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Tests of bank accounts test application that i found in the internet

TC #1 Account intended balance check

GIVEN: the user initializes BankAccount with 1000 units, minimum balance 100, the account’s name ‘TestAccount’

WHEN: the user initializes the account

THEN: initial balance is equal to 1000 units

TC #2 Deposit function with proper value check

GIVEN: the user initializes BankAccount with 1000 units, minimum balance 100, the account’s name ‘TestAccount’

WHEN: the user tries deposit function from BankAccount object trying to deposit 500 balance units

THEN: the account balance is equal to 1500 units

TC #3 Withdraw function with value lower than user’s balance check

GIVEN: the user initializes BankAccount with 1000 units, minimum balance 100, the account’s name ‘TestAccount’

WHEN: the user tries withdraw function from BankAccount object trying to withdraw 200 balance units from the account

THEN: the account balance is 800 units

TC #4 Withdraw function with value higher than user’s balance check

GIVEN: the user initializes BankAccount with 1000 units, minimum balance 100, the account’s name ‘TestAccount’

WHEN: the user tries withdraw function from BankAccount object trying to withdraw 1500 balance units from the account

THEN: exception is raised and account balance is unchanged 1000 units

TC #5 Transfer function between accounts where the amount is lower than transfering account balance

GIVEN: the user initializes BankAccount with 1000 units, minimum balance is 100, the account’s name is ‘TestAccount’ and BankAccount with 500 units with name ‘OtherAccount’

WHEN: using transfer function to transfer 300 units from TestAccount to OtherAccount

THEN: TestAccount balance is now 700 and OtherAccount balance is 800 units

TC #6 Interest Account deposit interest check

GIVEN: the user initializes InterestAccount with 1000 units, the account’s name ‘InterestAccount’

WHEN: user deposes 100 units to the account

THEN: the account’s balance is equal to 1105

TC #7 Saving account withdraw with fee check

GIVEN: the user initializes SavingsAccount with 1000 units, the account’s name ‘SavingsAccount’

WHEN: the user withdraws 100 units from the SavingsAccount’

THEN: the account’s balance is equal to 895

TC #8 Transfer to the same account check

GIVEN: the user initializes BankAccount with 1000 units, the account’s name is ‘ExtendedTestAccount’

WHEN: user transfers 100 units to the same account

THEN: Error BalanceException raised

TC #9 Negative deposit to bank account

GIVEN: the user initializes BankAccount with 1000 units, the account’s name is ‘ExtendedTestAccount’

WHEN: user deposits -100 units to the account

THEN: Error BalanceException raised

TC #10 Large withdrawal from account

GIVEN: the user initializes BankAccount with 1000 units, the account’s name is ‘ExtendedTestAccount’

WHEN: user withdraws 1000 units from the account

THEN: the account balance is equal to 0

TC #11 Invalid amount bank transfer check

GIVEN: the user initializes BankAccount with 1000 units, the account’s name is ‘ExtendedTestAccount’ and ‘OtherAccount2’ with 500 units

WHEN: user tries to transfer -100 units from ExtendedTestAccounts to OtherAccount2

THEN: Error BalanceException raised

TC #12 Interest on negative amount deposit check

GIVEN: the user initializes InterestRewardsAcc with 1000 units, the account’s name is ‘ExtendedInterestAccount’

WHEN: the user tries to deposit -100 units to the account

THEN: Error BalanceException raised

TC #13 Saving account withdrawing balance with fee

GIVEN: the user initializes SavingsAcct with 105 units, the account’s name is ‘LowBalanceSavingsAccount’

WHEN: the user withdraws 100 units before counting the fee

THEN: account balance is equal to 0

TC #14 Account blocking by bringing the balance below the minimum

GIVEN: the user initializes BankAccount with 1000 units, the account’s name is ‘TestAccount’ and minimum balance is 100

WHEN: the user withdraws balance equal to 1 unit under the minimum (901)

THEN: account is blocked

TC #15 Transaction history check

GIVEN: the user initializes BankAccount with 1000 units, the account’s name is ‘TestAccount’ and minimum balance is 100

WHEN: the user deposes 200 units, withdraws 100 units

THEN: the transaction\_history is equal to expected history of 1. Account opened, 1000 balance - 2. deposit, 200 balance 3. withdraw -100 units

TC #16 Deposit 0 units check

GIVEN: the user initializes BankAccount with 1000 units, the account’s name is ‘EdgeCaseAccount’ and minimum balance is 50

WHEN: the user tries deposing 0 units to the account

THEN: Error BalanceException raised

TC #17 Withdraw 0 units check

GIVEN: the user initializes BankAccount with 1000 units, the account’s name is ‘EdgeCaseAccount’ and minimum balance is 50

