# IT Asset Maintenance System Testing Plan

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| **Unit testing** | | | |
| Test No. | Method(s) tested in which class? | Passed/ Failed | Action |
| Matthew Edwards – B00774765 | | | |
| 1 | mainMenu() / MainMenu class | Passed | None needed |
| 2 | exitMenu() / MainMenu class | Passed | None needed |
| 3 | Main() / Main Menu class | Passed | None needed |
| 4 | displayLogs() / Display class | Passed | None needed |
| 5 | Main() / Display class | Passed | None needed |
| 6 | Main() / Run Report class | Passed | None needed |
| 7 | Main() / New Logs class | Passed | None needed |
| Alex Patterson - B00777593 | | | |
| 8 | main() / DeleteLogs class | Passed | None needed |
| 9 | main() / SaveChanges class | Passed | None needed |
| 10 | main() / HandleLogs class | Passed | None needed |
| 11 | getLogs() / HandleLogs class | Passed | None needed |
| 12 | getOgLogs () / HandleLogs class | Passed | None needed |
| 13 | main() / EditLogs class | Passed | None needed |

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| **Integration Testing** | | | |
| Test No. | Class(es) tested | Passed/ Failed | Action |
| Matthew Edwards – B00774765 | | | |
| 1 | Display | Passed | None needed |
| 2 | RunReport | Passed | None needed |
| 3 | NewLog | Passed | None needed |
| 4 | MainMenu / all methods selected | Passed | None needed |
| Alex Patterson - B00777593 | | | |
| 5 | DeleteLog | Passed | None needed |
| 6 | HandleLog | Passed | None needed |
| 7 | SaveChanges | Passed | None needed |
| 8 | EditLogs | Passed | None needed |
| 9 | All classes | Passed | None needed |

Debugging of the program was completed throughout the development process. This was completed using a step over approach using the NetBeans debugging tool. Errors were found and completed once they showed.

