# Test Log

The purpose of this document is to ensure that the solution, especially the validation, is working correctly. This will help to ensure that our solution is secure and that it cannot be exploited. Whilst this test log may broadcast some functionality, particularly in interest to validation, it is worth noting that a separate observation will be recorded in task 3a primarily to demonstrate the solution’s functionality.

Additionally, this document will contain multiple types of testing. There will be validation testing to ensure that invalid data is rejected, and valid data is accepted, in addition to accessibility testing to ensure the solution is WCAG compliant.

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# Validation Testing

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| **Description of test** | **Test data to be used (if required)** | **Expected outcome** | **Actual Output** | **Comments and intended actions** |
| Presence check for first name value in register action | **First name: [blank]**  Last name: Hodgson  Email: [jamieh@gmail.com](mailto:jamiehodgson@gmail.com)  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is rejected as nothing has been inputted |  | Complete |
| Invalid boundary value test for first name in register action | **First name: J**  Last name: Hodgson  Email: [jamieh@gmail.com](mailto:jamiehodgson@gmail.com)  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is rejected as it is less than minimum length (2 characters) |  | Complete |
| Valid boundary value test for first name in register action | **First name: Ja**  Last name: Hodgson  Email: [jamieh@gmail.com](mailto:jamiehodgson@gmail.com)  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is accepted as it is minimum length (2 characters) |  | Complete |
| Valid boundary value test for first name in register action | **First name: J\*20**  Last name: Hodgson  Email: [jamieh@gmail.com](mailto:jamiehodgson@gmail.com)  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is accepted as it is maximum length (20 characters) |  | Complete |
| Valid boundary value test for first name in register action | **First name: J\*21**  Last name: Hodgson  Email: [jamieh@gmail.com](mailto:jamiehodgson@gmail.com)  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is rejected as it is more than maximum length (20 characters) |  | Complete |
| Presence check for last name value in register action | First name: J\*21  **Last name: [blank]**  Email: [jamieh@gmail.com](mailto:jamiehodgson@gmail.com)  Password: P@ssw0rd  Confirm password: P@ssw0rd |  |  |  |
| Invalid boundary value test for last name in register action | First name: Jamie  **Last name: H**  Email: [jamieh@gmail.com](mailto:jamiehodgson@gmail.com)  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is rejected as it is less than minimum length (2 characters) |  | Complete |
| Valid boundary value test for last name in register action | First name: Jamie  **Last name: Ho**  Email: [jamieh@gmail.com](mailto:jamiehodgson@gmail.com)  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is accepted as it is minimum length (2 characters) |  | Complete |
| Valid boundary value test for last name in register action | First name: Jamie  **Last name: H\*20**  Email: [jamieh@gmail.com](mailto:jamiehodgson@gmail.com)  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is accepted as it is maximum length (20 characters) |  | Complete |
| Invalid boundary value test for last name in register action | First name: Jamie  **Last name: H\*21**  Email: [jamieh@gmail.com](mailto:jamieh@gmail.com)  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is rejected as it is more than maximum length (20 characters) |  | Complete |
| Erroneous value test for email address in register action | First name: Jamie  Last name: Hodgson  **Email: jamieh**  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is rejected as it does not contain an @ symbol |  | Complete |
| Erroneous value test for email address in register action | First name: Jamie  Last name: Hodgson  **Email: jamieh@gmail**  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is rejected as it does not contain a top-level domain (.com) |  | If the website is deployment, an email will be sent to this address. For now, temporary validation has been added. |
| Erroneous value test for email address in register action after update | First name: Jamie  Last name: Hodgson  **Email: jamieh@gmail**  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is rejected as it does not contain a top-level domain (.com) |  | Complete. |
| Normal value test for email in register action | First name: Jamie  Last name: Hodgson  **Email: jamieh@gmail.com**  Password: P@ssw0rd  Confirm password: P@ssw0rd | Data is accepted and the information is passed into the database. |  | Complete |
| Invalid boundary test for password in register action | First name: Jamie  Last name: Hodgson  Email: jamieh@gmail.com  **Password: passw**  Confirm password: P@ssw0rd | Data is rejected as it is less than minimum length (6 characters) |  | Complete |
| Erroneous value test for password in register action | First name: Jamie  Last name: Hodgson  Email: jamieh@gmail.com  **Password: password**  Confirm password: P@ssw0rd | Data is rejected as it does not contain symbol, upper-case, or numbers. |  | Complete |
| Erroneous value test for password in register action | First name: Jamie  Last name: Hodgson  Email: jamieh@gmail.com  **Password: Passw0rd**  Confirm password: P@ssw0rd | Data is rejected as it does not contain symbol but contains an uppercase, lowercase, and number. |  | Complete |
| Normal value test for password in register action | First name: Jamie  Last name: Hodgson  Email: jamieh@gmail.com  **Password: P@ssw0rd**  Confirm password: P@ssw0rd | Data is accepted as it is greater than minimum length and contains a lower-case, upper-case, symbol and number. |  | As per GDPR, we cannot store passwords in plain text due to security risks. The password value is put through a hashing algorithm and stored as “PasswordHash”.  Complete. |
| Erroneous value test for confirm password in register action | First name: Jamie  Last name: Hodgson  Email: jamieh@gmail.com  Password: P@ssw0rd  **Confirm password: P@SSw0rd!** | This is also a valid password but assuming we signed up with the first valid password, these passwords would not match, hence it is rejected. |  | Complete |
| Normal value test for confirm password in register action | First name: Jamie  Last name: Hodgson  Email: jamieh@gmail.com  Password: P@ssw0rd  **Confirm password: P@ssw0rd** | Value is accepted as it matches the original valid password we signed up with. |  | The user’s information has been submitted to the database. As stated before, passwords are hashed to comply with GDPR’s rule regarding data security. This means that the password is jumbled, it is stored under the “passwordhash” value.  Complete |
| Presence test for email address value on log in action | **Email: [blank]**  Password: P@ssw0rd | Value is rejected as email cannot be just a blank address |  | Complete |
