Phase #1

Login (Mirisan)

| Test Cases | Descriptions |
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| T1 (Successful Login) | This test verifies a successful login scenario where a user provides a valid username, allowing the system to read current user accounts and available games. |
| T2 (Invalid Username Format) | It checks if the system handles an attempt to login with an invalid username format (e.g., containing special characters), providing an appropriate error message. |
| T3 (Logout Followed by Login) | Ensures that the system allows a user to log in after properly logging out without encountering any issues |
| T4 ( Standard User Attempting Privileged Transaction) | Checks whether the system prevents a standard user from performing a privileged transaction, generating an error message accordingly |
| T5 (Non-admin Login Followed by Admin Login) | Verifies that the system allows a non-admin user to log in, log out, and then allows an admin to log in without any issues |
| T6 (Multiple Logins) | Ensures that the system handles multiple login attempts correctly, preventing subsequent logins until a proper logout has occurred. |
| T7 (Empty Username) | Checks if the system handles an attempt to login with an empty username, providing an appropriate error message |
| T8 (Nonexistent User Login) | Verifies that the system correctly handles a login attempt with a username that doesn't exist, providing an error message |
| T9 (Admin Attempting Unprivileged Transaction) | Checks if the system prevents an admin user from performing an unprivileged transaction, generating an error message accordingly |
| T10 (Admin Login Followed by Standard User Login) | Ensures that the system allows an admin to log in, log out, and then allows a standard user to log in without any issues |

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| T11 (Attempting Transaction After Logout) | Checks whether the system correctly prevents users from performing transactions after logging out, providing an appropriate error message. |
| T12 (Admin Logging in After Logout) | Verifies that the system allows an admin user to log in again after properly logging out |
| T13 (Consecutive Failed Logins) | After a certain number of consecutive failed attempts, the system should temporarily lock the account or implement a delay to prevent brute-force attacks. |
| T14 (Login During Another Active Session) | The system should prevent concurrent logins and notify the user that another session is already active |
| T15 (Login After System Reset) | The system should handle the login correctly after a system reset, initializing necessary components for the new session |
| T16 (Unauthorized Access After Logout) | Try to perform a transaction after logging out. |

## Logout (Mirisan)

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| T17 (Successful Logout) | User logs out after a successful login |
| T18 (Logout After Failed Transaction) | User attempts to logout after a failed transaction |
| T19 (Logout After Multiple Transactions) | User performs multiple transactions and then logs out |
| T20 (Logout Without Performing Any Transactions) | User logs in but decides to logout without performing any transactions |
| T21 (Logout After Add Credit Transaction) | User logs out after adding credit to the account |
| T22 (Logout After Game Transactions) | User logs out after buying/selling games |
| T23 (Logout After Refund Transaction) | User logs out after processing a refund |
| T24 (Logout After Admin Operations) | Admin user logs out after performing admin operations |
| T25 (Logout During Transaction Processing) | User attempts to logout while a transaction is being processed |

| T26 (Logout After Failed Transaction) | User logs in, attempts a transaction that fails, and then tries to logout |
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| T27 (Logout After Deletion of User Account) | Admin user logs in, deletes a user account, and then tries to logout |
| T28 (Logout During File Write Error) | User logs in, performs transactions, and encounters an error during the file write process when logging out |

## create (haider)

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| T29 (Username unique) | Username must be unique from all other users |
| T30 (Creation of user with max credits) | An admin creates a user with the maximum credit to see if it works |
| T31 (Creation of user with invalid credits) | Verify the system rejects creation of a user with invalid credit amount |
| T32 (Non admin tries to create a user) | Confirm that a non-admin user cannot access user creation features. |
| T33 (Space-Free Username Validation) | Username with spaces should not be allowed |
| T34 (Alphanumeric Username Compliance) | Test that usernames are limited to alphanumeric characters, rejecting any special characters. |
| T35(Username Case Sensitivity Analysis) | Determine whether the system distinguishes usernames based on capitalization. |
| T36 (Buyer Privilege Assignment) | Check the system's capability to assign 'buy-standard' privileges during user creation. |
| T37 (Seller Privilege Assignment) | Verify the system's ability to create users with 'sell-standard' privileges. |
| T38 (Mandatory Username Submission) | Validate that the system mandates the entry of a username for user creation. |
| T39 (One-Character Username Acceptance) | The system only allows the creation of users with a minimum of one character in their username. |
| T40 (Non-Decimal Credit Limit Adherence) | Assess if the system strictly enforces non-decimal credit values, particularly at the upper limit. |
| T41 (Unauthorized Creation Prevention) | Ensure that user creation is not possible when the admin is not logged in. |
| T42 (Specific Credit Initialization) | Test the system's ability to set a precise initial credit amount for new users. |

