Quinterac Front End System Documentation

CISC327 Fall 2019

Assignment 2

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# System Specifications

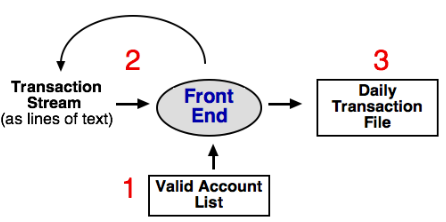
Please refer to <https://l1nna.com/327/Course%20Project.pdf> for functional specifications of the Quinterac Front End System (QFES).

Qualitative requirements are not considered to be within the scope of this assignment.

# System Design

## General Front Design

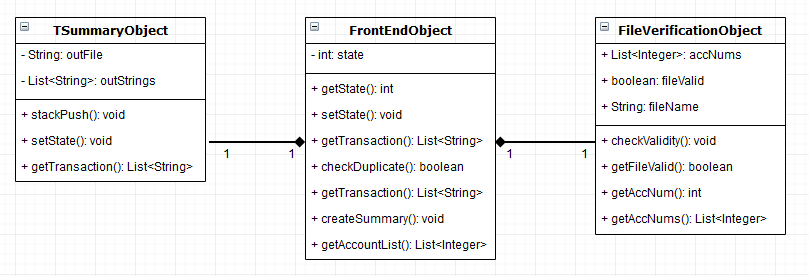
The following diagram summarizes the inputs and outputs of QFES.



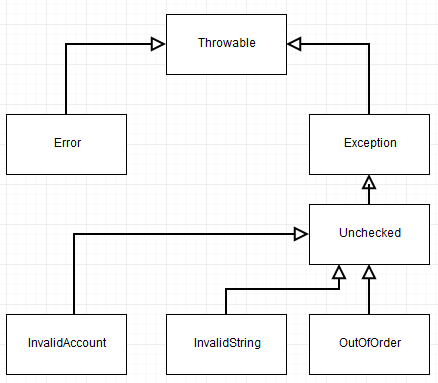
## Class Hierarchy Diagrams

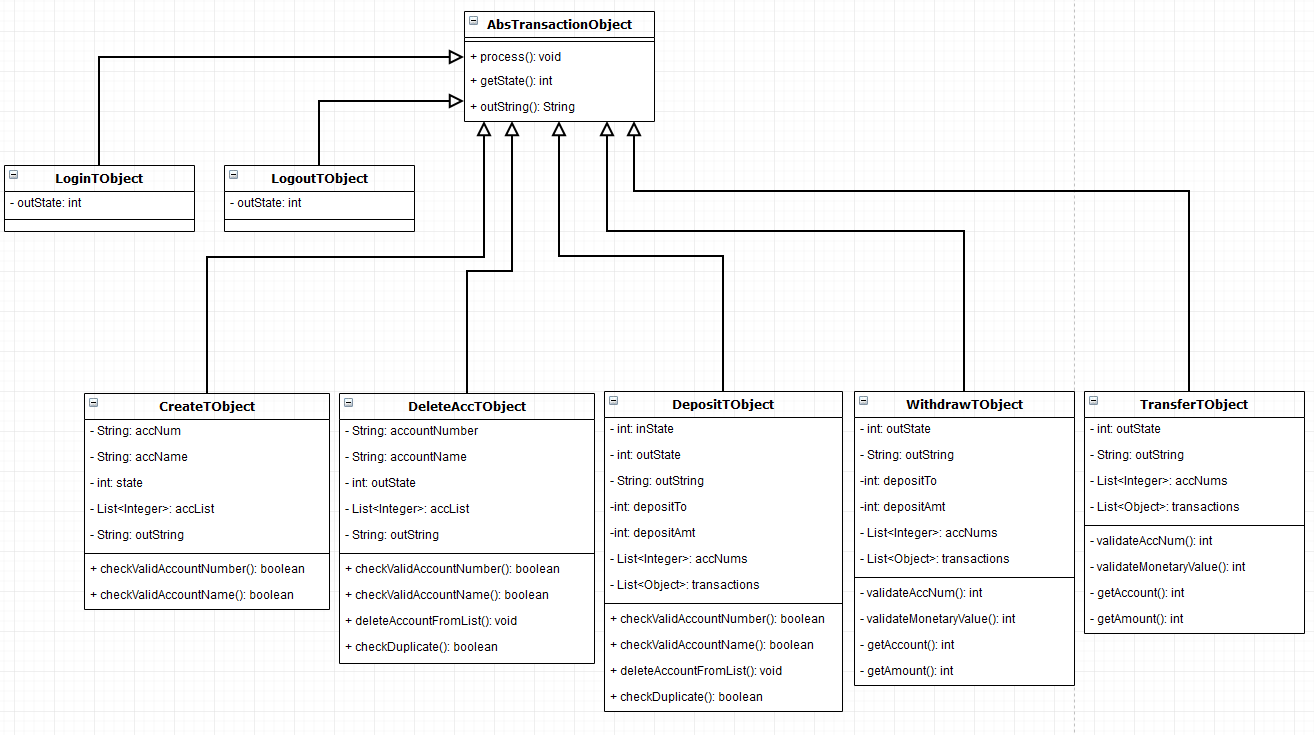
The current implementation of QFES is the first of a series of evolutionary prototypes. The prototype has been simplified in terms of several lower-level details for ease of development and testing. The following class diagrams describe the intended design and architecture of QFES.

FrontEndObject:



Exception Hierarchy:



Transaction Object Hierarchy:

## Improvements Upon Current Prototype

In line with the principles of evolutionary development, the current prototype has been implemented with ease of development and testing in mind. Several code refactoring and optimizations can be performed on the current hierarchy of transaction objects in order to improve the structure of QFES.

After analysis of the current implementation, the following structure would represent a system with a

Potential Improvements to Transaction Object Hierarchy:

