Text, logo

Description automatically generated

ENSEK Energy Project Test Plan

# Document Control

## Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Revision Date** | **Status / Comments / Summary of Key Changes** | **Author** |
| V 1.0 | 10-10-2022 | Draft version for review | Santosh Doreswamy |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Reference Documents

|  |  |
| --- | --- |
| **Reference Document Title** | **Reference Document Location** |
| Ensek Remote Software Tester Exercise | [Sharepoint Link](https://ensek-my.sharepoint.com/:p:/g/personal/oly_yates_ensek_co_uk/EUk9kb86g_dFqjdsK4XNmuABb7t-ctL8UgSYMV4EnCuA0g?e=ijuTxz) |
|  |  |
|  |  |

## Stakeholder List

|  |  |  |
| --- | --- | --- |
| **Stakeholder Name** | **Job Role** | **Status** |
| Santosh Doreswamy | Senior QA Candidate | Test Plan Creation |
| Oly Yates | ENSEK Engineering Manager | Review |
| TBD | Ensek Employee / QA Lead | Review |
|  |  |  |

Document Control 2

Version Control 2

Reference Documents 2

Stakeholder List 2

1. Introduction 4
   1. Purpose of the Document 4
2. Test Scope 4
   1. In Scope 4
   2. Out of Scope 4
3. Test Strategy 5
   1. Manual testing 5
   2. Automation Testing 5
   3. Entry Criteria 5
   4. Exit Criteria 5
   5. Test Artefacts Storage 6
4. Test Schedule 6
5. Test Tools & Environments 6
   1. Testing Tools 6
   2. Test Environments 6
6. Test Scenarios 7
7. Risks & Mitigations 8
8. Glossary 8

# Introduction

## Purpose of the Document

The purpose of this document is to outline the approach that will be adopted for testing the ENSEK Energy Project at ENSEK Energy Corp.

This test plan will confirm that ENSEK customers can Buy or Sell energy using ENSEK Energy Corp’s web application.

The document will outline the following:

* Test Scope
* Test Strategy
* Test Schedule
* Test Tools & Environments
* Test Scenarios
* Risks

# Test Scope

## In Scope

Testing that is in Scope:

* Functionality testing
* Usability testing
* RestAPI Automation testing

## Out of Scope

Testing that is Out of Scope:

* Cross-device and cross-platform testing
* Non-functional testing
* Interface Testing

# Test Strategy

## Manual testing

Functionality & Usability of the system will be tested manually using Chrome browser.

## Automation Testing

* RestAPI function validation will be automated using Postman tool.
* Sample Web Application function(s) will be tested using BDD SpecFlow automation framework.

## Entry Criteria

* All the requirements are defined & documented.
* Test Plan is reviewed and approved.
* Defined quality gate is reached in the previous test phase.
* Test cases are written, reviewed & approved.
* Test environment setup is completed.
* Test tools are identified, reviewed & approved.

## Exit Criteria

* All the business scenarios have been tested.
* 100% of the test cases are executed or descoped.
* All defects identified during testing are reported for review.
* A Test Completion Report / Test Evidence document has been produced, reviewed and approved.

## Test Artefacts Storage

Please refer the table below:

|  |  |
| --- | --- |
| **Artefact Name** | **Location** |
| Test Plan | Shared via Mail / GitHub |
| Test Cases | Shared via Mail / GitHub |
| Test Evidence / Report | Shared via Mail / GitHub |
| Automation Framework | GitHub repository |
| Postman Collections | GitHub repository |
| Defect Report | Shared via Mail / GitHub |

# Test Schedule

The target date for the completion of testing and submission of relevant test evidence and artefacts is 14th October 2022.

# Test Tools & Environments

## Testing Tools

Below hardware & Software components are required for the testing.

* Computer with internet connectivity.
* Browsers (Chrome)
* Visual Studio / Postman
* SpecFlow
* Github

## Test Environments

ENSEK Candidate Test website hosted on Azure Cloud will be leveraged for testing purpose. No additional environment configuration is needed to test this system.

# Test Scenarios

Below is a list of all the manual tests that will be executed. This includes both positive and negative scenarios.

The test scripts will be maintained in a separate document.

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case ID** | **Test Case Name** | **Business Function** | **Priority** |
| 1 | Basic Sanity Check | Usability | High |
| 2 | Verify About Us Page | Usability | High |
| 3 | Verify Contact Page | Usability | High |
| 4 | Verify Register Page | Usability | Medium |
| 5 | Register form validation | Functional | High |
| 6 | Verify Login Page | Usability | Medium |
| 7 | Login form validation | Functional | High |
| 8 | Verify Sell Some Energy Page | Usability | High |
| 9 | Verify Buy Some Energy Page | Usability | High |
| 10 | Validate Buying / Purchase of Energy | Functional | High |
| 11 | Validate Buying of Energy form - Negative scenarios | Functional | High |

# Risks & Mitigations

|  |  |  |
| --- | --- | --- |
| **#** | **Risks** | **Mitigation Plan** |
| 1 | Not performing cross-device and cross-platform testing can result in breakage of system for few customers. | Automation suite should be expanded to include multiple browsers & device testing. |
| 2 | Few of the functionalities are not completely developed or under maintenance. | System should be completely operational before handing it over for testing. |

# Glossary

|  |  |
| --- | --- |
| **Term** | **Explanation** |
| Visual Studio | IDE used for automation |
| Postman | Platform for building and using APIs |
| BDD | Behaviour driven development |
| SpecFlow | SpecFlow is a BDD framework for . NET |