

SOFTWARE TESTING

Objective

The primary objective of this testing is to ensure all the functionalities and UI interface of the mockup pages meet the requirements and to document any defects.

TEST I: createUser.html

Introduction

Testing of “createUser.html” is to validate that the user sign-up form works as intended. The test aims to ensure the user can successfully sign up using valid information. This document outlines the requirement analysis of the webpage, test scenarios generation, test cases, specific steps, expected results, and test data to be used during the execution of the test case.

Requirement Analysis

createUser.html page requires email, password, and re-password to complete the sign-up process, however, based on our assessment, such a sign-up page should also require the filling of location and gender selection. Also, the buttons should work as intended.

Alongside these requirements, it is also necessary for all the UI elements to be displayed to the user and function as intended.

1. Functional Requirements
 - a. Sign Up initiation Button
 - i. Description: The system should open a registration form to sign up for a new account when the Sign-Up initiation button is clicked.
 - ii. Acceptance Criteria:
 1. Users can access the registration form when the “Sign Up” button is clicked.
 - b. Email
 - i. Description: The user should provide a valid email address for account registration.
 - ii. Acceptance Criteria:
 1. The system validates the email format.
 2. The system checks if the email used is already used.
 3. The system must require the user to enter an email for signing up.
 - c. Password
 - i. Description: The user must set up a secure password for the account.
 - ii. Acceptance Criteria:
 1. Password must meet a minimum length of 8 characters and be complex enough to be secured.

2. The password must not be the same as the email address.
 3. Password should be visible or invisible when typing as chosen by the user.
 4. The system must require the user to set up a password.
- d. Repeat Password
- i. Description: The user should confirm their chosen password by re-entering it again.
 - ii. Acceptance Criteria:
 1. The system must compare the entered password in the repeated field with the initially provided password for consistency.
 2. Repeat password should be visible or invisible when typing as chosen by the user.
 3. The system must require the user to repeat their set up password.
- e. Location
- i. Description: The user should provide their location for the sign-up process.
 - ii. Acceptance Criteria:
 1. The system should provide users with a dropdown menu for location selection.
 2. The system must require users to select their location among the options provided.
- f. Gender
- i. Description: The user should specify their gender.
 - ii. Acceptance Criteria:
 1. The system provides radio buttons for users to select their gender.
 2. The system must require users to select their gender.
- g. Remember Me
- i. Description: User may choose to save their filled information as per their choice.
 - ii. Acceptance Criteria:
 1. The system saves the user-filled information after completing the sign-up process if the checkbox is ticked.
 2. The system does not save the user-filled information after the completion of the sign-up process if the checkbox is unticked.
- h. Terms & Privacy
- i. Description: The user may choose to read Terms & Privacy.
 - ii. Acceptance Criteria:
 1. The system redirects the user to the Terms & Privacy page if clicked.
- i. Cancel Button

- i. Description: User should be able to cancel their registration at any moment.
 - ii. Acceptance Criteria:
 - 1. The system returns the user to the homepage.
 - j. Cross Button
 - i. Description: User should be able to cancel their registration at any moment.
 - ii. Acceptance Criteria:
 - 1. The system returns the user to the homepage.
 - k. Sign Up Button
 - i. Description: The system should register a new user with filled information.
 - ii. Acceptance Criteria:
 - 1. The user must fill all the required fields with valid data.
 - 2. The system must save the information about the new user.
 - 3. The user is informed about the completion of the sign-up process.
2. Non-Functional Requirements
- a. Usability
 - i. Description: The sign-up process should be user-friendly.
 - ii. Acceptance Criteria:
 - 1. The sign-up form is logically organized with clear labels and instructions.
 - 2. Users receive information about invalid data.
 - b. Performance
 - i. Description: The sign-up process should be responsive and efficient.
 - ii. Acceptance Criteria:
 - 1. The sign-up page loads within an acceptable time.
 - c. Compatibility
 - i. Description: The sign-up page should ensure consistent behavior across multiple browsers.
 - ii. Acceptance Criteria:
 - 1. The sign-up page should be functional and responsive across multiple browsers.

Test Scenarios

Based on the requirement analysis, the following are the test cases designated to cover a specific aspect of the user registration feature.

S.N.	Fields	Test Scenarios	Test Case IDs
1.	Sign Up	1. User Access to the Registration Form.	TC_SU_000

2.	Email	1. Email Validation. 2. Duplicate Email Prevention.	TC_Email_###
3.	Password	1. Valid Password Creation. 2. Password Visibility.	TC_pwd_###
4.	Repeat Password	1. Re-Password Matching. 2. Password Mismatch Prevention. 3. Re-Password Visibility.	TC_re_pwd_###
5.	Location	1. Location Field Validation.	TC_loc_###
6.	Gender	1. Gender Field Validation. 2. Multiple Selection Prevention.	TC_gen_###
7.	Remember me	1. Successful Data Save with “Remember Me”. 2. Unsuccessful Data Save without “Remember Me”	TC_RM_###
8.	Terms & Privacy	1. Successful Redirection when clicked.	TC_TP_000
9.	Cancel Button	1. Cancelling User Registration.	TC_CB_000
10.	Cross Button	1. Cancelling User Registration. 2. Unsuccessful Cancellation when clicked outside the Cross Button	TC_CrB_###
11.	Sign Up Button on the Registration Form	1. Successful Sign Up with valid inputs. 2. Unsuccessful Sign Up with invalid inputs.	TC_SUR_###

Test Cases

The test cases are tagged with their Test IDs with each test case serving a purpose to attain particular objectives based on the test scenarios.

- Manual Testing: The final result of the manual testing taking into consideration 50 test cases yielded a pass-fail ratio of 28:22.
Detailed results of Manual Testing can be found in Appendix B. The table includes Test Case ID, Test Case Description, Pre Conditions, Steps, Expected Result, etc.
- Automated Testing: The final result of automated testing taking into consideration 35 test cases yielded a pass-fail ratio of 19:16.
 - Tools Used:
 - Python Programming Language
 - Selenium WebDriver

- Visual Studio Code IDE

A link for the automation code along with its installation will be provided in Appendix A. Detailed results of Automated Testing can be found in Appendix C.

