Test Execution Log

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# Application under Test (AUT)

ENSEK Automation Candidate Test website <https://ensekautomationcandidatetest.azurewebsites.net/>

## Test Environment

Latest version of Chrome, running on a Windows 11 PC. The viewport is maximised in a standard definition display at 1920 x 1080 resolution at 100% zoom.

Bugs are listed at the end of the document, following the test execution log.

*NB. It is recommended to view this document in Read Mode or Web Layout.*

## **T1:** Top-level menu – PASSED

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| --- | --- | --- | --- | --- | --- |
| **Ref** | **Test Objective** | **Actions** | **Expected Result** | **Actual Result & Bug Ref** | **Pass/Fail** |
| T1.1 | Top-level menu is available | Open the AUT in the browser and check the menu | The application opens to the Home page and the menu contains links for:   * Home * About * Contact * Register * Log In | As expected | PASS |
| T1.2 | Menu items open the correct pages | Click each menu item in turn and verify the page navigated to | Home -> Opens the ENSEK welcome page  About -> Opens the About ENSEK page  Contact -> Opens the page containing contact information  Register -> Opens the page containing a registration form  Log In -> Opens the page containing a login form | As expected | PASS |

## **T2:** Registration process – FAILED

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| **Ref** | **Test Objective** | **Actions** | **Expected Result** | **Actual Result & Bug Ref** | **Pass/Fail** |
| T2.1 | The registration form is clearly readable with no spelling errors | Open the Register page from the menu and inspect the text on the page | All text on the page is clearly readable and there are no spelling errors | As expected | PASS |
| T2.2 | A user can register using valid credentials | Populate all form fields with valid data and submit | The user’s form data is accepted and they are shown a message informing them their account is now registered | Bug ref B1.  Error returned when valid data supplied to the form | FAIL |
| T2.3 | The user’s email address must be in a valid format | Attempt to register a new account with valid passwords, using the following email addresses:   1. @test.com 2. john@ 3. john@test 4. !pete@test.com 5. alex(f)gee@test.com 6. jane@beale@test.com 7. bree”tay”lor@test.com 8. fox owl@test.com 9. doc\page@test.com 10. first.name.middle.name.last.hyphen.names@myinternetwebsite.org.uk | The user is prevented from registering with any of these email addresses. They are returned to the registration form and shown an error message | Bug ref B2.  Email addresses 3, 4 and 10 were all accepted as valid email addresses | FAIL |
| T2.4 | The user’s password or confirm password must not be blank | Attempt to register a new account with a valid email address but with only password populated, then with only email and confirm password populated | The user is prevented from registering without populating both password and confirm password. They are returned to the registration form and shown an error message | As expected | PASS |
| T2.5 | The user’s passwords must match | Attempt to register a new account with a valid email address but with non-matching strings in password and confirm password | The user is prevented from registering without populating both password and confirm password with the same string. They are returned to the registration form and shown an error message | As expected | PASS |
| T2.7 | The password must meet complexity requirements | Attempt to register a new account with a valid email address, using the following passwords in both fields:   * aB£d3 * LetMeIn * 123456 * pa55w0rd * PA$$WORD | The user is prevented from registering. They are returned to the registration form with a message informing them of the complexity requirement that has not been met:   * At least 6 characters long * At least one non-letter or digit character * At least one digit * At least one upper-case character * At least one lower-case character | As expected | PASS |
| T2.8 | The user must not be able to register with the same email twice | Attempt to register again with the same email address used in T2.2 and a new password | The user is prevented from registering with the same email address again. They are returned to the registration form and shown an error message | Unable to test as the first account was not created (ref T2.2) | N/A |

## **T3:** Login process – FAILED

Dependency: This should be run only after T2, as a valid account will be required for some tests.

