Sheetless

Testing Documentation – Graded Unit 2025

Dundee & Angus College

HND Software Development

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# Introduction

The following Documentation contains all relevant testing documentation and overall testing plan for the duration of the Testing Phase of my Graded Unit Project SheetLess, a Digital system for storing Traveller Sheets for the company MEP Technologies. The system allows a user to log in, pick a template option and fill it out to be submitted to the Database, once in the database its automatically categorised by its own ID Number and sorted in numerical order. The test plan I will be following was constructed during the Planning phase of the project in which I will be performing Usability and Functionality Testing.

## White Box Testing

The following White Box Testing is being rated on a Traffic-Light System, it is colour coded for simplicity and understanding on if a task was hard to complete or was easy. The colour coding is below:

1. **Hard**
2. **Medium**
3. **Easy**

When conducting White Box Testing, I reached out to the Head of Production to conduct real world testing on the current state of the Project. I organised a small session to get the Head of Production and a Production Associate to test the application against tasks I have set out to receive feedback on what works well, what needs to be fixed before completion and what can be done better. The White Box testing method was chosen for this instance as employees at the company have an understanding of the systems, they are about to test due to using the same systems but in paperback form.

* Testing Date: **14/04/2025**
* Tester Candidate #1 – Gavin Farquhar
* Tester Candidate #2 – John Merchant

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task** | **Tester #1 – Head Of Production** | **Feedback** | **Tester #2 – Production Associate** | **Feedback** |
| Login to the system with the respective login credentials | **Easy** | Easy to do, Simple design allows for us to know how to use the system immediately, additionally I would like to have an option to set logon credentials myself for security. | **Easy** | Logging into the system was very simple to do as we had the right login credentials. |
| Navigate to the Smedley-D Traveller | **Easy** | I was able to get to the traveller very quickly due to the templates being on the main dashboard. | **Easy** | I located the Smedley Traveller in a short time which is useful when we have to fill the travellers out quicky. |
| Edit & Submit a Traveller into the system | **Medium** | Editing the traveller with the data it requires was easier than the paper-based system. Only thing I would request is an option to auto fill the fields with a specific initial for faster use. | **Easy** | Editing the traveller was very easy for me to do, a lot easier than our current live system in production. |
| View a submitted Traveller | **Medium** | Finding the page in itself was easy, Traveller data displayed on the site is easy to read. Locating a specific traveller was a little difficult, a search function would make it easier if it were added. | **Medium** | Navigating to the submitted travellers page was simple thanks to the navigation, I was having a small issue with locating the traveller I was told to look for. |
| Log out from the system | **Easy** | Logging out of the system was swift and easy, goes straight back to the log in screen upon clicking the button. | **Easy** | The log out process is swift and easy; this is useful for the end of the day when we have to shut down our systems. The interface is created to be simple which I like. |

## Black Box Testing

The following Black Box Testing is being rated on a Traffic-Light System, it is colour coded for simplicity and understanding on if a task was hard to complete or was easy. The colour coding is below:

1. **Hard**
2. **Medium**
3. **Easy**

When conducting Black Box Testing, I ran the exact same test with the same tasks as White Box Testing however the candidates for this test had zero background or previous knowledge on the system or Travellers that are used within the MEP Technologies. Running the same test proves useful to determine how easy it is to navigate and use the system no matter the background of the end user whilst providing accurate data & Feedback to improve on.

* Testing Date: **16/04/2025**
* Tester Candidate #1 – Liam Ramsay
* Tester Candidate #2 – Ryan Christie