TEST II: powerTrade_1.html

Introduction

Testing of “powerTrade_1.html” is to validate that the record form works as intended. The test aims to ensure a new record of a power trade can be successfully recorded/stored using valid information. This document outlines the requirement analysis of the webpage, test scenarios generation, test cases, specific steps, expected results, and test data to be used during the execution of the test case.

Requirement Analysis

powerTrade_1.html page requires data in all the fields provided to allow for submission. The buttons should work as intended and it is also necessary for all the UI elements to be displayed to the user and function as intended.

1. Functional Requirements

a. Company Name

- i. Description: The user should not be able to change the company name.
- ii. Acceptance Criteria:
 1. Company Name field is uneditable.

b. Address

- i. Description: The user should provide a valid address.
- ii. Acceptance Criteria:
 1. The system validates the address.
 2. The system must require users to enter their address.

c. Trader

- i. Description: The user must select a trader with whom the trade is to be made.
- ii. Acceptance Criteria:
 1. The system provides users with a dropdown menu for trader selection.
 2. The system must require users to select a trader among the options provided.

d. Trade Date

- i. Description: The user should select the date of the trade.
- ii. Acceptance Criteria:
 1. The trade date must be before the Delivery Dates.
 2. The trade date must be a past or a present date.
 3. The user must specify the trade date.

e. UOM Conversion

- i. Description: The user should provide a unit of measurement.

- ii. Acceptance Criteria:
 - 1. The system provides users with radio buttons for the unit of measurement selection.
 - 2. The system must require users to select a unit of measurement among the options provided.
- f. Delivery Date From
 - i. Description: The user should specify the lower limit for the delivery date.
 - ii. Acceptance Criteria:
 - 1. A “Delivery Date From” date must be after the trade date and before the “Delivery Date To” date.
 - 2. The system must require users to select a “Delivery Date From” date.
- g. Delivery Date To
 - i. Description: The user should specify the upper limit for the delivery date.
 - ii. Acceptance Criteria:
 - 1. A “Delivery Date To” date must be after the trade date and “Delivery Date From” date.
 - 2. The system must require users to select a “Delivery Date To” date.
- h. Volume
 - i. Description: The user should specify the volume of energy to be traded.
 - ii. Acceptance Criteria:
 - 1. The specified value must be an integer value greater than 0.
 - 2. No alphabets or symbols are allowed.
 - 3. The specified volume must be less than the volume available to the trader.
 - 4. The user must enter the volume of trade.
- i. Frequency
 - i. Description: The user should be able to select their measurement frequency.
 - ii. Acceptance Criteria:
 - 1. The system provides a dropdown menu for measurement frequency selection.
 - 2. The system must require the user to select a measurement frequency.
- j. Reset Button
 - i. Description: The user should be able to reset their filled form when clicked.
 - ii. Acceptance Criteria:
 - 1. The system clears all the input data when clicked.
- k. Submit Button

- i. Description: The system should register a new record with filled information.
 - ii. Acceptance Criteria:
 - 1. The user must fill all the required fields with valid data.
 - 2. The system must save the new record.
 - 3. The user is informed about the submission.
- 2. Non-Functional Requirements
 - a. User Interface
 - i. Description: The UI of the webpage should be self-explanatory and the submitted data should be displayed to the user.
 - ii. Acceptance Criteria:
 - 1. The UI elements are clear and responsive.
 - 2. Submitted data is displayed to the user.
 - b. Usability
 - i. Description: The record submission process should be user-friendly.
 - ii. Acceptance Criteria:
 - 1. The record submission form is logically organized with clear labels and instructions.
 - 2. Users receive information about invalid data.
 - c. Performance
 - i. Description: The record submission process should be responsive and efficient.
 - ii. Acceptance Criteria:
 - 1. The power trade page loads within an acceptable time.
 - d. Compatibility
 - i. Description: The record submission process should be seamless regardless of any browser.
 - ii. Acceptance Criteria:
 - 1. All features and elements of the page must operate correctly and consistently across various browsers.

Test Scenarios

Based on the requirement analysis, the following are the test cases designated to cover a specific aspect of the user registration feature.

S.N.	Fields	Test Scenarios	Test Case IDs
1.	Company Name	1. Uneditable Company Name.	TC_CN_####
2.	Address	1. Successful Address Entry. 2. Address Field Validation.	TC_Add_####

3.	Trader	1. Trader Field Validation	TC_Tr_###
4.	Trade Date	1. Trade Date Validation. 2. Unsuccessful Future Date Entry. 3. UI Functionality Validation.	TC_Td_###
5.	UOM conversion	1. UOM Conversion Field Validation. 2. Multiple Selection Prevention.	TC_UC_###
6.	Delivery Date From	1. Delivery Date Validation. 2. UI Functionality Validation.	TC_DDF_###
7.	Delivery Date To	1. Delivery Date Validation. 2. UI Functionality Validation.	TC_DDT_###
8.	Volume	1. Volume Field Validation. 2. Volume Availability Check. 3. UI Functionality Validation.	TC_Vol_###
9.	Frequency	1. Frequency Field Validation.	TC_Freq_###
10.	Reset Button	1. Successful Form Reset.	-
11.	Submit Button	1. Successful Submission. 2. Submission Confirmation Prompt.	-

Test Cases

The test cases are tagged with their Test IDs with each test case serving a purpose to attain particular objectives based on the test scenarios.

1. Manual Testing: The final result of the manual testing taking into consideration 49 test cases yielded a pass-fail ratio of 37:12.

Detailed results of Manual Testing can be found in Appendix D. The table includes Test Case ID, Test Case Description, Pre Conditions, Steps, Expected Result, etc.