WHEN: the user tries withdrawing 0 units from the account

THEN: Error BalanceException raised

TC #18 Transfer function between accounts where the amount is higher than transfering account balance

GIVEN: the user initializes BankAccount with 1000 units, the account’s name is ‘EdgeCaseAccount’ and minimum balance is 50 and other BankAccount called ‘Recipent’ with 500 units

WHEN: user tries to transfer 100 units more than his balance (1100)

THEN: Error BalanceException raised

TC #19 Savings account minimum balance check by exceeding it with the amount itself

GIVEN: the user initializes SavingsAcct with 1000 units, the account’s name is ‘SavingsAccount’ and minimum balance is 200

WHEN: the user withdraws 800 units from the account

THEN: Error BalanceException raised, the accounts minimal balance exceeded

TC #20 Savings account minimum balance check by exceeding it with the fee only

GIVEN: the user initializes SavingsAcct with 1000 units, the account’s name is ‘SavingsAccount’ and minimum balance is 200

WHEN: the user withdraws 795 units from the account

THEN: there is no error raised when minimal balance is exceeded after the fe eis counted.

TC #21 Savings account blocking the account by exceeding minimum balance and trying to deposit money to it

GIVEN: the user initializes SavingsAcct with 1000 units, the account’s name is ‘SavingsAccount’ and minimum balance is 200, withdraws 800 units from it making the account blocked

WHEN: the user tries to depose 100 units to the blocked account

THEN: there is error saying Insufficient funds in account 'SavingsAccount' and the deposit doesnt go through

TC #22 Savings account withdrawing to exactly minimal balance and seeing if it is blocked

GIVEN: the user initializes SavingsAcct with 1000 units, the account’s name is ‘SavingsEdgeCaseAccount’ and minimum balance is 100

WHEN: the user withdraws 895 units not counting the fee (900)

THEN: the account is not blocked when the balance is exactly minimal

TC #23 Savings account withdrawing to just over the minimal balance and seeing if it is blocked

GIVEN: the user initializes SavingsAcct with 1000 units, the account’s name is ‘SavingsEdgeCaseAccount’ and minimum balance is 100

WHEN: the user withdraws 896 units not counting the fee (901)

THEN: the account is blocked and error is raised

TC #24 Childs account creation check

GIVEN: the user initializes BankAccount with 1000 units, the account’s name is ‘ParentAccount’, minimal balance 100, and child account from the ‘ParentAccount’ called ‘ChildAccount’ with 500 balance

WHEN: the user creates the account, checks if its not none, and if it has correct name and balance

THEN: the account is created correctly

TC #25 Childs account transfer to parent check

GIVEN: the user initializes ChildAccount with 500 balance units from his parent’s ‘ParentAccount’ that has 1000 units of balance

WHEN: the user tries to transfer 200 units to his parent’s account

THEN: transfer goes through, user’s balance is equal to 300 and parent’s balance is equal to 1200

TC #26 Childs account transfer to parent exceeding it’s balance

GIVEN: the user initializes ChildAccount with 500 balance units from his parent’s ‘ParentAccount’ that has 1000 units of balance

WHEN: the user withdraws 450 units that should block his account and then tries to transfer 100 units to his parent

THEN: the transfer doesnt go through, user’s balance is equal to 50 and parent’s balance is equal to 1000

TC #27 Child’s account transfer to blocked parent account

GIVEN: the user initializes ChildAccount with 500 balance units from his parent’s ‘ParentAccount’ that has 1000 units of balance and minimal balance of 100

WHEN: user’s parent withdraws 900 units, user tries to transfer his parent 100 units

THEN: the transfer goes through, user’s balance is equal to 400, parent’s balance is equal to 200

TC #28 Childs account transfering negative amount to his parent’s account

GIVEN: the user initializes ChildAccount with 500 balance units from his parent’s ‘ParentAccount’ that has 1000 units of balance and minimal balance of 100

WHEN: the user tries to transfer -100 units to his parent’s account

THEN: the transfer doesnt go through and error BalanceException is raised.

TC #29 Closing account with zero balance

GIVEN: the user initializes BankAccount called ‘TestAccount’ with 0 balance

WHEN: the user closes the account and checks the transaction history

THEN: the last log shown is the account being closed containing 0 balance

TC #30 Closing account with positive balance

GIVEN: the user initializes BankAccount called ‘TestAccount’ with 0 balance

WHEN: the user deposits 200 units to his account and closes the account, then checks the transaction history

THEN: the last log shown is the account being closed containing 200 balance