

Bank System Test Case List

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Test Name	Test Intentions
Login Standard Success	Tests a standard login success. Asks for the session type, is given standard for the type, then asks for and receives a valid (accepted) name. Afterwards, reads in the current bank accounts file and starts accepting transactions.
Login Standard Fail	Tests a standard login fail. Tests that when given an invalid (unaccepted) name, will return an error message and allow the user to try again.
Login Admin Success	Tests an admin login success. Asks for the session type, when given admin for type, after the type is accepted, reads in the current bank accounts file and starts accepting transactions.
Login Admin Fail	Tests an admin login fail. When the login is not accepted, sends an error message, and allows the user to try again
No Login Transaction	Tests that transactions other than login are not accepted prior to a successful login.
Subsequent Login	Tests that subsequent logins are not accepted until after a logout
Standard Transaction Availability	Tests that after a successful standard login, only unprivileged transactions are accepted.
Admin Transaction Availability	Tests that after a successful admin login, all transactions are available.
Logout	Tests that when a user logs out, the bank account transaction file is written.
Logout Acception	Tests that logout is only accepted when a user is logged in.
Logout Transaction	Tests that after logging out, no transactions other than login are accepted
Withdrawal Standard Success	Tests a successful withdrawal by a standard account. Asks for the account number, then for withdrawal amount, and saves this information for the bank account transaction file.
Withdrawal Standard Fail	Tests a failed withdrawal by a standard account. When given an invalid input, gives an error message and sends the user the current available actions.

Withdrawal Admin Success	Tests a successful withdrawal by an admin account. Asks for the account name, then number, then amount to withdraw, and saves this information for the bank account transaction file.
Withdrawal Admin Fail	Tests a failed withdrawal by an admin account. When given an invalid input, sends an error message, then allows the user to try again or sends the user the current available actions.
Withdrawal Account Validity	Tests that withdrawals are only allowed from valid accounts of the current user.
Withdrawal Max	Tests that the maximum value allowed in a standard session is \$500.
Withdrawal Account Balance	Tests that withdrawals are only allowed if the resulting balance after withdrawal is at least \$0.
Transfer Standard Success	Tests a successful transfer by a standard account. Asks for the account number money will be transferred from, then the account number money will be transferred to, then the amount to transfer, and saves this information for the bank account transaction file.
Transfer Standard Fail	Tests a failed transfer by a standard account. When given an invalid input, sends an error message, then allows the user to try again or sends current available actions.
Transfer Admin Success	Tests a successful transfer by an admin account. Asks for the account holder's name, then asks for the account number money will be transferred from, then the account number money will be transferred to, then the amount to transfer, and saves this information for the bank account transaction file.
Transfer Admin Fail	Tests a failed transfer by an admin account. When given an invalid input, sends an error message, then allows the user to try again or sends current available actions.
Transfer Account From Validity	Tests that transfers are only allowed from valid accounts of the current user.
Transfer Account To Validity	Tests that transfers are only allowed to valid accounts in the Bank System.
Transfer Max	Tests that the maximum amount that can be transferred in a single standard session is \$1000.
Transfer Account Balance	Tests that the resulting balance of both accounts involved in the transfer is at least \$0 after transfer.
Pay Bill Standard Success	Tests a successful bill payment by a standard account. Asks for the account number, then the company to whom the bill is being paid, then the amount to pay, and saves this information for the bank account transaction file.