2. Automated Testing:

- Tools Used:
 - Python Programming Language
 - Selenium WebDriver
 - Visual Studio Code IDE

A link for the automation code along with its installation will be provided in Appendix A.

APPENDIX A

Source Code and Installation Procedure for Testing:

https://github.com/SauravKumarMahato/Software_tree.git

Manual Testing Result for **createUser.html** : **Test Cases**

Title	Objectives	Test Case ID	Test Case Description	Test Steps	Preconditions	Test Data	Expected Results	Remarks	Status
Sign Up	To check if sign up button opens sign up (registration) form when clicked	TC_SU_000	Check if sign up button opens a registration form	1. Open HTML document: createUser.html in browser 2. Click on Sign Up button	HTML document: createUser.html should open in browser without any errors	-	User should be shown a registration form for signing up	Registration form was shown as expected	Pass
Email	To check if the field is empty	TC_Email_000	Check sign up with empty email field	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: Re-password: 12345678 Location: Keltimandu Gender: Male	User should be shown an error pop up saying "email field empty"	User was notified of the empty email field when using the test case in the given static page	Pass
	To check with the valid email format.	TC_Email_001	Check sign up using valid email	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: helio@gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: 12345678 Re-password: 12345678 Location: Keltimandu Gender: Male	User should be successfully signed up	Sign up was allowed but no redirection was made.	Pass
		TC_Email_002	Check sign up using email with number at the beginning	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: 1helio@gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: 1helio@gmail.com password: 12345678 Re-password: 12345678 Location: Keltimandu Gender: Male	User should be successfully signed up	Sign up was allowed but no redirection was made.	Pass
		TC_Email_003	Check sign up using email with valid special character not at the start or end of the recipient name	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: helio.mellow@gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio.mellow@gmail.com password: 12345678 Re-password: 12345678 Location: Keltimandu Gender: Male	User should be successfully signed up	Sign up was allowed but no redirection was made.	Pass
		TC_Email_004	Check sign up using email with no domain name and no top level domain	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: helio@ 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@ password: 12345678 Re-password: 12345678 Location: Keltimandu Gender: Male	User should be shown an error pop up saying "invalid email"	No such check was made.	Fail
	TC_Email_005	Check sign up using email with no top level domain	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: helio@gmail 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@gmail password: 12345678 Re-password: 12345678 Location: Keltimandu Gender: Male	User should be shown an error pop up saying "invalid email"	No such check was made.	Fail	
	TC_Email_006	Check sign up using email with top level domain but no domain name	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: helio.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio.com password: 12345678 Re-password: 12345678 Location: Keltimandu Gender: Male	User should be shown an error pop up saying "invalid email"	No such check was made.	Fail	
	TC_Email_007	Check sign up using email with upper case letters	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: Helio@gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: Helio@gmail.com password: 12345678 Re-password: 12345678 Location: Keltimandu Gender: Male	User should be shown an error pop up saying "invalid email"	No such check was made.	Fail	
	TC_Email_008	Check sign up using email with no recipient name	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: @gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: @gmail.com password: 12345678 Re-password: 12345678 Location: Keltimandu Gender: Male	User should be shown an error pop up saying "invalid email"	No such check was made.	Fail	
	TC_Email_009	Check sign up using email with special character at front	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: !helio@gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: !helio@gmail.com password: 12345678 Re-password: 12345678 Location: Keltimandu Gender: Male	User should be shown an error pop up saying "invalid email"	No such check was made.	Fail	
	TC_Email_010	Check sign up using special character at the end of recipient name	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: helio@gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: 12345678 Re-password: 12345678 Location: Keltimandu Gender: Male	User should be shown an error pop up saying "invalid email"	No such check was made.	Fail	
TC_Email_011	Check sign up using email with invalid special character not at the start or end of the recipient name	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: helio.mellow@gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio.mellow@gmail.com password: 12345678 Re-password: 12345678 Location: Keltimandu Gender: Male	User should be shown an error pop up saying "invalid email"	No such check was made.	Fail		

Password	To check with leading and trailing spaces.	TC_Email_012	Check sign up using email with leading space	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: helio@gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: 12345678 Re-password: 12345678 Location: Kalmharandu Gender: Male	User should be shown an error pop up saying "Invalid email" or should auto correct and remove the space	No such check was made.	Fail
	To check if the email address is already registered.	TC_Email_013	Check sign up using email with trailing space	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: helio@gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: 12345678 Re-password: 12345678 Location: Kalmharandu Gender: Male	User should be shown an error pop up saying "Invalid email" or should auto correct and remove the space	No such check was made.	Fail
	To check if the email address is already registered.	TC_Email_014	Check sign up using already registered email (email present in database)	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: johnwick@gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: johnwick@gmail.com password: 12345678 Re-password: 12345678 Location: Kalmharandu Gender: Male	User should be shown an error pop up saying "Email already registered"	No such check was made.	Fail
	To check if the field is empty.	TC_pwd_000	Check sign up using empty password field	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter password: 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: Re-password: Location: Kalmharandu Gender: Male	User should be shown an error pop up saying "password field empty"	User is notified of the empty password field when using the test case in the given static page	Pass
	To check if the password is 8 characters long.	TC_pwd_001	Check sign up using valid password length of 8 characters	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter password: pwd12345 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: pwd12345 Re-password: pwd12345 Location: Kalmharandu Gender: Male	User should be successfully signed up	Sign up was allowed but no redirection was made.	Pass
	To check if the password length of less than 8 characters	TC_pwd_002	Check sign up using invalid password length of less than 8 characters	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter password: pwd 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: pwd Re-password: pwd Location: Kalmharandu Gender: Male	User should be shown an error pop up saying "too short password"	No such check was made.	Fail
	To check if the password is the same as the email address.	TC_pwd_003	Check sign up using password same as email	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter email: helio@gmail.com 3. Enter password: helio@gmail.com 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: helio@gmail.com Re-password: helio@gmail.com Location: Kalmharandu Gender: Male	User should be shown an error pop up saying "password same as email"	No such check was made.	Fail
	To check if the password is maintained as per the option selected.	TC_pwd_004	Check if password is visible when typing if visibility is disabled	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter password: pwd12345 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: pwd12345 Re-password: pwd12345 Location: Kalmharandu Gender: Male	Password should not be visible to the user	Password was not visible as expected	Pass
	To check if the field is empty.	TC_pwd_005	Check if password is visible when typing if visibility is enabled	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter password: pwd12345 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: pwd12345 Re-password: pwd12345 Location: Kalmharandu Gender: Male	Password should be visible to the user	Password was visible as expected	Pass
	To check if the field is empty.	TC_re_pwd_000	Check sign up using valid password and empty re-password field	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter password: pwd12345 3. Enter re-password: 4. Enter valid data in other sections 5. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: pwd12345 Re-password: Location: Kalmharandu Gender: Male	User should be shown an error pop up saying "re-password field empty"	User is notified of the empty re-password field when using the test case in the given static page	Pass
	To check with a matching password.	TC_re_pwd_001	Check sign up using valid password and matching re-password	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter password: pwd12345 3. Enter re-password: pwd12345 4. Enter valid data in other sections 5. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: pwd12345 Re-password: pwd12345 Location: Kalmharandu Gender: Male	User should be successfully signed up	Password and re-password were not checked in the static page	Pass
	To check with a non-matching password.	TC_re_pwd_002	Check sign up using valid password and non-matching re-password	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter password: pwd12345678 3. Enter re-password: pwd12345678 4. Enter valid data in other sections 5. Click on sign up	Other fields must be filled with valid data	email: helio@gmail.com password: pwd12345 Re-password: pwd12345678 Location: Kalmharandu Gender: Male	User should be shown an error pop up saying "password and re-password don't match"	Password and re-password were not checked in the static page	Fail

