Black-box testing

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | Test Case | Input | Expected Output | Observed Output | Status |
| 1 | Add item | 1 | Prompt to choose an item type | Prompt to choose an item type | Pass |
|  |  | 2 | Prompt to enter an item ID | Prompt to enter an item ID | Pass |
|  |  | 8 | Error message and re-prompt for input | Error message and re-prompt for input | Pass |
|  |  | 0 | Pass |
|  |  | -3 | Pass |
|  |  | g | Pass |
| 2 | Choose item type to add | @ | Error message and re-prompt for input | Error message and re-prompt for input | Pass |
|  |  | j | Pass |
|  |  | 9.0 | Pass |
|  |  |  |  |  |  |
| 3 | Choose item type to add | 1 | User is prompted to input information about a CD | User is prompted to input information about a CD | Pass |
|  |  | 2 | User is prompted to input information about a Vinyl | User is prompted to input information about a Vinyl | Pass |
|  |  | h | Error message and re-prompt for input | Error message and re-prompt for input | Pass |
|  |  | 5 | Pass |
|  |  | -3 | Pass |
|  |  | # |  |
|  |  |  |  |  |  |
| 4 | Enter Date | 32/1/2019 | Day is set to 1  Date entered is: 1/1/2019 | Day is set to 1  Date entered is: 1/1/2019 | Pass |
|  |  | 31/1/2019 | Date entered is: 31/1/2019 | Date entered is: 31/1/2019 | Pass |
|  |  | 29/2/2019 | Day is set to 1 | Day is set to 1 | Pass |
|  |  | 29/2/2020 | Date entered is: 29/2/2020 | Date entered is: 29/2/2020 | Pass |
| 5 | Enter day OR month OR year of date | 7.6 | Display Error message and re-prompt for input | Display Error message and re-prompt for input | Pass |
|  |  |  |  |  |  |
| 6 | Buy item | 7, No | Display total cost | Display total cost | Pass |
| 7 | Choose number of copies to buy | 3.0 | Display Error message | Display Error message | Pass |
|  |  | 3 | Display total cost | Display total cost | Pass |
|  |  |  |  |  |  |
| 8 | Generate file upon purchase | Item ID = 7,  No. of copies= 2 | Write item ID =7, title, price, copies, total cost and selling date/time in the specified file | Write item ID =7, title, price, copies, total cost and selling date/time in the specified file | Pass |
|  |  |  |  |  |  |
| 9 | Search item in GUI by title | Hello | Display all information relevant to this item in the table, if available in store | Display all information relevant to this item in the table, if available in store | Pass |

White-box testing

|  |  |  |
| --- | --- | --- |
| Test ID | Test Case | Status |
| 1 | The cloud database gets connected to the program when the program starts. | Pass |
| 2 | Import items saved in the database, when the program starts | Pass |
| 3 | Display main menu | Pass |
| 4 | Prompt user to choose an option from the main menu | Pass |
| 5 | Add item option prompts the user to choose the type of the item to be added | Pass |
| 6 | If CD type was chosen to be added; item ID, title, genre, release date, artist, price and duration are prompted sequentially | Pass |
| 7 | If Vinyl type was chosen to be added; item ID, title, genre, release date, artist, price, speed and diameter are prompted sequentially | Pass |
| 8 | When an item is added to the system, its information gets saved in the cloud database as a document (noSQL – MongoDB Atlas) | Pass |
| 9 | When adding items, if an item ID that already exists in store is entered, the user is notified that the item ID has already been taken and the user is prompted for a different item ID. | Pass |
|  |  |  |
| 10 | Once the chosen task is completed, the main menu is re-prompted | Pass |
|  |  |  |
| 11 | Delete item option prompts the user to enter an item ID that the user requires to delete | Pass |
| 12 | If item ID entered is of an item in store, all the information related to the item gets deleted from the system and the cloud database (MongoDB Atlas) | Pass |
| 13 | Whenever an item is added to/ deleted from the system, the number of free spaces left in the store is displayed | Pass |
|  |  |  |
| 14 | Print list of items option displays all the items in store with their item IDs, types and titles in a table format. | Pass |
| 15 | Sort items option sorts the stored items in ascending order of title and saves all the items in this order | Pass |
| 16 | When printing the list of items/ displaying them in the GUI, items are displayed in the sorted order, after sort items option is chosen. | Pass |
| 17 | Whenever new items are added, they are added to the end of these tables |  |
|  |  |  |
| 18 | Buy item option prompts the user to enter an item ID of the item that the user desires to purchase | Pass |
| 19 | If the item that the user requests exists in store, the user is prompted whether more than one copy of the item chosen is required | Pass |
| 20 | If the user chooses to buy more than one item, the number of required copies is prompted | Pass |
| 21 | Once the user enters the number of copies required, the total cost of all purchased items is calculated and displayed | Pass |
|  |  |  |
| 22 | When a purchase is completed through the buy item option, a report is generated in file. | Pass |
| 23 | The title, item ID, price, total cost, selling date/time are saved in the file generated upon completion of purchase. | Pass |
|  |  |  |
| 24 | If the item ID entered in delete item and buy item options isn’t found in the system, the user is notified that there’s no such item in store. | Pass |
|  |  |  |
| 25 | Open GUI option opens the Graphical User Interface in a separate window | Pass |
| 26 | All the information of the items in store are displayed in a JavaFX table component format | Pass |
| 27 | Items can be searched by Title in a search box displayed in the GUI | Pass |
| 28 | When Reset button is clicked in the GUI, all the items in store are displayed in the table and the search field is emptied | Pass |
|  |  |  |
| 29 | If the user tries to enter more than 1000 items, the system notifies the user that there’re no available spaces to store new items | Pass |
| 30 | Exit program option in the main menu, ends the program | Pass |