer Transaction (3)**.
8. Choose **Checking Account (1) as the source**.
9. Choose **Savings Account (2) as the destination**.
10. Enter any transfer amount (e.g., **10.00**).
11. Confirm the transfer.

12. Observe that the balances are **incorrectly updated**—the checking account is not properly debited, and/or the savings account is not correctly credited.

**Expected Behavior:**
The transferred amount should be **deducted from the checking account** and **added to the savings account** correctly.

**Actual Behavior:**
The total and available balances are miscalculated, leading to incorrect financial records for the user.

**Impact:**
Users may see incorrect account balances, leading to confusion and potential financial mismanagement due to inaccurate fund transfers.

## [SCRUM-16] MFT- Test 39 Re-entry of correct pin fails after an invalid pin entry Created: 06/Feb/25 Updated: 06/Feb/25

| Status: | To Do |
|---|---|
| Project: | SENG438-Assignmment1 |
| Components: | None |
| Affects versions: | None |
| Fix versions: | None |

| Type: | Bug | Priority: | Medium |
|---|---|---|---|
| Reporter: | Hassan Baig | Assignee: | Unassigned |
| Resolution: | Unresolved | Votes: | 0 |
| Labels: | None | | |
| Remaining Estimate: | Not Specified | | |
| Time Spent: | Not Specified | | |
| Original estimate: | Not Specified | | |

| Rank: | 0|i00033: |
|---|---|
| Sprint: | SCRUM Sprint 1 |

Description

**Retested in Version 1.1. The defect still exists.**

When a user enters an incorrect PIN followed by the correct PIN, the system fails to proceed with the transaction and incorrectly prompts the user to re-enter the PIN again instead of continuing as expected.

**Steps to Reproduce:**

1. Run the **ATM System - Lab 1 Version 1.1.jar** file.
2. Turn on the ATM using the **"On"** button.
3. Enter the number of $20 bills available (e.g., 10).
4. Click **"Insert card"** to begin the session.
5. Enter **card number 1** (for the Checking account) and press **Enter**.
6. Enter an **incorrect PIN** (e.g., 123) and press **Enter**.
7. Enter the **correct PIN (42)** and press **Enter**.

**Expected Result:** The system should accept the correct PIN and proceed to display the transaction menu.

**Actual Result:** The system incorrectly prompts the user to re-enter the PIN again, preventing the user from continuing to the transaction menu.