	To check if the visibility of the repeat password is maintained as per the option selected.	TC_re_pwd_003	Check if repeat password is visible when typing if visibility is disabled	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter password: pwd12345 3. Enter re-password: pwd12345 4. Disable visibility of re-password 5. Enter valid data in other sections 6. Click on sign up	Other fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Kaimrandu Gender: Male	Re-password should not be visible to the user	Re-password was not visible as expected	Pass
		TC_re_pwd_004	Check if repeat password is visible when typing if visibility is enabled	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter password: pwd12345 3. Enter re-password: pwd12345 4. Enable visibility of re-password 5. Enter valid data in other sections 6. Click on sign up	Other fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Kaimrandu Gender: Male	Re-password should be visible to the user	Re-password was visible as expected	Pass
	To check with an empty field.	TC_loc_000	Check sign up without selecting any location option	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Leave the location option as it is 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Select One Gender: Male	User should be shown an error pop up saying "select a location"	Since the default option was selected as "Select One" which although it is not a location, is one of the options, thus sign up was allowed but no redirection was made.	Fail
		TC_loc_001	Check sign up with selection of location "Kaimrandu"	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Select the location as "Kaimrandu" 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Kaimrandu Gender: Male	User should be successfully signed up	Sign up was allowed but no redirection was made.	Pass
		TC_loc_002	Check sign up with selection of location "Bhaktapur"	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Select the location as "Bhaktapur" 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Bhaktapur Gender: Male	User should be successfully signed up	Sign up was allowed but no redirection was made.	Pass
		TC_loc_003	Check sign up with selection of location "Lalitpur"	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Select the location as "Lalitpur" 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalitpur Gender: Male	User should be successfully signed up	Sign up was allowed but no redirection was made.	Pass
Location	To check with a non-empty field.	TC_gen_000	Check sign up without selecting any gender option	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Leave the gender field as it is 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalitpur Gender:	User should be shown an error pop up saying "select a gender"	Sign up was allowed but no redirection was made.	Fail
		TC_gen_001	Check sign up with selection of gender option as "Male"	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Select the gender field to be "Male" 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalitpur Gender: Male	User should be successfully signed up	Sign up was allowed but no redirection was made.	Pass
		TC_gen_002	Check sign up with selection of gender option as "Female"	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Select the gender field to be "Female" 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalitpur Gender: Female	User should be successfully signed up	Sign up was allowed but no redirection was made.	Pass
		TC_gen_003	Check sign up with selection of gender option as "Other"	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Select the gender field to be "Other" 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalitpur Gender: Other	User should be shown an error pop up saying "multiple selections in gender field"	Sign up was allowed but no redirection was made.	Pass
	To check with multiple options.	TC_gen_004	Check if selection of multiple genders at once is allowed	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Select multiple genders: Male, Female and Other 3. Enter valid data in other sections 4. Click on sign up	Other fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalitpur Gender: Male, Female, Other	User should be shown an error pop up saying "multiple selections in gender field"	Selection of multiple genders was not allowed	Pass
		TC_RM_000	Check if check marking remember me saves the filled data, when going back to the registration page	1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter valid data in all sections and checkmark remember me 3. Click on sign up 4. Go back clicking back arrow button on browser or press Alt+LeftArrow on Keyboard	All fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalitpur Gender: Male Remember Me: checked	All fields should be as filled before except for password and re-password	All fields were filled as before except for password and re-password	Pass