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| T43 (Fifteen-Character Username Limit) | Confirm the system's acceptance of usernames that are exactly 15 characters long. |
| T44 (Admin Account Creation) | Assess the process of creating a new user with administrative privileges. |
| T45 (Complete Privilege User Setup) | Examine the creation process for users with 'full-standard' privileges. |
| T46 (Long Username Rejection) | Validate that the system rejects usernames exceeding 15 characters. |
| T47 (User Creation Recordkeeping) | Ensure that all user creations are accurately logged in the daily transaction file. |
| T48 (User Type Specification) | Test the system's handling of user type selection during the account creation process. |

delete ( haider)

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| T49 (Admin Privilege Verification) | Ensure that delete actions are only accepted when performed by an admin user. |
| T50 (User Existence Check) | Confirm that the user exists in the system and is not the current logged-in user before deletion. |
| T51 (Post-Deletion Transaction Block) | Verify that once a user is deleted, no further transactions can occur on their available inventory of games. |
| T52 (Deletion Confirmation) | Test if the system asks for confirmation before deleting a user. |
| T53 (Transaction File Update) | Check if the deletion of a user is correctly logged in the daily transaction file. |
| T54 (Inventory Clearance Check) | Confirm that all games for sale by the user are canceled upon deletion. |
| T55 (User Re-creation Check) | Verify if the system allows creating a new user with the same username after deletion. |
| T56 (Multi-User Deletion Handling) | Test system behavior when multiple user deletions are requested in sequence. |
| T57 (User Deletion Audit Trail) | Ensure there's a proper audit trail for user |

| | deletion actions. |
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| T58 (Username input validate) | Test to see if the system correctly prompts for and accepts a valid username for deleting. |
| T59 (Non-Existence User Deletion Attempt) | Test the system's response when an attempt is made to delete a non-existent user. |
| T60 (Current User Deletion Attempt) | Verify the system prevents an admin from deleting their own account while logged in. |
| T61 (Deletion Impact on Active Sessions) | Assess whether active sessions of a deleted user are terminated immediately upon account deletion. |
| T62 (Deletion with Pending Transactions) | Test how the system handles deletion when there are pending transactions associated with the user. |

sell (Azan)

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| T63 (Sell/List Game ( Buy Standard User)) | Test if an error is given when a standard user tries to sell a game |
| T64 (Check ASCII ) | Game's name must be in ASCII letters only. |
| T65 (Sell from list) | Sell from list command |
| T66 (Test Same Name as other game) | If game being sold has the same name (capitalization does not matter) as a another game, it cannot be listed and is considered the same game |
| T67 (Sell/List Game (Admin)) | Test the successful listing of a game by an admin user |
| T68 (Sell Game (Full-Standard User)) | Test the successful listing of a game by a Full-standard user |
| T69 (Sell game without logging in) | Test if system prompts the user to log in before the selling screen |
| T70 (Sell game a game with Max Length of game name) | Test selling a game with the maximum allowed length of the game name |

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| T71 (Sell a game with more than the Max Length of game name) | Test selling a game with a name that is above the maximum allowed length of the game name and see if error |
| T72 (Sell/list game (Sell Standard) | Test the successful listing of a game by an sell standard |
| T73(Sell Game - Exceed Maximum Price) | Test attempting to sell a game with a price exceeding the maximum allowed and display an error |
| T74 (Sell Game - Maximum Price) | Test successfully attempting to sell a game right on the maximum price. |
| T75 ( Sell Game - Not Numbers) | Attempt to sell a game with anything but a number and display an error |
| T76 (More than 2 point decimal) | Display error if user attempts to sell a game with more than 2 points of a decimal (43.221) |
| T77 (Sell game with price of PPPP) | Successfully sell a game with the price of P.PP (2.63) |
| T78 (Sell a game with price of PPPPP) | Successfully sell a game with the price of PP.PP (31.53) |
| T79 (Sell a game with price of P) | Successfully sell a game with the price of P(4) |
| T80 (Choose Game name) | Successfully input the game's name when system prompts you to |
| T81 (Choose game price) | Successfully input game price when system prompts you to |
| T82 (Saved to daily transaction file(admin)) | Check if game is saved to daily transaction file after inputting the game name, game price |
| T83  (Sell during login) | Attempt to sell from the login stage and ensure it does not allow so |
| T84  (Log in, then log out and then sell from login stage) | Login, Logout, then sell from the login stage and ensure it does not allow so |
| T85 (Input a empty game name) | Attempt to sell a game with no name and display and error |
| T86 (Successfully set the game's name with ASCII letters) | Successfully sell a game with ASCII letters only |
| T87(Sell a game with the same name but | Sell a game with the same name as another |