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| **System Testing** | | | | | | |
| Test No. | Area tested | Test Case/ Requirements | Passed/  Failed | Expected Outcome | Actual Outcome | Action |
| Matthew Edwards – B00774765 | | | | | | |
| 1 | Main Menu console | Call the display option 1 to display all logs / Requirement 1 and 2 | Passed | Display all logs | Outcome as expected | None needed |
| 2 | Main Menu console | Call the New Log option 2 / Requirement 3 | Passed | Show the Enter Date input | Outcome as expected | None needed |
| 3 | New Log console | Enter a date / Requirement 3 | Passed | Allow entry of the date 2020303 | Outcome as expected | None needed |
| 4 | New Log console | Enter an Asset ID / Requirement 3 | Passed | Allow entry of T78647 | Outcome as expected | None needed |
| 5 | New Log console | Enter the hours / Requirement 3 | Passed | Allow entry of 78 | Outcome as expected | None needed |
| 6 | New Log console | Enter if you want to add log / Requirement 3 | Passed | Add log to file when entering Y for the input. | Outcome as expected | None needed |
| 7 | Main Menu console | Call the display option 1 to display all logs / Requirement 1 and 2 | Passed | Display the new added log with the rest of the logs. | Outcome as expected | None needed |
| 8 | Main Menu console | Call the Run report option 1 to show a summary of the logs, with the correct number of log entries, the correct average hours for entries and the entries greater than 4 hours to compete/ Requirement 6 | Passed | Display the 4 entries, the average hours and 3 tasks which are greater than 4 hours to complete. | Outcome as expected | None needed |
| 9 | NewLog console | Create a new log, so you can see if the run report will show the updated information. / Requirement 3 | Passed | Add the log to the log file. | Outcome as expected | None needed |
| 10 | Main menu console | Run report option 5 to see if the information has been updated. / Requirement 6 | Passed | Show the updated log making a difference to the information shown | Outcome as expected | None needed |
| 11 | Main menu console | Exit the program without calling option 6, by saving the new log entry. / Requirement 7 | Passed | The log should be removed from the log file. | Outcome as expected | None needed |
| 12 | NewLog console | Create a new log, so you can see if the save all changes works by saving the new log that has been entered / Requirement 3 | Passed | Add the log to the log file and allow the entry of yes to accept the log. | Outcome as expected | None needed |
| 13 | Main menu console | Save changes of the program, option 6 to see if the information has been updated when exiting. / Requirement 7 | Passed | Save the changes of the log, exit the program and show the log still in the log file once you run the program again. | Outcome as expected | None needed |
| 14 | Deletelogs console | Delete a log to see if the display logs have been updated with one less log appearing. / Requirement 5 | Passed | Show the updated logs in the display option in the main menu is called. | Outcome as expected | None needed |
| 15 | Main menu console | To see if the Run report has updated its information. / Requirement 6 | Passed | Show the updated summary information in the run report. | Outcome as expected | None needed |
| 16 | Main menu console | To see if the log which was deleted has appeared if the program has exited without saving. / Requirement 5 | Passed | The log which was delete should reappear, once the program has exited without saving. | Outcome as expected | None needed |
| 17 | Main menu console | To see if the program does not exit once you enter no for option 7 for exiting the program | Passed | The main menu should reappear. | Outcome as expected | None needed |
| 18 | Main menu console | To see if the program does not exit once you enter n for option 7 for exiting the program | Passed | The main menu should reappear. | Outcome as expected | None needed |
| 19 | Main menu console | To see if the program does exit once you enter yes for option 7 for exiting the program | Passed | The program should exit and show a goodbye message. | Outcome as expected | None needed |
| Alex Patterson - B00777593 | | | | | | |
| 20 | HandleLogs Class | Allows the log text file to be read into the program / Requirement 1 | Passed | Create a txt file called text and load 4 records in the format (YYYYMMDD,Asset ID,Hours) | Outcome as expected | None needed |
| 21 | SaveChanges Class | Call from MainMenu to save changes to any deleted/new log entries / Requirement 7 | Passed | Entry P12345 should be successfully deleted and not show up when displaying all logs | Outcome as expected | None needed |
| 22 | DeleteLog Class | Enter relating Asset ID and delete entry / Requirement 5 | Passed | Allow entry of P12345 to be deleted | Outcome as expected | None needed |
| 23 | EditLogs Class | Change log entry by entering Asset ID, selecting attribute to change then entering change hours / Requirement 4 | Passed | Allow the hours attribute of entry of M54321 to be changed from 1 to 10 | Outcome as expected | None needed |
| 24 | EditLogs Class | Change log entry by entering Asset ID, selecting attribute to change then entering change / Requirement 4 | Passed | Allow the asset ID attribute of entry of M54321 to be changed from M54321 to M12345 | Outcome as expected | None needed |
| 25 | EditLogs Class | Change log entry by entering Asset ID, selecting attribute to change then entering change / Requirement 4 | Passed | Allow the date attribute of entry of M54321 to be changed from 16/01/2020 to 10/04/2020 | Outcome as expected | None needed |