Remember Me Checkmark	To check with a non-empty field.	TC_RM_001	Check if check marking remember me saves the filled data after refreshing the registration page	<ol style="list-style-type: none"> 1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter valid data in all sections and checkmark remember me 3. Click on sign up 4. Refresh the registration form or close and reopen the HTML document: createUser.html in browser 	All fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalpur Gender: Male Remember Me: checked	All fields should be as filled before except for password and re-password	No data was saved	Fail
		TC_RM_002	Check if check marking remember me saves the filled data, after clicking on cancel button	<ol style="list-style-type: none"> 1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter some data in all sections and checkmark remember me 3. Click on Cancel 4. Re-enter using sign up button 	All fields must be filled with some data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalpur Gender: Male Remember Me: checked	All fields should be as filled before except for password and re-password	All fields were filled as before except for password and re-password	Pass
		TC_RM_003	Check if not check marking remember me saves the filled data, after refreshing the registration page	<ol style="list-style-type: none"> 1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter valid data in all sections and unchecked remember me 3. Click on sign up 4. Go back clicking back arrow button on browser or press Alt+LeftArrow on Keyboard and click on Sign Up 	All fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalpur Gender: Male Remember Me: unchecked	All fields should be empty	All fields were filled except for password and re-password	Fail
	To check with an empty field.	TC_RM_004	Check if not check marking remember me saves the filled data, after refreshing the registration page	<ol style="list-style-type: none"> 1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter valid data in all sections and unchecked remember me 3. Click on sign up 4. Refresh the registration form or close and reopen the HTML document: createUser.html in browser and click on Sign Up 	All fields must be filled with valid data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalpur Gender: Male Remember Me: unchecked	All fields should be empty	No data was saved	Pass
		TC_RM_005	Check if not check marking remember me saves the filled data, after clicking on cancel button	<ol style="list-style-type: none"> 1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Enter some data in all sections and unchecked remember me 3. Click on Cancel 4. Re-enter using sign up button 	All fields must be filled with some data	email: hello@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalpur Gender: Male Remember Me: unchecked	All fields should be empty	All fields were filled except for password and re-password	Fail
Terms and Privacy	To check if the page is redirected to the Terms & Privacy page/document when clicking on the Terms & Privacy link	TC_TP_000	Check if the page is redirected to Terms and Privacy page/document when clicked on Terms & Privacy link	<ol style="list-style-type: none"> 1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Click on Terms & Privacy link 	Registration form should be open without any errors	-	Terms & Privacy page or document should be opened	Clicking on the link had no effect	Fail
Cancel Button	To check if clicking on the cancel button lands the user on the previous sign-up page i.e home page	TC_CB_000	Check if cancel button redirects user to the previous sign up page i.e. home page	<ol style="list-style-type: none"> 1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Click on Cancel button 3. Click on Sign Up button 	Registration form should be open without any errors	-	Page should be redirected to home page	Page was redirected to home page	Pass
Cross Button		TC_CB_000	Check if cross button redirects user to the previous sign up page i.e home page	<ol style="list-style-type: none"> 1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Click on anywhere outside cross button but within the form box 3. Click on Sign Up button 	Registration form should be open without any errors	-	Page should be redirected to anywhere	Page was not redirected to any other page	Pass
	To check if clicking anywhere outside the cross button lands the user on the previous sign-up page i.e home page	TC_CB_001	Check if clicking anywhere outside cross button but within the form box redirects user to the previous sign up page i.e. home page	<ol style="list-style-type: none"> 1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Click on anywhere outside cross button but within the form box 3. Click on Sign Up button 	Registration form should be open without any errors	-	Page should not be redirected to anywhere	Page was redirected to home page	Fail
		TC_CB_002	Check if clicking anywhere outside cross button and outside the form box redirects user to the previous sign up page i.e. home page	<ol style="list-style-type: none"> 1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Click on anywhere outside cross button and outside the form box 3. Click on Sign Up button 	Registration form should be open without any errors	-	Page should not be redirected to anywhere	Page was redirected to home page	Fail
		TC_SUR_000	Check sign up button with all empty fields in the registration form	<ol style="list-style-type: none"> 1. Open HTML document: createUser.html in browser and click on Sign Up button 2. Leave the registration fields empty 3. Click on Sign Up button 	All fields should be empty	email: password: Location: Gender:	User should be shown an error pop up saying "empty fields"	User is notified of the empty fields when using the test case in the given static page	Pass

Sign Up Button on the Registration Form	To check if the sign up button submits the registration form with empty fields	TC_SUR_001	Check sign up button with some empty fields in the registration form	1. Open HTML document created User.html in browser 2. Enter valid data in some fields and leave some fields empty 3. Click on Sign Up button	Some fields should be filled with valid data and others left empty	email: helio@gmail.com password: Re-password: Location: Lalpur Gender: Male or email: password: pwd12345 Re-password: pwd12345 Location: Lalpur Gender: Male email: password: Re-password: pwd12345 Location: Lalpur Gender: Male and so on, at random	User should be shown an error pop up saying "empty fields"	User is notified if the empty fields if the fields left empty are empty, password, re-password when using the test case in the given static page, else the sign up is allowed	Fail
	To check if the sign up button submits the registration form with filled fields	TC_SUR_002	Check sign up button with all filled fields in the registration form	1. Open HTML document created User.html in browser 2. Enter valid data in all fields 3. Click on Sign Up button	All fields must be filled with valid data	email: helio@gmail.com password: pwd12345 Re-password: pwd12345 Location: Lalpur Gender: Male	User should be successfully signed up	Sign up was allowed but no redirection was made.	Pass

APPENDIX C

Result of Automated Testing of createUser.html:  Automated Test.xlsx

Look up test case IDs in Appendix B to read the test case description of the automated test cases.

Here, validity 0 represents positive test cases and 1 represents negative test cases.

