

system

FrontEnd
- tsfQueue: LinkedList - loggedOut: boolean - accountListFileLocation: String - transactionSummaryFileLocation: String
+ main(): void - startUp(): void - login(): void - logout(): void - createAcct(agent: boolean): void - deleteacct(agent: boolean): void - deposit(): void - withdraw(agent: boolean): void - transfer(): void - isAllDigits(number: String): boolean - accountNumberValid(number: String): boolean - accountNumberExists(Num: String): boolean - accountNameValid(Name: String): boolean - writeTransactionsToSummaryFile(fileName: String): void

# Method Descriptions

## **main**

This method takes in both the accountListFile location and transacionSummaryFile location via parameters, and calls the startUp function which would begin the session.

## **startUp**

This method acts as a welcome screen, requests for initial user commands and keeps on running until a system logout.

## **login**

This method starts a front-end session, asks for a type of session, and assigns the agent variable a Boolean value which will be used in a variety of functions to check the session mode.

## **logout**

This method ends the front-end session, writes "EOS" to the transaction summary file and directs user to the welcome screen afterwards where a new session can be started

## **createAcct**

This method validates the mode the user is in and the account number and name before creating a new account using user input and adding the transaction code to tsfQueue.

## **deleteAcct**

This method validates the mode the user is in and the account number and name before deleting an existing account and adding the transaction code to tsfQueue.

## **deposit**

This method validates the account number and amount being deposited before depositing money into an account and adding the transaction code to tsfQueue.

## **withdraw**

This method validates the account number and amount being withdrawn before withdrawing money into an account and adding the transaction code to tsfQueue.

## **transfer**

This method validates both account numbers and amount being transferred before transferring money into the second account and adding the transaction code to tsfQueue.

## **isAllDigits**

This method is a common helper function that is called by multiple larger methods that verifies that the account number entered consists only of decimal digits.

# Method Descriptions

## **accountNumberValid**

This method is a common helper function that is called by multiple larger methods that verifies the account number is exactly seven decimal digits not beginning with 0.

## **accountNameValid**

This method is a common helper function that is called by multiple larger methods that verifies the string follows all rules and constraints for account names such as no leading or trailing spaces.

## **writeTransactionsToSummaryFile**

This method writes out every transaction that has been made in the session day to the transaction summary file by emptying out tsfQueue.