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task** | **Tester #1** | **Feedback** | **Tester #2** | **Feedback** |
| Login to the system with the respective login credentials | **Medium** | The overall interface was user friendly which I like, I struggled with logging in as I initially did not have any credentials to log in for which also aids in the security of the system. | **Medium** | The logging in experience was simple after I was given my low-level access to the system, and I like the design. |
| Navigate to the Smedley-D Traveller | **Easy** | Navigating to the form was easy to do as the section was on the main screen upon logging in. | **Easy** | Getting to the traveller couldn’t be simpler, after logging in, it takes you to the dashboard with available travellers. |
| Edit & Submit a Traveller into the system | **Hard** | Opening the form to edit was simple, I struggled the most with figuring out what data needed to go into the field. | **Medium** | When editing the traveller it was a little challenging trying to determine what sort of information was required however it was understandable due to not being familiar with the company its created for. |
| View a submitted Traveller | **Easy** | Locating the traveller was simple for me, the whole process couldn’t be simpler which can help in a time sensitive situation. | **Medium** | I personally found it a little difficult to find the specific Traveller Entry due to the amount of data on the page, a search function or filter system would help. |
| Log out from the system | **Easy** | Logging out was quick and easy, clicking the button on the page navigation took me right back to the log in screen immediately. | **Easy** | The task of logging out was quicker than most systems, some systems have to save before logging out, but this system done it in a timely manner. |

# Functional Testing

Functional Testing is being performed on all sections of the system that takes in a User Input or outputs something based on an end users’ action to ensure that everything functions as expected. During the functional testing I will be using a Pass/Fail system which are colour coded to their respective colours which can be seen throughout:

1. **Pass**
2. **Fail**

## Login System

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Expected Output** | **Actual Output** | **Pass/Fail** |
| Enter “admin“ into the Username field | System accepts Username as valid. | System accepts entry and grants access. | **Pass** |
| Enter “ “ into the Username field | System does not accept valid input | System does not accept valid input and throws an error. | **Pass** |
| Enter “123456” into the Username field | System does not accept valid input | System does not accept valid input and throws an error. | **Pass** |
| Enter “12345AbCD3” into the Username field | System does not accept valid input | System does not accept valid input and throws an error. | **Pass** |
| Enter “ “ into the Password field | System does not accept valid input | System does not accept valid input and throws an error. | **Pass** |
| Enter “admin” into the Password field | System accepts password as valid. | System accepts entry and grants access. | **Pass** |
| Enter “123456” into the Password field | System does not accept valid input | System does not accept valid input and throws an error. | **Pass** |
| Enter “12345AbCD3” into the Password field | System does not accept valid input | System does not accept valid input and throws an error. | **Pass** |

## BatFan Traveller

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Expected Output** | **Actual Output** | **Pass/Fail** |
| Enter “CF” into the fields | System successfully inputs traveller into the system. | System successfully inputs traveller into the system. | **Pass** |
| Enter “&\*%!” into the fields | System does not allow input. | System does allow the input. | **Fail** |
| Enter “A!!BO&^” into the fields | System does not allow input. | System does allow the input. | **Fail** |
| Enter “Connley Farquhar“ into the fields | System does allow input even with a space | System does allow the input. | **Pass** |

## Smedley-D Traveller

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Expected Output** | **Actual Output** | **Pass/Fail** |
| Enter “CF” into the fields | System successfully inputs traveller into the system. | System successfully inputs traveller into the system. | **Pass** |
| Enter “&\*%!” into the fields | System does not allow input. | System does allow the input. | **Fail** |
| Enter “A!!BO&^” into the fields | System does not allow input. | System does allow the input. | **Fail** |
| Enter “Connley Farquhar“ into the fields | System does allow input even with a space | System does allow the input. | **Pass** |

### Updated Test Cases

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Expected Output** | **Actual Output** | **Pass/Fail** |
| Enter “&\*%!” into the fields | System does not allow input. | System blocks any special characters from being inputted. | **Pass** |
| Enter “A!!BO&^” into the fields | System does not allow input. | System does not allow special characters to be entered and only allows the letters. | **Pass** |

## Screenshots

A screen shot of a computer program

AI-generated content may be incorrect.