ID	Form Inputs	Validity	Status
TC_Email_000	email: password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	pass
TC_Email_001	email: hello@gmail.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	1	pass
TC_Email_002	email: 1hello@gmail.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	1	pass
TC_Email_003	email: hello.mellow@gmail.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	1	pass
TC_Email_004	email: hello@ password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	fail
TC_Email_005	email: hello@gmail password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	fail

TC_Email_006	email: hello@.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	fail
TC_Email_007	email: Hello@gmail.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	fail
TC_Email_008	email: @gmail.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	fail
TC_Email_009	email: _hello@gmail.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	fail
TC_Email_010	email: hello.@gmail.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	fail
TC_Email_011	email: hello#mellow@gmail.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	fail

TC_Email_012	email: hello@gmail.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	fail
TC_Email_013	email: hello@gmail.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	fail
TC_Email_014	email: johnwick@gmail.com password : 12345678 repeat password: 12345678 location: Kathmandu gender: Male	0	fail
TC_pwd_000	email: hello@gmail.com password : repeat password: location: Kathmandu gender: Male	0	pass
TC_pwd_001	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Kathmandu gender: Male	1	pass
TC_pwd_002	email: hello@gmail.com password : pwd repeat password: pwd location: Kathmandu gender: Male	0	fail

TC_pwd_003	email: hello@gmail.com password : hello@gmail.com repeat password: hello@gmail.com location: Kathmandu gender: Male	0	fail
TC_pwd_004	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Kathmandu gender: Male	1	pass
TC_pwd_005	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Kathmandu gender: Male	1	pass
TC_re_pwd_000	email: hello@gmail.com password : pwd12345 repeat password: location: Kathmandu gender: Male	0	pass
TC_re_pwd_001	email: hello@gmail.com password : pwd12345 repeat password: pwd12345678 location: Kathmandu gender: Male	1	pass
TC_re_pwd_002	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Kathmandu gender: Male	1	pass

TC_re_pwd_003	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Kathmandu gender: Male	1	pass
TC_re_pwd_004	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Select One gender: Male	0	fail
TC_loc_000	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Kathmandu gender: Male	1	pass
TC_loc_001	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Bhaktapur gender: Male	1	pass
TC_loc_002	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Lalitpur gender: Male	1	pass
TC_loc_003	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Lalitpur gender:	0	fail

TC_gen_000	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Lalitpur gender: Male	1	pass
TC_gen_001	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Lalitpur gender: Female	1	pass
TC_gen_002	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Lalitpur gender: Other	1	pass
TC_gen_003	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Lalitpur gender: Male, Female, Other	0	fail
TC_gen_004	email: hello@gmail.com password : pwd12345 repeat password: pwd12345 location: Lalitpur gender: Male	1	pass

APPENDIX D

Result of manual testing of powerTrade_1.html:

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 Test Cases

Title	Objectives	Test Case ID	Test Case Description	Test Steps	Preconditions	Test Data	Expected Results	Remarks	Status
Company Name	To check if the field is editable	TC_CN_000	Check if the field is editable	1. Open HTML document powerTrade_1.html in browser 2. Click on Company Name Field	-	Company Name: K8S Energy Address: Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Company Name must be uneditable and should remain K8S energy	Company Name was uneditable and remained K8S energy	Pass
	To check if the field is empty	TC_Add_000	Check Submit using empty address	1. Open HTML document powerTrade_1.html in browser 2. Keep the field empty 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K8S Energy Address: Kalmat-21 Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Enter address"	Error message "Please fill out this field" was displayed at address field.	Pass
	To check if the field contains alphanumeric value	TC_Add_001	Check Submit using address having combination of alphabetic and numeric character	1. Open HTML document powerTrade_1.html in browser 2. Keep field alpha-numeric character 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K8S Energy Address: Kalmat-21 Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	User should be able to submit form successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
	To check if the field is in invalid format	TC_Add_002	Check if the Address field contains special symbols and emojis	1. Open HTML document powerTrade_1.html in browser 2. Enter address containing special character or emojis 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K8S Energy Address: kalmahudu@1342 Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Enter address in correct format"	No error was displayed and form submitted successfully without redirection to any other page	Fail
Address	To check if the field is empty	TC_Tr_000	Check Submit using empty trader field	1. Open HTML document powerTrade_1.html in browser 2. Keep the Trader field empty 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K8S Energy Address: Puditovok Trader: Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Select trader"	Error message "Please fill out this field" was displayed at Trader field.	Pass
	To check if the field contains alphanumeric value	TC_Tr_001	Check submit using Trader: A Energy	1. Open HTML document powerTrade_1.html in browser 2. Select 'A Energy' in Trader field 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K8S Energy Address: Puditovok Trader: B Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
	To check if the field is empty	TC_Tr_002	Check submit using Trader: B Energy	1. Open HTML document powerTrade_1.html in browser 2. Select 'B Energy' in Trader field 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K8S Energy Address: Puditovok Trader: C Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
	To check if the field has a valid selection	TC_Tr_003	Check submit using Trader: C Energy	1. Open HTML document powerTrade_1.html in browser 2. Select 'C Energy' in Trader field 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K8S Energy Address: Puditovok Trader: C Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
Trader	To check if the field has a valid selection								

		TC_Td_004	Check submit using Trader: D Energy	1. Open HTML document: powerTrade_1.html in browser 2. Select 'D Energy' in Trader field 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K&S Energy Address: Pulchovok Trader: D Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
	To check if the field is empty	TC_Td_000	Check Submit without selecting any date from date picker	1. Open HTML document: powerTrade_1.html in browser 2. Keep the field empty 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K&S Energy Address: Trader: A Energy Trade Date: mmmddyyy UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "enter date"	Error message "Please fill out this field" was displayed	Pass
	To check the field with valid "Trade Date"	TC_Td_001	Check submit with valid "Trade Date" i.e. before "Delivery Date From" date and "Delivery Date To" date	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Trade Date" before that of "Delivery Date From" date and "Delivery Date To" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K&S Energy Address: Pulchovok Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
		TC_Td_002	Check submit with "Trade Date" date with future date value	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Trade Date" such that it is a future date and before that of "Delivery Date From" date and "Delivery Date To" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K&S Energy Address: Pulchovok Trader: A Energy Trade Date: 01/18/2024 UOM Conversion: Kw Delivery Date From: 01/19/2024 Delivery Date To: 01/20/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Invalid "Trade Date" date"	No error was displayed and form submitted successfully without redirection to any other page	Fail
		TC_Td_003	Check submit with "Trade Date" date i.e. after "Delivery Date From" date and before "Delivery Date To" date	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Trade Date" after that of "Delivery Date From" date and before that of "Delivery Date To" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K&S Energy Address: Pulchovok Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/15/2024 Delivery Date To: 01/17/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Invalid "Trade Date" date"	No error was displayed and form submitted successfully without redirection to any other page	Fail
	To check the field with invalid "Trade Date"	TC_Td_004	Check submit with "Trade Date" date i.e. before "Delivery Date From" date and after "Delivery Date To" date	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Trade Date" before that of "Delivery Date From" date and after that of "Delivery Date To" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K&S Energy Address: Pulchovok Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/12/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Invalid "Trade Date" date"	No error was displayed and form submitted successfully without redirection to any other page	Fail
		TC_Td_005	Check submit with "Trade Date" date i.e. after "Delivery Date From" date and "Delivery Date To" date	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Trade Date" after that of "Delivery Date From" date and "Delivery Date To" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: K&S Energy Address: Pulchovok Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/14/2024 Delivery Date To: 01/15/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Invalid "Trade Date" date"	No error was displayed and form submitted successfully without redirection to any other page	Fail
	To verify date picker interface is working correctly	TC_Td_006	Check calendar buttons and arrows to move between months and years are working as expected	1. Open HTML document: powerTrade_1.html in browser 2. Try navigating and selecting years and months in "Trade Date" field	-	-	User should navigate through years, months smoothly	The interface functioned smoothly as expected	Pass