| different capitalization) | game but the only difference is a capital and display an error as not unique |
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| T88 (Game name is special letter) | Fail to sell a game with letters other than ASCII |
| T89 (No Price entered) | Attempt to sell a game with no price entered |
| T90 (Sell a game with price of PPPPP) | Successfully sell a game with the price of PPP.PP (901.53) |
| T91 (Test for appending of .00 on games of P) | Test to see if the transaction file is updated with an additional .00 on games with just P, PP, or PPP (10-> 10.00) |
| T92 Test for unused numbers) | Test to see if unused numbers of a price are replaced with 0s ((e.g. 0000 for free game) |
| T93 (Free game) | Attempt to sell a free game |

buy (Azan)

| T94 (Buy Game (Sell-Standard User)) | Test for an error to be given if a Sell-Standard user attempts to purchase a game |
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| T95 (Test if message is displayed to logout after buying a game) | Users should be told to logout to refresh the backend to display their game in their library. |
| T96 (Test if Buyer is the Seller (Full-Standard) | Check for if the User is the Seller of the said game they are buying and display error. |
| T97 ( Buy Game (Admin user)) | Test the successful purchase of a game by an admin user |
| T98 ( Buy Game (Buy-Standard User)) | Test the successful purchase of a game by a buy-standard user |
| T99 ( Buy game with not enough credit) | Verify the system does not allow the purchase of a game if the user does not have enough credits and it displays the appropriate error message |
| T100 (Buy game with enough credits - Buy-Standard User ) | Successfully purchase a game with the correct amount of credits needed to purchase the game |
| T101 (Buy game with enough credits Admin User) | Successfully purchase a game with the correct amount of credits needed to purchase the game |

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| T102 (Buy game with enough credits Sell-Standard User) | Verify the system does not allow for a sell-standard user to purchase the game even with the correct amount of credits |
| T103  (Buy game with enough credits Full-Standard User) | Successfully purchase a game with the correct amount of credits needed to purchase the game |
| T104 (Buy Game - Non Existing Game) | Test attempting to buy a game that does not exist |
| T105 Buy Game with Maximum price) | Test buying a game that is at the maximum price |
| T106 (Buy game from Full-Standard user) | Test buying a game from a Full-Standard user |
| T107 (Buy game from Sell-Standard user) | Test buying a game from a Sell-Standard user |
| T108 (Buy game from Admin user) | Test buying a game from a Admin user |
| T109 (Buy a game with Maximum characters) | Test buying a game successfully that has the maximum character limit |
| T110 (Buy game with price of X.XX) | Successfully buy a game with the price of X.XX (2.63) |
| T111 (Buy a game with price of XX.XX) | Successfully buy a game with the price of XX.XX (31.53) |
| T112 (Buy a game with price of X) | Successfully buy a game with the price of X (4) |
| T113 (Buy game without logging in) | Attempt to use the buy command from the login screen |
| T114 (Buy game with not enough credits - Buy-Standard User ) | Display error for not having enough credits to purchase game |
| T115 (Buy game with not enough credits Admin User) | Display error for not having enough credits to purchase game |
| T116  (Buy game with not enough credits Sell-Standard User) | Display error telling the user they are a Sell-Standard user and may not purchase any games. |
| T117  (Buy game with not enough credits Full-Standard User) | Display error for not having enough credits to purchase game |
| T118 (Test if Buyer is the Seller (Admin) | Check for if the Admin is the Seller of the said game they are buying and display error |

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| T119 (Buy game that does exist with different capitalization) | Successfully purchase a game by inputting the correct game name but the capitalization is different. |
| T120 (Buy game with game not in collection) | Successfully purchase a game with game not already being in the library of the user |
| T121  (Buy a game on one user, then try it on another user) | Successfully purchase a game that has been purchased by another user already in the past. |
| T122(Buy a game that exists in collection) | Fail to purchase a game as it is already in the collection |
| T123 (Purchase the same game again in the same session) | Attempt to purchase the same game in the same session |
| T124 (Purchase a game again in the same session) | Purchase one game, then  purchase another game. In the same session |
| T125  (Daily transaction file update) | Check if the daily transaction file has been updated correctly after the purchase of a game |
| T126  (Purchase a free game (Admin)) | Successfully purchase a game and make sure no credits are taken away |
| T127  (Purchase a free game (Full-Standard)) | Successfully purchase a game and make sure no credits are taken away |
| T128 (Purchase a free game (Buy-Standard)) | Successfully purchase a game and make sure no credits are taken away |
| T129 (Purchase a free game (Sell-Standard)) | Display error that you may not purchase a video game as a Sell-Standard account |
| T130 (Purchase from list command) | Input list command and then input buy command and successfully purchase a game |