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| **Validation Testing of system** | | | | | | |
| Test No. | Area tested | Test Performed | Passed/  Failed | Expected Outcome | Actual Outcome | Action |
| Matthew Edwards – B00774765 | | | | | | |
| 1 | Main Menu console | Enter whitespace in the input. | Passed | Show a enter valid selection error message | Outcome as expected | None needed |
| 2 | Main Menu console | Enter yu in the input. | Passed | Show a enter valid selection error message | Outcome as expected | None needed |
| 3 | Main Menu console | Enter 67 into the input. | Passed | Show a enter valid selection message | Outcome as expected | None needed |
| 4 | Main Menu console | Enter whitespace for exit (option 7) | Passed | Show an invalid input message | Outcome as expected | None needed |
| 5 | Main Menu console | Enter yy for exit (option 7) | Passed | Show an invalid input message | Outcome as expected | None needed |
| 6 | Main Menu console | Enter 45 for exit (option 7) | Passed | Show an invalid input message | Outcome as expected | None needed |
| 7 | New Log console | Enter whitespace for the Enter date input. | Passed | Show an Conform to the YYYYMMDD format message | Outcome as expected | None needed |
| 8 | New Log console | Enter yyyymmdd for the Enter date input. | Passed | Show an Conform to the YYYYMMDD format message | Outcome as expected | None needed |
| 9 | New Log console | Enter 20203030 for the Enter date input. | Passed | Show an Conform to the YYYYMMDD format message | Outcome as expected | None needed |
| 10 | New Log console | Enter 20200402 for the Enter date input. | Passed | Allow entry of the input. | Outcome as expected | None needed |
| 11 | New Log console | Enter whitespace for the Enter asset id input. | Passed | Show an invalid input message | Outcome as expected | None needed |
| 12 | New Log console | Enter 3341348 for the Enter asset id input. | Passed | Show an Enter a valid asset ID message | Outcome as expected | None needed |
| 13 | New Log console | Enter R23847 for the Enter asset id input. | Passed | Show an Enter a valid asset ID message | Outcome as expected | None needed |
| 14 | New Log console | Enter t23847 for the asset id input. | Passed | Allow entry of the input and ignore the lower case letter. | Outcome as expected | None needed |
| 15 | New Log console | Enter whitespace for the Enter hours input. | Passed | Show an invalid input message | Outcome as expected | None needed |
| 16 | New Log console | Enter yy for the Enter hours input. | Passed | Show a numerical values only message. | Outcome as expected | None needed |
| 17 | New Log console | Enter @d for the Enter hours input. | Passed | Show a numerical values only message. | Outcome as expected | None needed |
| 18 | New Log console | Enter 60 for the Enter hours input. | Passed | Allow entry of the input. | Outcome as expected | None needed |
| 19 | New Log console | Enter whitespace for are you sure you want to add this log message input. | Passed | Show an invalid input message | Outcome as expected | None needed |
| 20 | New Log console | Enter yv for are you sure you want to add this log message input. | Passed | Show an invalid input message | Outcome as expected | None needed |
| 21 | New Log console | Enter no for are you sure you want to add this log message input. | Passed | Does not add the log to the logs file and goes back to the main menu. | Outcome as expected | None needed |
| Alex Patterson - B00777593 | | | | | | |
| 22 | DeleteLogs | Enter whitespace | Passed | Show an invalid input message | Outcome as expected | None needed |
| 23 | DeleteLogs | Enter something not matching an asset ID | Passed | Show an invalid input message | Outcome as expected | None needed |
| 24 | DeleteLogs | Lowercase letter in asset id | Passed | Ignores the case of the later | Outcome as expected | None needed |
| 25 | DeleteLogs | Load text file with no logs | Passed | No logs to delete message | Outcome as expected | None needed |
| 26 | SaveChanges | Detect when no changes to be saved | Passed | Display no changes have been made | Outcome as expected | None needed |
| 27 | EditLogs | Enter whitespace for entry prompts | Passed | Console will move onto the next prompt for input or return to the main menu with the message “Log successfully changed” | Outcome as expected | None needed |
| 28 | EditLogs | Enter invalid id | Passed | Display a message telling the user the entry wasn’t found | Outcome as expected | None needed |
| 29 | EditLogs | Enter number for selecting attribute to change | Passed | Display invalid option message | Outcome as expected | None needed |
| 30 | EditLogs | Enter non numerical value for entering hours | Passed | Display invalid input message | Outcome as expected | None needed |
| 31 | EditLogs | Enter assetid in an invalid format | Passed | Display invalid input message | Outcome as expected | None needed |
| 32 | EditLogs | Enter duplicate assetid | Passed | Display duplicate error message | Outcome as expected | None needed |