| Erroneous value test for email address on log in action | **Email:** [**hodgsonj@gmail.com**](mailto:hodgsonj@gmail.com)  Password: P@ssw0rd | Value does not match the email we used in the register action; hence it is rejected. |  | Complete |
| Normal value test for email address in log in action | **Email:** [**jhodgson@gmail.com**](mailto:jhodgson@gmail.com)  Password: P@ssw0rd | Value is accepted should the password be correct as it matches the email which we used in the register action. |  | Complete |
| Erroneous value test for password in log in action | Email: [hodgsonj@gmail.com](mailto:hodgsonj@gmail.com)  **Password: P4ssw@rd** | Value is rejected as it does not match the password which we used in the register action. |  | Complete |
| Normal value test for email address in log in action | Email: [hodgsonj@gmail.com](mailto:hodgsonj@gmail.com)  **Password: P@ssw0rd** | Value is accepted as it matches the password which we used in the register action. |  | Complete |
| Accuracy test for weather API | API Key: Redacted  Latitude: 52.040623  Longitude: -0.759417 | Values provided for current weather should be somewhat like other providers and services. |  | Complete |
| Accuracy test for air pollution API | API Key: Redacted  Latitude: 52.040623  Longitude: -0.759417 | Values provided for air pollution should be somewhat like other providers and services. |  | Difficult to find AQI / pollutant concentrations for our exact area, data will be assumed to be accurate as per the previous accuracy test. Complete. |
| Erroneous data test for steps field in track health action | **Steps: 12abcdef**  Calories: 2000  Cups of Water: 8 | Value is rejected as it is not a suitable number. |  | No letters can be inputted apart from e and it cannot be used without an exponent. |
| Erroneous data test for steps in track health action. | **Steps: -1**  Calories: 2000  Cups of Water: 8 | Value should be rejected as it is below the minimum value (0). |  | Complete. |
| Valid boundary test for steps in track health action | **Steps: 0**  Calories: 2000  Cups of Water: 8 | Value should be accepted as it is the minimum value (0). |  | Complete. |
| Range test for steps in track health action. | **Steps: 200000**  Calories: 2000  Cups of Water: 8 | Value should be accepted as it is the maximum value (200000) |  | Complete. |
| Range test for steps in track health action | **Steps: 200001**  Calories: 2000  Cups of Water: 8 | Value should be rejected as it is above the maximum value (200000) |  | Complete. |
| Erroneous data test for calories field in track health action | Steps: 6000  **Calories: 20abcdef**  Cups of Water: 8 | Value is rejected as it is not a suitable number. |  | No letters can be inputted apart from e and it cannot be used without an exponent. |
| Invalid boundary value test for calories in track health action | Steps: 6000  **Calories: -1**  Cups of Water: 8 | Value should be rejected as it is below the minimum value (0). |  | Complete. |
| Valid boundary value test for calories in track health action | Steps: 6000  **Calories: 0**  Cups of Water: 8 | Value should be accepted as it is the minimum value (0). |  | Complete. |
| Valid boundary value test for calories in track health action | Steps: 6000  **Calories: 50000**  Cups of Water: 8 | Value should be accepted as it is the maximum value (50000) |  | Complete. |
| Invalid boundary value test for calories in track health action | Steps: 6000  **Calories: 50001**  Cups of Water: 8 | Value should be rejected as it is above the maximum value (50000) |  | Complete. |
| Invalid boundary value test for cups of water in track health action | **Steps: 6000**  **Calories: 2000**  **Cups of Water: -1** | Value should be rejected as it is below the minimum value (0). |  | Originally this test was not included but due to complications, the water cup system does not add to the current amount but instead overwrites it.  Complete. |
| Valid boundary value test for cups of water | Steps: 6000  Calories: 50001  **Cups of Water: 0** | Value should be accepted as it is the minimum value (0). |  | Originally, this test was not included but due to complications, the water cup system does not add to the current amount but instead overwrites it.  Complete. |
| Valid boundary value test for cups of water | Steps: 6000  Calories: 50001  **Cups of Water: 100** | Value should be accepted as it is the maximum value (100) |  | Originally, this test was not included but due to complications, the water cup system does not add to the current amount but instead overwrites it.  Complete. |
| Invalid boundary value test for cups of water | Steps: 6000  Calories: 50001  **Cups of Water: 101** | Value should be rejected as it is above the maximum value (101) |  | Originally, this test was not included but due to complications, the water cup system does not add to the current amount but instead overwrites it.  Complete. |
| Presence test for image in create advice action | **Image: [blank]**  Title: Lorem ipsum  Temperature: 21  Description: Lorem ipsum sit dolor | Value is accepted and a placeholder asset is used as images are optional. |  | Complete. |
| Normal value test for image in create advice action | **Image: fever.jpg**  Title: Lorem ipsum  Temperature: 21  Description: Lorem ipsum sit dolor | Value is accepted and the image is displayed to the user |  | Complete. |
| Range test for title in add advice action | Image: [blank]  **Title: Lore**  Temperature: 21  Description: Lorem ipsum sit dolor | Value is rejected as it is less than minimum length (5 characters) |  | Complete. |
| Range test for title in add advice action | Image: [blank]  **Title: Lorem**  Temperature: 21  Description: Lorem ipsum sit dolor | Value is accepted as it is minimum length (5 characters) |  | Complete. |
| Range test for title in add advice action. | Image: [blank]  **Title: L\*50**  Temperature: 21  Description: Lorem ipsum sit dolor | Value is accepted as it is maximum length (50 characters) |  | Complete. |
| Range test for title in add advice action. | Image: [blank]  **Title: L\*51**  Temperature: 21  Description: Lorem ipsum sit dolor | Value is rejected as it is more than maximum length (50 characters) |  | The input does not enter characters after 50 characters of length.  Complete |
| Range test for temperature in add advice section | -91C | Value should be rejected as it is below the minimum value (-90). |  | The minimum value is approximately the coldest recorded temperature on Earth. This could change in the future.  Complete. |
| Range test for temperature in add advice section | -90C | Value should be accepted as it is the minimum value (-90). |  | The minimum value is approximately the coldest recorded temperature on Earth. This could change in the future.  Complete. |
| Range test for temperature in add advice section | 60C | Value should be accepted as it is the maximum value (60) |  | The maximum value is approximately the hottest recorded temperature on Earth. This could change in the future.  Complete. |

