

## **Course Project Phase #1 - Front End Requirements**

Group3TuesdaySHA

.Mohammad — 100755461

Meron Daniel — 100864048

Heather Meatherall — 100823999

Simon Gotera Vargas — 100872011

Faculty of Science, Ontario Tech University

CSCI 3060U Software Quality Assurance

Jeremy Bradbury, Risshi More

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## Test Cases

### List of all Login test cases

Transaction	Test Cases names	Intention
login	login-1	Tests that transaction success during login
	login-2	Tests that transaction fails if no login
	login-3	Tests for login as an admin
	login-4	Tests for login as a standard
	login-5	Test for only unprivileged transactions are accepted after standard login.
	login-6	Test that all transactions are accepted after admin login.
	login-7	Test that no login can be attempted before logout.
	login8	Test for system correctly prompts for account holder's name after a standard login

### List of all withdrawn test cases

Transaction	Test name	Intension
withdraw	withdraw-1	Test for asking user_name, number, and amount during withdrawal if login as admin
	withdraw-2	test withdrawal fails when standard login
	withdraw-3	test withdrawal failed when withdrawing more than 500\$
	withdraw-4	test withdrawal failed when

		the account balance was zero 0\$
	withdraw-5	test withdrawal from the standard amount in the limit
	withdraw-6	test for after-withdrawal Log-file update

#### List of all Transfer test cases

Transaction	Test name	Intension
transfer	transfer-1	Test that account holder's name is logged in as admin
	transfer-2	Test fails if the account holder's name is logged in as standard
	transfer-3	Test identifies the account number as valid to transfer the money from
	transfer-4	Test failed to identify the account number to transfer the money from
	transfer-5	Test identifies the account number to transfer the money to
	transfer-6	Test failed to identify the account number to transfer the money to
	transfer-7	Tests if transfer goes beyond the limit of \$1000
	transfer-8	Test if both accounts balance at least \$0 post-transfer

### List of all Pay Bill test cases

Transaction	Test name	Intension
Pay Bill	pay_bill-1	Test checks if the account holder's name is logged in as admin
	pay_bill-2	Test fails if the account holder is logged in as standard
	pay_bill-3	Test identifies the account number as valid
	pay_bill-4	Test fails to identify the account number as valid
	pay_bill-5	Test identifies company inputs as either: "The Bright Light Electric Company (EC)", "Credit Card Company Q (CQ)" or "Fast Internet, Inc. (FI)"
	pay_bill-6	Test fails when company input isn't: "The Bright Light Electric Company (EC)", "Credit Card Company Q (CQ)" or "Fast Internet, Inc. (FI)"
	pay_bill-7	Test checks if bill was paid within the limit of \$2000.00
	pay_bill-8	Test is both account balances are \$0 post bill paid

### List of Deposit Test Cases

Transaction	Test Name	Intention
Deposit	deposit-01	Test that the system asks for the account holder's name when logged in as admin
	deposit-02	Test that the system doesn't ask for the account holder's

		name when logged in as standard
	deposit-03	Test that the system asks for the account number when logged in as admin
	deposit-04	Test that the system asks for the account number when logged in as standard
	deposit-05	Test that the system accepts a valid account number when logged in as admin
	deposit-06	Test that the system accepts a valid account number when logged in as standard
	deposit-07	Test that the system does not accept an invalid account number when logged in as admin
	deposit-08	Test that the system does not accept an invalid account number when logged in as standard
	deposit-09	Test that the system asks for the amount to deposit when logged in as admin
	deposit-10	Test that the system asks for the amount to deposit when logged in as standard
	deposit-11	Test that the bank account transaction file contains the deposit information when logged in as admin
	deposit-12	Test that the bank account transaction file contains the deposit information when logged in as standard
	deposit-13	Test that when withdrawing

		money you can't withdraw the deposited amount as admin in the same session
	deposit-14	Test you can't withdraw the deposited amount as standard in the same session
	deposit-15	Test that when transferring money you can't transfer the deposited amount when logged in as admin in the same session
	deposit-16	Test that when transferring money you can't transfer the deposited amount when logged in as standard in the same session
	deposit-17	Test that you can't pay a bill with the deposited amount when logged in as admin in the same session
	deposit-18	Test that you can't pay a bill with the deposited amount when logged in as standard in the same session
	deposit -19	Test that you deposit an amount of money that would bring the total balance over 99999.99