	To check if date picked displayed correctly after choosing	TC_Td_007	Check if selected date is displayed correctly as per the format	1. Open HTML document: powerTrade_1.html in browser 2. Select a date		Trade Date: 01/16/2024	User should be able to see the selected date	Chosen date was displayed in correct format	Pass
	To check if the clear button works correctly	TC_Td_008	Check if the date is cleared when the clear button is clicked	1. Open HTML document: powerTrade_1.html in browser 2. Select a date in "Trade Date" field 3. Click on clear button	Other fields must be filled with valid data		User should be able to clear the selected date	Chosen date was displayed in correct format	Pass
UOM Conversion	To check if the field is empty	TC_UC_000	Check submit with selection of UOM Conversion empty	1. Open HTML document: powerTrade_1.html in browser 2. Leave the UOM Conversion field empty or as it is 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Select of UOM"	Error message "Please fill out this field" was displayed at "UOM Conversion" Field	Pass
	To check the field with a valid selection	TC_UC_001	Check submit with selection of UOM Conversion as Kw	1. Open HTML document: powerTrade_1.html in browser 2. Select the UOM Conversion field as Kw 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Mw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
		TC_UC_002	Check submit with selection of UOM Conversion as Mw	1. Open HTML document: powerTrade_1.html in browser 2. Select the UOM Conversion field as Mw 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: mm.dyyyy Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
	To check if the field is empty	TC_DDF_000	Check submit with the "Delivery Date From" empty or as it is	1. Open HTML document: powerTrade_1.html in browser 2. Leave the "Delivery Date From" empty 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Select "Delivery Date From" date"	Error message "Please fill out this field" was displayed at "Delivery Date From" field.	Pass
	To check the field with valid "Delivery Date From" date (Date between Trade date and "Delivery Date To" date)	TC_DDF_001	Check submit with valid "Delivery Date From" date i.e. after Trade Date but before "Delivery Date To" date	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Delivery Date From" after that of trade date and before that of "Delivery Date To" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
		TC_DDF_002	Check submit with "Delivery Date From" before Trade Date and "Delivery Date To" date	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Delivery Date From" before that of trade date and before that of "Delivery Date To" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/15/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Invalid "Delivery Date From" date"	No error was displayed and form submitted successfully without redirection to any other page	Fail

Delivery Date From	To check the field with invalid "Delivery Date From" date	TC_DDF_003	Check submit with "Delivery Date From" date after Trade Date and "Delivery Date To" date	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Delivery Date From" after that of trade date and after that of "Delivery Date To" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchook Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/19/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Invalid "Delivery Date From" date"	No error was displayed and form submitted successfully without redirection to any other page	Fail
		TC_DDF_004	Check submit with "Delivery Date From" date before Trade Date but after "Delivery Date To" date	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Delivery Date From" before that of trade date and after that of "Delivery Date To" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchook Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/15/2024 Delivery Date To: 01/14/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Invalid "Delivery Date From" date"	No error was displayed and form submitted successfully without redirection to any other page	Fail
	To verify date picker interface is working correctly	TC_DDF_005	Check calendar buttons and arrows to move between months and years are working as expected	1. Open HTML document: powerTrade_1.html in browser 2. Try navigating and selecting years and months in "Delivery Date From" field	-	-	User should navigate through years, months smoothly	The interface functioned smoothly as expected	Pass
	To check if date picked displayed correctly after choosing	TC_DDF_006	Check if selected date is displayed correctly as per the format	1. Open HTML document: powerTrade_1.html in browser 2. Select a date in "Delivery Date From" field	-	Delivery Date From: 01/17/2024	User should be able to see the selected date	Chooosen date was displayed in correct format	Pass
	To check if the clear button works correctly	TC_DDF_007	Check if the date is cleared when the clear button is clicked	1. Open HTML document: powerTrade_1.html in browser 2. select a date in "Delivery Date From" field 3. Click on clear button	-	-	User should be able to clear the selected date	Chooosen date was displayed in correct format	Pass
	To check if the field is empty	TC_DDT_000	Check submit with the "Delivery Date To" empty or as it is	1. Open HTML document: powerTrade_1.html in browser 2. Leave the "Delivery Date To" empty or as it is 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchook Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: mmdidyyy Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Select "Delivery Date To" date"	Error message "Please fill out this field" was displayed at "Delivery Date To" field.	Pass
	To check the field with valid "Delivery Date To"	TC_DDT_001	Check submit with valid "Delivery Date To" date i.e. after Trade Date and "Delivery Date From" date	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Delivery Date To" after that of trade date and "Delivery Date From" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchook Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
Delivery Date To		TC_DDT_002	Check submit with "Delivery Date To" date after Trade Date and before "Delivery Date From" date	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Delivery Date To" after that of trade date and before that of "Delivery Date From" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchook Trader: A Energy Trade Date: 01/14/2024 UOM Conversion: Kw Delivery Date From: 01/18/2024 Delivery Date To: 01/17/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Invalid "Delivery Date To" date"	No error was displayed and form submitted successfully without redirection to any other page	Fail
	To check the field with invalid "Delivery Date To"	TC_DDT_003	Check submit with "Delivery Date To" date before Trade Date and after "Delivery Date From" date	1. Open HTML document: powerTrade_1.html in browser 2. Set the "Delivery Date To" before that of trade date and after that of "Delivery Date From" date 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchook Trader: A Energy Trade Date: 01/14/2024 UOM Conversion: Kw Delivery Date From: 01/11/2024 Delivery Date To: 01/12/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Invalid "Delivery Date To" date"	No error was displayed and form submitted successfully without redirection to any other page	Fail