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| Range test for temperature in add advice section | 61C | Value should be rejected as it is above the maximum value (61) |  | The maximum value is approximately the hottest recorded temperature on Earth. This could change in the future.  Complete. |

# Accessibility Testing

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| --- | --- | --- | --- | --- |
| **Description of test** | **Test data to be used (if required)** | **Expected outcome** | **Actual Output** | **Comments and intended actions** |
| Accessibility test for landing page | Views/Home/Index.cshtml | No errors are detected by the accessibility checker. |  | Complete. |
| Accessibility test for privacy oage | Views/Home/Privacy.cshtml | No errors are detected by the accessibility checker. |  | Complete. |
| Accessibility test for create advice page | Views/Advice/Create.cshtml | No errors are detected by the accessibility checker |  | Complete. |
| Accessibility test for delete advice page | Views/Advice/Delete.cshtml | No errors are detected by the accessibility checker |  | Complete. |
| Accessibility test for details advice page | Views/Advice/Details.cshtml | No errors are detected by the accessibility checker |  | This would be from the images which the user has uploaded. In a future iteration, we will add an image description field which can be used as alternative text. |
| Accessibility test for edit advice page | Views/Advice/Edit.cshtml | No errors are detected by the accessibility checker |  | Complete. |
| Accessibility test for index advice page | Views/Advice/Index.cshtml | No errors are detected by the accessibility checker |  | This would be from the images which the user has uploaded. In a future iteration, we will add an image description field which can be used as alternative text. |
| Accessibility test for my advice page | Views/Advice/MyAdvice.cshtml | No errors are detected by the accessibility checker |  | This would be from the images which the user has uploaded. In a future iteration, we will add an image description field which can be used as alternative text. |
| Accessibility test for create entry page | Views/Health /Create.cshtml | No errors are detected by the accessibility checker |  | Complete. |
| Accessibility test for delete entry page | Views/Health/Delete.cshtml | No errors are detected by the accessibility checker |  | Complete. |
| Accessibility test for edit entry page | Views/Health /Edit.cshtml | No errors are detected by the accessibility checker |  | Complete. |
| Accessibility test for index diary page | Views/Health/Index.cshtml | No errors are detected by the accessibility checker |  | Complete. |
| Accessibility test for my diary page | Views/Health /MyHealth.cshtml | No errors are detected by the accessibility checker |  | Complete. |
| Accessibility test for forecast page | Views/Dashboard/Forecast.cshtml | No errors are detected by the accessibility checker |  | Complete |
| Accessibility test for air quality page | Views/Dashboard/AirQuality.cshtml | No errors are detected by the accessibility checker. |  | Complete |