AuctionBay
Project Phase One

CSCI3060U, Software Quality Assurance
Miljanovic, M.
Ontario Tech University, Faculty of Science
February 03, 2023

Tuesday Lab (CRN: 72674):
Rija Baig (100746674)
Preet Panchal (100707094)
Eihab Syed (100707448)
Nathaniel Tai (100662284)

TABLE OF CONTENTS

1.0. INTRODUCTION

AuctionBay is an Auction-style Sales Service. The system consists of two parts: the Front End, a point of purchase terminal for bidding and advertising items and the Back End, an overnight batch processor to maintain and update a master auctions file intended to run each day at midnight. This is Phase 1 of the project and it contains the description of a testing plan for the front end of our AuctionBay. The testing plan includes a list of all test cases for each operation of the AuctionBay service and their respective intentions. Phase 1 also covers how the test files will be organized and which method will be used to run them.

1.1. ASSUMPTIONS

I.   admin01, fsuser01, bsuser01, ssuser01 will all exist as initial users in the user-accounts file.

II.   admin01, fsuser01, bsuser01, ssuser01 will all have an initial credit balance of $10.00.

III.   login01, login03, create01, create03, delete01, refund01 are all test cases that cover multiple possibilities of user inputs tested as one. (ie. You cannot enter any operation other than 'login' before logging in. Test file covers an example case of the user entering 'create').

2.0. LIST OF TEST CASES

2.1. LOGIN

Start a Front End session.

Case Name	Case Description
login01	User attempts to enter an operation other than 'login' before logging in.
login02	User attempts to login after already logging into an active session.
login03	Any non-admin user (FS, BS, SS) attempts to enter a privileged operation.
login04	Invalid user login; username does not exist in user-accounts file.

2.2. LOGOUT

End a Front End session.

Case Name	Case Description
logout01	User attempts to logout before logging in.
logout02	User successfully logs out after logging in.

2.3. CREATE

Creates a new user with bidding and/or selling privileges.

Case Name	Case Description
create01	Any non-admin user (FS, BS, SS) attempts to enter 'create'.
create02	Admin attempts to create a user with a username with more than 15 characters in length.
create03	Admin attempts to create a user with a user type other than AA, FS, BS, and SS.
create04	Admin attempts to create a user with a credit type other than a double.
create05	Admin attempts to create user with credit more than 999,999.00.
create06	Admin attempts to create user with credit less than 0.00.
create07	Admin attempts to create a user that already exists in the user-accounts file.
create08	Admin creates a new user.

2.4. DELETE

Cancel any outstanding items for sale and remove the user account.

Case Name	Case Description
delete01	Any non-admin user (FS, BS, SS) attempts to delete a user.
delete02	Admin attempts to delete itself.
delete03	Admin attempts to delete a user that does not exist in the user-accounts file.
delete04	Admin deletes the user that matches the username provided.

2.5. ADVERTISE

Put up an item for auction.

Case Name	Case Description
advertise01	A buy-standard (BS) user attempts to put an item for auction.
advertise02	User successfully puts an item up for auction.
advertise03	User attempts to add a minimum bid type other than a double.
advertise04	User attempts to put an item for auction that is listed with a minimum bid amount greater than $999.99.
advertise05	User attempts to put an item for auction with an item name of more than 25 characters in length.
advertise06	User attempts to put up an item for auction with an expiration period of more than 100 days.
advertise07	An admin (AA) or full-standard (FS) user attempts to place a bid on a item right after putting up for an auction. After adding an item no other transaction should be accepted on a new ticket for sale until the next session.
advertise08	User attempts to advertise an item with the same name as an item they already have listed.

2.6. BID

Make a bid on an item available for auction.

Case Name	Case Description
bid01	A sell-standard (SS) user attempts to place a bid.
bid02	User attempts to place a bid on an item that does not exist in the available-items file.
bid03	User attempts to place a bid on an item where the seller's username entered does not exist in the user-accounts file.
bid04	User attempts to enter a bid amount that is not an appropriate type.
bid05	User's new bid placed is successfully added to the item's record of the 'Current Highest Bid' amount.
bid06	User's new bid placed is not greater than the current highest bid amount if the user type is admin (AA).
bid07	User's new bid placed is not at least 5% greater than the current highest bid amount if the user type is buy-standard (BS).
bid08	User's new bid placed is not at least 5% greater than the current highest bid amount if the user type is full-standard (FS).

2.7. REFUND

Issue a credit to a buyer's account from a seller's account (privileged transaction).

Case Name	Case Description
refund01	Any non-admin user (FS, BS, SS) attempts to enter 'refund'.
refund02	Admin attempts to enter a buyer's username that does not exist in the user-accounts file.
refund03	Admin attempts to enter a seller's username that does not exist in the user-accounts file.
refund04	Admin attempts to refund with a credit type other than a double.
refund05	Admin attempts to refund a credit amount greater than the seller's credit balance.
refund06	Admin attempts to refund a credit amount to the buyer's account which results in the buyer's credit balance surpassing 999,999.00.
refund07	Admin attempts to refund a credit amount that does not match the credit for the item being refunded.

2.8. ADDCREDIT

Add credit into the system for the purchase of accounts.

Case Name	Case Description
addcredit01	Admin attempts to add credit to a username that does not exist in the user-accounts file.
addcredit02	Any user attempts to add with a credit type other than a double.
addcredit03	If the user type is full-standard (FS) only credit amount is entered.
addcredit04	If the user type is buy-standard (BS) only a credit amount is entered.
addcredit05	If the user type is sell-standard (SS) only a credit amount is entered.
addcredit06	Any credit amount entered is no more than $1000.00 in any given session.

2.9. LISTALL

List all the items that are still available to auction.

Case Name	Case Description
listall01	User attempts to view all items available for auction via 'listall'.
listall02	Item deleted prior to a user entering the 'listall' operation does not show up as available for auction.
listall03	Item advertised prior to a user entering the 'listall' operation shows up as available for auction.

3.0. TEST PLAN

Our test cases will be executed via shell script that will be stored in the project root directory. All test cases listed above will be contained in subdirectories within the 'test-cases' folder. This folder will include a 'input' subfolder, containing the input files, an 'output' subfolder, containing the expected output files for each case, and finally, the 'result' folder, containing the results of each test.

3.1. TEST PROCEDURE

The script will pipe the output files in 'test/output' and it will compare it to the result files in 'test/result' based on the input files 'test/input'. During the execution of the script, the results for each test case will be used to determine if each test case is a pass or fail.

3.2. FILE STRUCTURE

‖=== scripts
‖=== src
‖=== test-cases
*   ‖=== input
*   *   ‖=== operation-name (ie. login)
*   *   *   ‖=== *test-case-name (ie. login01)*
*   ‖=== output
*   *   ‖=== operation-name (ie. login)
*   *   *   ‖=== *test-case-name (ie. login01)*
*   ‖=== result
*   *   ‖=== operation-name (ie. login)
*   *   *   ‖=== *test-case-name (ie. login01)*
‖=== transactions