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| **Ref** | **Test Objective** | **Actions** | **Expected Result** | **Actual Result & Bug Ref** | **Pass/Fail** |
| T3.1 | All text in the page is clearly readable with no spelling errors | Open the Login page from the menu and inspect the text on the page | All text on the page is clearly readable and there are no spelling errors | As expected | PASS |
| T3.2 | Links within the page take the user to the correct page | Links included in the page include ‘this article’ and ‘Register as a new user’. Use both of these links in turn | Clicking ‘this article’ takes the user to a Microsoft help guide on setting up ASP.NET applications.  Clicking ‘Register as a new user’ takes the user to the Register page in the test application | As expected | PASS |
| T3.3 | A user can log in using valid credentials | Ensure the user is not logged in. Populate all form fields with valid data (using the previously registered account) and submit, leaving ‘Remember me?’ unchecked | The user’s form data is accepted and they are shown a page informing them their account is now registered | Bug ref B3.  Error returned from valid-looking data | FAIL |
| T3.4 | User must supply both an email and password | Ensure the user is not logged in. Attempt to log in by supplying only a valid email address, then attempt again by supplying only a valid password, then again with missing email and password | The user is prevented from logging in. They are returned to the login page and shown an error message | As expected | PASS |
| T3.5 | User cannot log in with an incorrect password | Ensure the user is not logged in. Attempt to log in with a valid email address and invalid password | The user is prevented from logging in. They are returned to the login page and shown an error message | Unable to test as the first account was not created (ref T2.2) | N/A |
| T3.6 | User cannot log in with correct password and incorrect email | Ensure the user is not logged in. Attempt to log in with an invalid email address and using the correct password for the registered account | The user is prevented from logging in. They are returned to the login page and shown an error message | Attempted log in with email “john@” | PASS |
| T3.7 | User’s login state is remembered | Ensure the user is not logged in. Log in with valid credentials and ticking the ‘Remember me?’ tickbox. Once the user is logged in, close and reopen the browser and navigate back to the application. | The user’s session is remembered and they remain logged in after closing and reopening the browser | Unable to test as the first account was not created (ref T2.2) | N/A |

## **T4:** The Home page – FAILED

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| **Ref** | **Test Objective** | **Actions** | **Expected Result** | **Actual Result & Bug Ref** | **Pass/Fail** |
| T4.1 | All text in the page is clearly readable with no spelling errors | Open the Home page from the menu and inspect the text on the page | All text on the page is clearly readable and there are no spelling errors | Bug ref B4.  Typo in ‘Sell some energy’ section | FAIL |
| T4.2 | Buttons within the page take the user to the correct page | Click each of the 4 buttons in the page in turn and check their results | Each button takes the user to a new page as follows:   * ‘Find out more’ -> the user is taken to the ENSEK company website home page * ‘Buy energy’ -> the user is taken to a screen allowing them to purchase energy * ‘Sell energy’ -> the user is taken to a screen allowing them to sell energy * ‘Learn more’ -> the user is taken to the About screen in the test application | As expected | PASS |