	To verify date picker interface is working correctly	TC_DDT_005	Check calendar buttons and arrows to move between months and years are working as expected	1. Open HTML document: powerTrade_1.html in browser 2. Try navigating and selecting years and months in "Delivery Date" to field	-	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/15/2024 Volume: 1 Frequency: Daily	User should be able to navigate through years, months smoothly	The interface functioned smoothly as expected	Pass
	To check if date picked displayed correctly after choosing	TC_DDT_006	Check if selected date is displayed correctly as per the format	1. Open HTML document: powerTrade_1.html in browser 2. Select a date in "Delivery Date" to field	-	Delivery Date To: 01/18/2024	User should be able to see the selected date	Chooosen date was displayed in corred format	Pass
	To check if the clear button works correctly	TC_DDT_007	Check if the date is cleared when the clear button is clicked	1. Open HTML document: powerTrade_1.html in browser 2. select a date in "Delivery Date" to field 3. Click on clear button	-	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: Frequency: Daily	User should be able to clear the selected date	Chooosen date was displayed in corred format	Pass
	To check if the field is empty	TC_Vol_000	Check submit with the Volume field empty	1. Open HTML document: powerTrade_1.html in browser 2. Leave the Volume Field empty 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	User should be shown an error pop up saying "Enter value of volume"	Error message "Please fill out this field" was displayed at Volume field.	Pass
		TC_Vol_001	Check submit with the valid value in Volume field i.e greater than or equal to 0	1. Open HTML document: powerTrade_1.html in browser 2. Set the Volume Field to be 1 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
		TC_Vol_002	Check submit with value in Volume field less than 0	1. Open HTML document: powerTrade_1.html in browser 2. Set the Volume Field to be -1 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: -1 Frequency: Daily	User should be shown an error pop up saying "Select a value greater than or equal to zero"	Error message "Value must be equal to or greater than 0" was displayed at Volume field.	Pass
Volume		TC_Vol_003	Check submit with real value (values with period) in Volume field	1. Open HTML document: powerTrade_1.html in browser 2. Set the Volume Field to be 1.23 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1.23 Frequency: Daily	User should be shown an error pop up saying "Select an integer value"	Error message "Please enter a valid value. Two nearest valid values are 1 and 2" was displayed at Volume field.	Pass
	To check the field with valid integer value	TC_Vol_004	Check submit with alphabetical values in Volume field	1. Open HTML document: powerTrade_1.html in browser 2. Set the Volume Field to be AB 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: AB Frequency: Daily	User should be shown an error pop up saying "Select an integer value"	Error message "Please fill out this field" was displayed at Volume field.	Pass

		TC_Vol_005	Check submit with special characters in Volume field	1. Open HTML document: powerTrade_1.html in browser 2. Set the Volume Field to be "%" 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: "%" Frequency: Daily	User should be shown an error pop up saying "Select an integer value"	Error message: Please fill out this field" was displayed at Volume field.	Pass
	To check if required volume is with the trader	TC_Vol_006	Check submit with volume greater than that with the trader	1. Open HTML document: powerTrade_1.html in browser 2. Set UOM to: 999999999999 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 999999999999 Frequency: Daily	User should be shown an error pop up saying "Select a value less than [volume with the trader]"	No such check was made due to the lack of database with volume information about the trader	Fail
	To check if increment and decrement buttons work	TC_Vol_007 TC_Vol_008	Check if the increment button increases the value of volume Check if the decrement button decreases the value of volume	1. Open HTML document: powerTrade_1.html in browser 2. Click on increment button 1. Open HTML document: powerTrade_1.html in browser 2. Click on decrement button	- -	- -	Value of Volume should increase by 1 Value of Volume should decrease by 1	Value of Volume increased by 1 Value of Volume decreased by 1	Pass Pass
	To check if the field is empty	TC_Freq_000	Check Submit using empty frequency field	1. Open HTML document: powerTrade_1.html in browser 2. Keep Frequency field empty 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency:	User should be shown an error pop up saying "select any from list"	Error message: "Please select an item in the list" was displayed in Frequency field	Pass
Frequency		TC_Freq_001	Check submit using frequency Hourly	1. Open HTML document: powerTrade_1.html in browser 2. Select frequency as "Hourly" 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Hourly	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass
	To check the field with a valid selection	TC_Freq_002	Check submit using frequency: Daily	1. Open HTML document: powerTrade_1.html in browser 2. Select Frequency as "Daily" 3. Enter valid data in other sections 4. Click on Submit	Other fields must be filled with valid data	Company Name: KBS Energy Address: Pulchowk Trader: A Energy Trade Date: 01/16/2024 UOM Conversion: Kw Delivery Date From: 01/17/2024 Delivery Date To: 01/18/2024 Volume: 1 Frequency: Daily	Form should be submitted successfully	Form was submitted and page redirected to a new page with blank form. However, data was not saved.	Pass