# Usability Testing

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Feedback / Compliance** | | | | | |
|  | Always | Sometimes | Never | N/A | Notes |
| It is always clear what is happening on the site? | **✓** |  |  |  | End users are able to understand what is happening on the pages. |
| Users are made aware if the system is awaiting user input? | **✓** |  |  |  | Typing indicators are provided when user input is required. |
| Progress indicators are present (where applicable)? |  |  |  | **✓** | N/A |
| Users can contact the company via email or web forms? |  |  |  | **✓** | No email or webform is connected to the site, assistance can be acquired from IT |
| Help is available (where applicable)? | **✓** |  |  |  | Additional help is available via User Guide created by IT Personnel. |
| **Consistency**  **Compliance** | | | | | |
|  | Always | Sometimes | Never | N/A | Notes |
| Only one word or term is used to describe any link? | **✓** |  |  |  | Wording is consistent throughout all pages. |
| Links match titles of the pages or external sites to which they refer? | **✓** |  |  |  | Links are labelled correctly. |
| Custom colours are used for links and visited links? |  |  | **✓** |  | Links have consistent colour scheme throughout. |
| Application is consistent with general web usage? | **✓** |  |  |  | Content is consistent throughout the whole system. |
| **Error prevention and correction**  **Compliance** | | | | | |
|  | Always | Sometimes | Never | N/A | Notes |
| Errors do not occur unnecessarily? | **✓** |  |  |  | Systems created correctly to keep errors minimal. |
| Are error messages - if generated - in plain language? | **✓** |  |  |  | Errors are provided in a clear and understanding layout. |
| Error messages describe what action is necessary to recover? | **✓** |  |  |  | Errors provide enough information to easily recover and move on. |
| Error messages provide a clear exit point from the application? | **✓** |  |  |  | Errors have a clear point to continue. |
| Error messages provide contact details for assistance? |  |  |  | **✓** | N/A |

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|  | | | | | | |
| **Visual Clarity**  **Compliance** | | | | | | |
|  | Always | Sometimes | | Never | N/A | Notes |
| The layout is clear and understandable? | **✓** |  | |  |  | Design is clear and easy to use for all users. |
| There is sufficient ‘white space’? | **✓** |  | |  |  | All page content is spread evenly with sufficient white space. |
| Unnecessary animation is avoided? |  |  | |  | **✓** | N/A |
| **Navigation**  **Compliance** | | | | | | |
|  | Always | | Sometimes | Never | N/A | Notes |
| There is a clear indication of the current location within the site? | **✓** | |  |  |  | Subpages are labelled correctly. |
| There is a clearly identified link to the Home page? | **✓** | |  |  |  | Page Navigation is always shown. |
| All major parts of the site can be accessed from the Home page? |  | | **✓** |  |  | Most pages can be found on navigation. |
| A site map is available? |  | |  |  | **✓** | Webpage is designed to be easy to navigate and locate content. |
| Site structure is simple with no complex navigation required? | **✓** | |  |  |  | Site is created to be as simple and usable as possible. |
| A Search function is available (where applicable)? |  | |  |  | **✓** | N/A |
| **Functionality**  **Compliance** | | | | | | |
|  | Always | | Sometimes | Never | N/A | Notes |
| All functionality is clearly labelled? | **✓** | |  |  |  | All functional content is displayed as required. |
| All necessary functionality is available without leaving the site? | **✓** | |  |  |  | All tasks & operations can be completed within the system. |
| **User Control / Language**  **Compliance** | | | | | | |
|  | Always | | Sometimes | Never | N/A | Notes |
| There is a clear exit point on every page? | **✓** | |  |  |  | Each page has a clear exit via page navigation. |
| All graphic links are also available as text links? | **✓** | |  |  |  | All available imagery has respective alt text. |
| The site supports the user’s workflow? | **✓** | |  |  |  | The system is easy to understand, use and operate. |
| All content is appropriate? | **✓** | |  |  |  | All content is appropriate for intended age groups using the system. |
| Language - appropriate for the user - is employed? | **✓** | |  |  |  | All content is appropriate for intended age groups using the system. |
| No unnecessary technical jargon is used? | **✓** | |  |  |  | Wording is easy to understand by all ages or technical background. |