refund (Andres)

| Test Cases | Descriptions |
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| T200 (Admin refunds game) | Credit is issued to buyers account from seller's account |
| T201 (Buyer requests refund within 24 hours) | Declines request to refund, due to the 24 hour window where it is not refundable. |

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| T202 (Buyer requests refund after 24 hours) | Accepts request and asks for username of the seller and buyer. |
| T203 (Buyer types invalid username) | Error is issued stating that buyer's username doesn't exist, request failed. |
| T204 (Buyer types invalid seller username) | Error is issued stating that seller's username doesn't exist, request failed. |
| T205 (Buyer types seller's username but seller isn't currently selling game) | Request fails and informs the buyer that game isn't currently in their library |
| T206 (Buyer types incorrect amount of credit) | Request fails and informs the buyer that an incorrect amount of credit was put in. |
| T207 (Seller doesn't have the necessary amount of credit) | Request fails and informs the buyer that game can't be refunded due to lack of credits from the seller |
| T208 (buyer types seller's username but account was deleted) | Error is issued stating that seller's account has been deleted. |
| T209 (Multiple refund requests) | Ensures that the system handles multiple refund attempts, preventing subsequent refund until previous translation has been completed. |
| T210 (User enters an empty username for buyer) | Task fails and asks user to type in a valid buyer username |
| T211 (User enters an empty username for seller) | Task fails and asks user to type in a username |
| T212 (User enters an empty amount of credits) | Transaction fails and asks user to type in a username |
| T213 (Buyer types in an incorrect amount of credits) | System tells user that incorrect amount of credits was entered |
| T214 | |

### add credit (Andres)

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| T215 (Admin adds credit to user account) | add credit into the system for the purchase of accounts |
| T216 (Admin exceeds $1000 in current session) | An error occurs and tells admin that maximum transaction been reached for current session. |
| T217 (Admin types invalid username) | Error occurs stating that username does not |

| | exist |
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| T218 (Admin types invalid amount of credits for user account) | Transaction fails and tells admin that invalid amount of credits have been entered |
| T219 (Admin types invalid amount of credits for admin account) | Transaction fails and tells admin that invalid amount of credits have been entered |
| T220 (Admin types credits with decimal) | Transaction is accepted and credits are entered |
| T221 (User types the amount of credit) | Transaction is accepted |
| T222 (User exceeds maximum amount of credit) | Transaction fails and tells user that they exceed maximum amount of credit permitted |
| T223 (User types credit with decimal) | Transaction is accepted and credits are entered |
| T224 (Empty amount of credits have been entered) | Transaction fails and asks user to type in a valid amount of credits |

List (All)

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| T225 (Test List (Admin)) | Test successfully listing all game names with price as an admin user. |
| T226 (Test List (Full-Standard)) | Test successfully listing all game name with price as a Full-Standard user |
| T227 (Test List (Sell-Standard)) | Test successfully listing all game name with price as a Sell-Standard user |
| T228 (Test List (Buy-Standard)) | Test successfully listing all game name with price as an Buy-Standard user |
| T229 (Test List After Game Transactions) | Verifies that the system can successfully list all available games, including those that have been bought or listed for sale, after user transactions such as purchasing and selling games. |
| T230 (Test List After Refund Transaction) | This test checks if the system correctly lists all available games after processing a refund transaction. It ensures that the game list remains accurate and up-to-date even after financial transactions. |
| T231 (Test List After Admin Operations) | This test verifies if the system lists all |

| | available games successfully after various administrative operations (creating a new user, deleting a user, and adding credit). It ensures that admin operations do not affect the accuracy of the game list. |
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| T232 (Test List After Concurrent Transactions) | This test evaluates the system's ability to provide an accurate game list for a user after other users have performed concurrent transactions. It checks if the list is consistent and unaffected by simultaneous activities. |
| T233 (Test List After Session End) | This test examines the system's behavior when listing games after a session has ended. It involves logging in, performing multiple transactions, logging out, logging in again, and checking if the game list is correctly displayed. |