RetroAchievements Browser

Test Document

Version 1.0

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# Test Data

## Test Data Table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **#** | **Module** | **Function** | **Input** | **Expected Result** | **Tested** |
| 1 | User Profile | Display Profile | User Profile tab is selected. | User Profile is displayed to user. | PASS |
| 2 | Consoles | Display List | Console tab is selected. | Console list is populated and displayed in data grid. | PASS |
| 3 | Populate Console Details | Select/Click a console from the data grid. | Console details are populated according to selected console. | PASS |
| 4 | Enter console | Double click a console from the Console tab data grid. | Tab selection changes to games tab, games list is populated according to selected console. | PASS |
| 5 | Games | Populate games list | Games tab is selected. | Games list populates when a console is selected on the Console tab. | PASS |
| 6 | Display game details. | Select/Click a game from the Games tab data grid. | Game developer, publisher and release date are populated in right side panel. | PASS |
| 7 | Enter Game | Double click a game from the Games tab data grid. | Tab selection changes to achievements tab, achievements list is populated according to selected game. | PASS |
| 8 | Achievements | Populate achievements list | Achievements tab is selected. | Achievements list is populated according to selected game. | PASS |
| 9 | Update progress bar for current game | Populate achievements list. | Progress bar updates to correct value for current game. | PASS |
| 10 | Achievement status displayed. | Populate achievements list. | Each achievement tile is displayed in either full colour or gray-scale depending on the achievement status. | PASS |
| 11 | Display achievements details | Select/Click an achievement from the Achievements tab data grid. | Achievement details are displayed in the details panel. | PASS |
| 12 | Leader Board | Populate leader board. | Leader Board tab is selected. | Leader Board panel is populated with the 10 top users. | PASS |
| 13 | Search | Search Console | Search for non-existent console. | Message displaying “No results found”. | PASS |
| 14 | Search for existing console. | Console tab is selected, relevant console is selected in data grid. | PASS |
| 15 | Search Games | Search for non-existent game. | Message displaying “No results found”. | PASS |
| 16 | Search for existing game. | Game tab is selected, relevant game is selected in data grid. | PASS |
| 17 | Help | Launch help files in default browser. | Click Help -> Help. | HTML help files are opened in default browser. | PASS |

## Test Data Evidence

|  |  |
| --- | --- |
| **#** | **Screenshot** |
| 1 |  |
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| 16 |  |
| 17 |  |

# Encountered Issues

## Synchronous Methods

The main issue encountered during this project was the wait time incurred by the requests for data such as JSONs or images. Methods involving these functions would run synchronously, leaving the thread processing the rest of the instructions on stand-by until a response was received from a remote server. This was an un-desired behaviour as the follow-up instructions being held up were not dependent on the data being fetched.

By introducing asynchronous methods and tasks to the code, these operations were able to be carried out on separate threads leaving the main thread free of interruption. This change dramatically increased the responsiveness and overall user experience when using the application.

# Evaluation

## Requirements Traceability Matrix

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement** | **Case #** | **Defects** | **Status** |
| Must contain dynamic data structures | 13 – 18 | - | Satisfied |
| Must contain hashing techniques | 1 | - | Satisfied |
| Must contain sorting algorithm | 13 - 18 | - | Satisfied |
| Must contain searching technique | 13 - 18 | - | Satisfied |
| Must contain 3rd party library | 1, 2, 5, 6, 8, 12 | - | Satisfied |
| Must have a GUI | 1 – 18 | - | Satisfied |
| Must adhere to coding standards | 1 – 18 | - | Satisfied |

## Conclusion

After completing the test results, I have concluded this project performs is functionalities as intended, and satisfies all requirements as stated by JMC.

The requirements traceability matrix below tracks all the requirements and their relevant test cases, showing this project meets all requirements.