## **T5:** Energy Purchase process – FAILED

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| **Ref** | **Test Objective** | **Actions** | **Expected Result** | **Actual Result & Bug Ref** | **Pass/Fail** |
| T5.1 | All text in the page is clearly readable with no spelling errors | Open the ‘Buy Energy’ page using the button on the Home page and inspect the text on the page | All text on the page is clearly readable and there are no spelling errors | Bug ref B5.  The table header and discount text contain typos | FAIL |
| T5.2 | The correct time and day is shown in the page | Check the time and day shown in the text near the top of the page | The day and time are correct as at time of loading the page. The timezone reflects the current time in GMT | As expected | PASS |
| T5.3 | Correct units are displayed for each fuel type | Inspect the values in the ‘Price’ column for each fuel type | Gas is priced per m3, Nuclear is priced per MW, Electricity is priced per kWh, Oil is priced per Litre | As expected | PASS |
| T5.4 | The user can buy a small quantity of Gas | Enter a small number in the ‘Number of Units Required’ field for Gas, more than 0 but less than the ‘Quantity of Units Available’, then click Buy | The user is shown a message informing them their purchase was successful. The message also shows the correct number purchased, the correct fuel type and the correct number of units remaining. | As expected | PASS |
| T5.4a | The user can return to the fuel page | Return to the ‘Buy Energy’ page by clicking the ‘Buy more’ button | The user is returned to the ‘Buy Energy’ page. The ‘Quantity of Units’ available has been reduced by the purchased quantity | As expected | PASS |
| T5.5 | The user can buy quantities of Electricity and Oil fuel types | Repeat steps T5.4 and T5.4a for Electricity and Oil fuel types | The expected results are the same as in T5.4 and T5.4a for each fuel type | As expected | PASS |
| T5.6 | The Reset button restores the original values for all fuel types | Click the Reset button | The ‘Quantity of Units Available’ is updated to the following values:   * Gas has 3000 * Nuclear has 0 * Electricity has 4322 * Oil has 20 | As expected | PASS |
| T5.7 | Users cannot purchase negative quantities | For each fuel type, enter a negative number for that fuel type, then click Buy | The user is prevented from purchasing negative amounts. They are returned to the ‘Buy Energy’ screen and are shown an error message | Bug ref B6.  Users can “purchase” negative quantities | FAIL |
| T5.8 | Users are able to purchase the full quantity of available units | For each fuel type, enter an amount equal to the number available for that fuel, then click Buy | The user is shown a message informing them their purchase was successful. The message also shows the correct number purchased, the correct fuel type and the correct number of units remaining. | As expected | PASS |
| T5.9 | Users cannot purchase more than is available | For each fuel type, enter a number greater than the quantity available for that fuel type, then click Buy | The user is prevented from purchasing higher amounts than are available. They are returned to the ‘Buy Energy’ screen and are shown an error message | Bug ref B7.  Users can purchase more fuel than is available. | FAIL |
| T5.10 | Users cannot purchase 0 units | For each fuel type, enter 0 for the ‘Number of Units Required’ and click Buy | The user is prevented from purchasing 0 units. They are returned to the ‘Buy Energy’ screen and are shown an error message | Bug ref B8.  Users can purchase 0 units | FAIL |
| T5.11 | Users cannot purchase blank units | For each fuel type, remove the value for the ‘Number of Units Required’ and click Buy | The user is prevented from purchasing an unknown quantity of units. They are returned to the ‘Buy Energy’ screen and are shown an error message | Bug ref B9.  An error is returned | FAIL |
| T5.12 | Users can return to the Home page | Click the ‘Back to Homepage’ link at the bottom of the page | The user is returned to the home page | As expected | PASS |

## T6: Sell Energy page – PASSED

A yellow sign with a wrench and a hammer on it

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| --- | --- | --- | --- | --- | --- |
| **Ref** | **Test Objective** | **Actions** | **Expected Result** | **Actual Result & Bug Ref** | **Pass/Fail** |
| T6.1 | All text in the page is clearly readable with no spelling errors | Open the ‘Sell Energy’ page using the button on the Home page and inspect the text on the page | All text on the page is clearly readable and there are no spelling errors | As expected | PASS |
| T6.2 | Users are informed the page is currently unavailable | Check the content on the page | A temporary graphic is displayed, showing users that the page is currently being worked on | As expected | PASS |

## **T7:** About Us page – PASSED

A screenshot of a computer

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| **Ref** | **Test Objective** | **Actions** | **Expected Result** | **Actual Result & Bug Ref** | **Pass/Fail** |
| T7.1 | All text in the page is clearly readable with no spelling errors | Open the About page from the menu and inspect the text on the page | All text on the page is clearly readable and there are no spelling errors | As expected | PASS |
| T7.2 | Buttons within the page take the user to the correct page | Click the ‘Find out more about us’ button | The user is taken to the ENSEK company website About Us page | As expected | PASS |