#### List of Create Test Cases

Transaction	Test Name	Intention
Create	create-01	Test that when logged in as admin you can perform this transaction
	create-02	Test that when logged in as standard you can't perform this transaction

	create-03	Test that the system asks for a name for the account holder
	create-04	Test that the system asks for the initial balance of the account
	create-05	Test that the account name and initial balance is saved to the bank account transaction file
	create-06	Test that the bank account number is unique in the Bank System
	create-07	Test that the bank account number is not unique in the Bank System
	create-08	Test that the new account holder name can be less than 20 characters
	create-09	Test that the new account holder name can be exactly 20 characters
	create-10	Test that the new account holder name can't be more than 20 characters
	create-11	Test that the account balance can be less than \$99999.99
	create-12	Test that the account balance can be exactly \$99999.99
	create-13	Test that the account balance can't be more than \$99999.99
	create-14	Test that the created account is not available on a disabled account

**List of all delete test cases.**

Transaction	Test name	Intension
Delete	DEL-01	A transaction should be processed when the user is logged as an admin
	DEL-02	A transaction should not be processed when the user is not logged as an admin.
	DEL-03	Given an existing user name, the test should pass.
	DEL-04	Given a non-existing user name, the test should output an error.
	DEL-05	Given the correct account number, the test should pass
	DEL-06	Given an invalid account number test should output an error.
	DEL-07	Should not process when account number does not match user name.
	DEL-08	This should output an error when the account cannot be deleted (backend error).
	DEL-09	This should output an error when the account has already been deleted.
	DEL-10	This should test that the deletion was written in the transaction file successfully.
	DEL-11	This should output an error when the deletion was not written in the transaction file successfully.
	DEL-12	Should check that the account can't make any more transactions (paybill, transfer, login etc).

### List of Disable Test Cases



<b>Transaction</b>	<b>Test Name</b>	<b>Intention</b>
Disable	disable-01	Test that when logged in as admin you can perform this transaction
	disable-02	Test that when logged in as standard you can't perform this transaction
	disable-03	Test that the system asks for the bank account holder's name
	disable-04	Test that the Account Holder's name is pre existing
	disable-05	Test that the Account holder's name is not pre existing
	disable-06	Test that the system asks for the account number
	disable-07	Tests that the given account number belongs to the account holder specified
	disable-08	Test that the given account number doesn't belong to the account holder specified
	disable-09	Test that the line in the bank account transaction file where the disable account is contains a D at the end
	disable-10	Test that no further transactions are accepted on a disabled account

#### **List of Test Cases for Change Plan**

<b>Transaction</b>	<b>Test name</b>	<b>Intension</b>
change_plan	CHPL-01	A transaction should be processed when the user is

		logged as an admin
	CHPL-02	A transaction should not be processed when the user is not logged as an admin.
	CHPL-03	Should process when the user name is valid
	CHPL-04	Should not process when user name is invalid
	CHPL-05	Should process when the account number is valid
	CHPL-06	Should not process when the account number is invalid
	CHPL-07	Should not process when account number does not match user name.
	CHPL-08	Should proceed if it successfully changes the plan.
	CHPL-09	Should tell the user if the plan has already been change.
	CHPL-10	Should proceed when it successfully updates the information.
	CHPL-11	Should tell the user when information cannot be updated.

#### List of Logout Test Cases

Transaction	Test name	Intension
Logout	logout-01	Test for admin logout successfully
	logout-02	Test for logout during the withdrawal process
	logout-03	test logout error if admin does not log in

	logout-04	Test for standard logout successfully
	logout-05	Test for each logout to occur for every login

## **Test Plan**

### **Test Organization**

Tests files are organized into multiple directories, one for current bank accounts files, ones for terminal input files, one for bank account transaction files, and one for transaction stream/terminal output. Tests for each transaction type are stored in their own directory and numbered sequentially.

Bank account transactions files are for all tests within their transaction types unless specified otherwise. For example, create-transaction-log.eft is used for all create test cases, with the expectation of create-09 and create-12, who have designated transaction log files. One current bank accounts file is used for all tests.

### **Test Run Plan**

Test will be run using a Makefile that runs the front end for each test file in the directory. The script will save the output after each test and compare to the expected output files, reporting on any differences.

### **Requirements Problems**

### Contribution

Name	Contribution-part	Portion
Mohammad	login and withdrawal, logout	25%
Meron	transfer, pay bills, and logout	25%
Heather	deposit, create, and disable	25%
Simon	delete, change plan, and disable	25%