Pay Bill Standard Failure	Tests a failed bill payment by a standard account. When given an invalid input, allows the user to try again or to cancel and see current available actions.
Pay Bill Admin Success	Tests a successful bill payment by an admin account. Asks for the account holder's name, then asks for the account number, then the company to whom the bill is being paid, then the amount to pay, and saves this information for the bank account transaction file.
Pay Bill Admin Fail	Tests a failed bill payment by an admin account. When given an invalid input, allows the user to try again or to cancel and see current available actions.
Pay Bill Account Validity	Tests that bill payments are only allowed by a valid account of the current user.
Pay Bill Company Validity	Tests that bill payments are to one of the listed companies.
Pay Bill Max	Tests that the maximum amount that can be paid in a standard session is \$2000.
Pay Bill Account Balance	Tests that bill payments are only allowed when the resulting balance is at least \$0.
Deposit Standard Success	Tests a successful deposit by a standard account. Asks for the account number, then the amount to deposit, and saves this information for the bank account transaction file.
Deposit Standard Fail	Tests a failed deposit by a standard account. When given an invalid input, allows the user to try again or to cancel and see current available actions.
Deposit Admin Success	Tests a successful deposit by an admin account. Asks for the account holder's name, then asks for the account number, then the amount to deposit, and saves this information for the bank account transaction file.
Deposit Admin Fail	Tests a failed deposit by an admin account. When given an invalid input, allows the user to try again or to cancel and see current available actions.
Deposit Account Validity	Tests that deposits are only available for accounts that are valid for the current user.
Deposit Balance Availability	Tests that deposited funds are unavailable for use in the current session.
Create Success	Tests a successful bank account creation. Asks for the name of the account holder, then the initial balance of the account, and saves this information for the bank account transaction file

Create Fail	Tests a failed bank account creation. When given an invalid input, allows the user to try again or to cancel and see current available actions.
Create Privilege	Tests that the create transaction is only available to admin sessions
Create Uniqueness	Tests that a new bank account can only be created if the bank account number is unique to the Bank System.
Create Name Max	Tests that the name of a new bank account holder is at most 20 characters.
Create Balance Max	Tests that the initial balance of a new bank account is at most \$99999.99.
Create Account Availability	Tests that a newly created bank account is not available for other transactions in the session it was created in.
Delete Success	Tests a successful bank account deletion. Asks for the bank account holder's name, then account number, and saves this information for the bank account transaction file.
Delete Fail	Tests a failed bank account deletion. When given an invalid input, allows the user to try again or to cancel and see current available actions.
Delete Privilege	Tests that the delete transaction is only available to admin sessions.
Delete Name Validity	Tests that the account holder's name is the name of an existing account holder in the Bank System.
Delete Number Validity	Tests that the account deleted has the account number specified by the holder.
Delete Account Availability	Tests that a deleted account is no longer available for further transactions.
Disable Success	Tests a successful bank account disabling. Asks for the bank account holder's name, then the account number, then changes the bank account from active (A) to disabled (D), and saves this information for the bank account transaction file.
Disable Fail	Tests a failed bank account disabling. When given an invalid input, allows the user to try again or to cancel and see current available actions.
Disable Privilege	Tests that the disable transaction is only available to admin sessions
Disable Name Validity	Tests that the account holder's name is the name of an existing account holder in the Bank System.
Disable Number Validity	Tests that the account disabled has the account number specified by the holder.

Disable Account Availability	Tests that the disabled account is no longer available for further transactions.
Change Plan Success	Tests a successful change in transaction payment plan for an account. Asks for the bank account holder's name, then account number, then sets the payment plan to or from student (SP) or non-student (NP), and saves this information for the bank account transaction file.
Change Plan Fail	Tests a failed change in transaction payment plan for an account. When given an invalid input, allows the user to try again or to cancel and see current available actions.
Change Plan Privilege	Tests that the changeplan transaction is only available to admin sessions.
Change Plan Name Validity	Tests that the account holder's name is the name of an existing account holder in the Bank System.
Change Plan Number Validity	Tests that the account that has its payment plan changed has the account number specified by the holder.

Requirements Problems

- No specifications on login details (usernames, passwords, security).
- No way to see current status or details of account (enabled/disabled, payment plan, account number, etc).
- Requirements currently only allow the change plan transaction to work when switching from student to non-student.
- Bill payments above \$2000 have no current way of being paid in a single session.
- No transaction currently planned to access the bank account transaction file.
- No current way to handle names longer than 20 characters.
- Create transaction asks for unique account numbers but currently has no way to set account number in requirements.