## **T8:** Contact page – FAILED

A hand holding a sign in front of a computer

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| --- | --- | --- | --- | --- | --- |
| **Ref** | **Test Objective** | **Actions** | **Expected Result** | **Actual Result & Bug Ref** | **Pass/Fail** |
| T8.1 | All text in the page is clearly readable with no spelling errors | Open the Contact page from the menu and inspect the text on the page | All text on the page is clearly readable and there are no spelling errors | As expected | PASS |
| T8.2 | Information on how to contact ENSEK is shown to the user | Inspect the text on the page | Information on how to contact ENSEK is shown to the user | Bug ref B10.  There is no contact information, only an error graphic with a misspelled word | FAIL |

# Bugs

The following bugs were identified while completing the previous tests. Screenshots and references to test steps are included in each bug report.

## Bug Ref: B1

|  |  |
| --- | --- |
| ***Summary:*** When valid email and password are supplied an error is returned. | |
| ***Test Ref:*** T2.2 | ***Page:*** Register |
| ***Steps to Reproduce:***   * Open the Register page from the menu * Supply a valid email address, password and matching confirm password * Click the Register button | |
| ***Expected Result:***  The user’s form data is accepted and they are shown a message informing them their account is now registered | |
| ***Actual Result:***  Nothing happens for around half a minute, then the user is shown a new page containing a large error message. The user is not logged in. | |
| ***Screenshot:*** | |

A screen shot of a computer

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## Bug Ref: B2

|  |  |
| --- | --- |
| ***Summary:*** Some invalid email addresses are accepted when registering a new account. | |
| ***Test Ref:*** T2.3 | ***Page:*** Register |
| ***Steps to Reproduce:***   * Open the Register page from the menu * Supply one of the following invalid valid email addresses with a valid password and matching confirm password:   + john@test   + !pete@test.com   + first.name.middle.name.last.hyphen.names@myinternetwebsite.org.uk * Click the Register button | |
| ***Expected Result:***  The user is prevented from registering with an invalid email address. They are returned to the registration form and shown an error message. | |
| ***Actual Result:***  Some invalid email addresses are accepted as valid. For these, nothing happens for around half a minute, then the user is shown a new page containing a large error message. The user is not logged in. | |
| ***Screenshot:*** | |

A screen shot of a computer

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## Bug Ref: B3

|  |  |
| --- | --- |
| ***Summary:*** Valid form submission in Log in screen returns an error message | |
| ***Test Ref:*** T3.3 | ***Page:*** Log in |
| ***Steps to Reproduce:***   * Open the Log in page from the menu * Supply acceptable data (email address in a valid format and password matching complexity requirements) to the log in form * Click the Log in button | |
| ***Expected Result:***  The user’s form data is accepted and they are shown a page informing them their account is now registered | |
| ***Actual Result:***  Nothing happens for around half a minute, then the user is shown a new page containing a large error message. The user is not logged in. | |
| ***Screenshot:*** | |

A screen shot of a computer

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## Bug Ref: B4

|  |  |
| --- | --- |
| ***Summary:*** Typo in ‘Sell some energy’ section | |
| ***Test Ref:*** T4.1 | ***Page:*** Home page |
| ***Steps to Reproduce:***   * Open the Home page from the menu * Check the text in the ‘Sell some energy’ section | |
| ***Expected Result:***  All text on the page is clearly readable and there are no spelling errors | |
| ***Actual Result:***  There is a typo in the paragraph in this section. The word “surpless” should be written as “surplus”. | |
| ***Screenshot:*** | |

A screenshot of a computer

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## Bug Ref: B5

|  |  |
| --- | --- |
| ***Summary:*** Typos in energy table and discount section | |
| ***Test Ref:*** T5.1 | ***Page:*** Buy Energy |
| ***Steps to Reproduce:***   * Open the ‘Buy Energy’ page from the Home page * Check the text in the headers of the table * Also check the text in the discount section | |
| ***Expected Result:***  All text on the page is clearly readable and there are no spelling errors | |
| ***Actual Result:***  There are a few typos in the page. In the energy table, the header for the units available column has “Quantity” misspelled as “Quanity” and oil should be priced per “Litre”, not “Litres”. Additionally, in the discount section the graphic shows there is a 20% saving, but the text describes a 30% saving. | |
| ***Screenshot:*** | |

