

Back Office Unit Testing for Withdraw Transactions

Team Name: Runtime Terror

Team Member

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Anna and Faranak spent an hour together working on the report of the white box testing for the Withdraw Transaction.

conditon number	masterAccountDict input	accountNum input	moneyHave	amount	Test	Output
1	{'1234567': ['10', 'my account'], '1122334': ['1000', 'sdads']}	1234567	0	10	Test-1	None
1	{'1234567': ['10', 'my account'], '1122334': ['1000', 'sdads']}	1234567	-1	11	Test-2	"Do not have enough funds!"
1	{'1234567': ['10', 'my account'], '1122334': ['1000', 'sdads']}	1234567	1	9	Test-3	None

Code Snippit from backend.py of withdraw method

```
def withdraw(masterAccountDict, accountNum, amount):  
    # see how much money they have  
    moneyHave = masterAccountDict[accountNum][0]  
    # subtract it by the amount they want to withdraw  
    moneyHave = int(moneyHave) - int(amount)  
    if moneyHave < 0:  
        print("Do not have enough funds!")  
        return masterAccountDict  
    # store new amount of money back into the dictionary  
    masterAccountDict[accountNum][0] = str(moneyHave)  
    return masterAccountDict
```

For the withdraw transaction, we followed the decision coverage method of white box testing. We did not do condition or loop coverage since our code did not require it. The completion criteria was to create test cases that would cover the three possible decisions for our if statement in that function. Test 1 checks if the user withdraws ten dollars, and they only have ten dollars, then the amount left in the account will be zero, and thus no output message is given since everything is valid. On the other hand, test 2 checks if the user withdraws more than ten dollars, and they only have ten dollars, then the output message will be that they cannot go forth with the transaction. Finally, test 3 checks if the user withdraws ten dollars but they have more than ten dollars, then the transaction is valid and no output message is given. No test failures were found.