

Team Name: YES-MEN

Team Members:

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BackEnd Whitebox Testing: Withdraw

Source Listing

Withdraw method

```
224 private static void withdraw(String accountNumber, int amount, String accountName) {
225     Account tempAccount = accounts.get(accountNumber);
226     if (!tempAccount.getAccountName().equals(accountName)) {
227         System.out.println("Failed Constraint Log: the name given in a withdraw transaction" +
228             " must match the name associated with the withdrawing account");
229         return;
230     }
231     if (tempAccount.getBalance() - amount < 0) {
232         System.out.println("Failed Constraint Log: no account should ever have a negative balance");
233     } else {
234         tempAccount.setBalance(tempAccount.getBalance() - amount);
235     }
236 }
```

Lines 225-236 (total 3 cases)

Analysis

Test method: Basic Block Testing

Test Case	Lines to cover (excludes lines of just syntax)	Test File 1	Test File 2
1	224-229	"oldMasterAccounts.txt"	"mergedTransactionSummaryFile1.txt"
2	224-226, 231-232, 236	"oldMasterAccounts.txt"	"mergedTransactionSummaryFile2.txt"
3	224-226, 233-234, 236	"oldMasterAccounts.txt"	"mergedTransactionSummaryFile3.txt"

Test Inputs

Test Case 1

mergedTransactionSummaryFile1.txt

WDR 1234567 50000 0000000 BILLY
EOS
EOS

OldMasterAccounts.txt

7654321 100 BILLY
1234567 100000 MICHAEL

Test Case 2

mergedTransactionSummaryFile2.txt

WDR 7654321 50000 0000000 BILLY
EOS
EOS

OldMasterAccounts.txt

7654321 100 BILLY
1234567 100000 MICHAEL

Test Case 3

mergedTransactionSummaryFile3.txt

WDR 1234567 50000 0000000 MICHAEL
EOS
EOS

OldMasterAccounts.txt

7654321 100 BILLY
1234567 100000 MICHAEL

Test Report

Test Case	Test Result	Method Result
1	Ran as expected and hit every line as expected	Non-matching account number and name. Error message printed.
2	Ran as expected and hit every line as expected	Cannot withdraw more than account balance. Error message printed
3	Ran as expected and hit every line as expected	Successfully withdrawn