A screenshot of a computer

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## Bug Ref: B6

|  |  |
| --- | --- |
| ***Summary:*** Negative quantities of fuel are accepted for purchase | |
| ***Test Ref:*** T5.7 | ***Page:*** Buy Energy |
| ***Steps to Reproduce:***   * Open the ‘Buy Energy’ page from the Home page * Enter a negative quantity in ‘Number of Units Required’ for a fuel type * Click the Buy button for that fuel type | |
| ***Expected Result:***  The user is prevented from purchasing negative amounts. They are returned to the ‘Buy Energy’ screen and are shown an error message | |
| ***Actual Result:***  The transaction was successful and the user has now “purchased” a negative quantity of fuel. | |
| ***Screenshot:*** | |

A screenshot of a computer

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## Bug Ref: B7

|  |  |
| --- | --- |
| ***Summary:*** Users are able to purchase more fuel than is available | |
| ***Test Ref:*** T5.9 | ***Page:*** Buy Energy |
| ***Steps to Reproduce:***   * Open the ‘Buy Energy’ page from the Home page * Enter a quantity in ‘Number of Units Required’ that exceeds the number available for a fuel type * Click the Buy button for that fuel type | |
| ***Expected Result:***  The user is prevented from purchasing higher amounts than are available. They are returned to the ‘Buy Energy’ screen and are shown an error message | |
| ***Actual Result:***  The transaction was successful and the user has now “purchased” more fuel than is available. That fuel now has a negative number of units available. | |
| ***Screenshot:*** | |

A close-up of a message

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A screenshot of a computer

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## Bug Ref: B8

|  |  |
| --- | --- |
| ***Summary:*** Users are able to purchase 0 units of fuel | |
| ***Test Ref:*** T5.10 | ***Page:*** Buy Energy |
| ***Steps to Reproduce:***   * Open the ‘Buy Energy’ page from the Home page * Enter a quantity of 0 in ‘Number of Units Required’ for any fuel type * Click the Buy button for that fuel type | |
| ***Expected Result:***  The user is prevented from purchasing 0 units. They are returned to the ‘Buy Energy’ screen and are shown an error message | |
| ***Actual Result:***  The transaction was successful and the user has now “purchased” 0 units of fuel. | |
| ***Screenshot:*** | |

A close-up of a text

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## Bug Ref: B9

|  |  |
| --- | --- |
| ***Summary:*** An error is displayed to the user is they try to purchase fuel with a blank quantity | |
| ***Test Ref:*** T5.11 | ***Page:*** Buy Energy |
| ***Steps to Reproduce:***   * Open the ‘Buy Energy’ page from the Home page * Remove the value from ‘Number of Units Required’ for any fuel type, leaving it empty * Click the Buy button for that fuel type | |
| ***Expected Result:***  The user is prevented from purchasing an unknown quantity of units. They are returned to the ‘Buy Energy’ screen and are shown an error message | |
| ***Actual Result:***  The user sees a new page containing only a large error message. | |
| ***Screenshot:*** | |

A screenshot of a computer

Description automatically generated

## Bug Ref: B10

|  |  |
| --- | --- |
| ***Summary:*** An error graphic with a misspelled word is displayed instead of contact information | |
| ***Test Ref:*** T8.2 | ***Page:*** Contact |
| ***Steps to Reproduce:***   * Open the Contact page from the Home page | |
| ***Expected Result:***  Information on how to contact ENSEK is shown to the user | |
| ***Actual Result:***  The user sees a large graphic containing the word “Erorr”, which is misspelled. There is no contact information in this screen. | |
| ***Screenshot:*** | |

A hand holding a sign in front of a computer

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