Elite IT Assessment

Submitted By

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Task 1:

- a. Provide a test plan outline for testing the registration form. Include the following sections:
 - Introduction
 - Objectives

 - ScopeTest Environment
 - Test Data
 - **Test Scenarios**
 - Test Execution Schedule
 - Risks and Assumptions

Introduction

We will be developing a test plan basically outlining the strategy and approach we will be using for testing of the online registration form of the said website.

Objectives

- → We will ensure that all the fields in our form accept valid input.
- → If an erroneous input is made, we will verify that a suitable and appropriate prompt/ message is displayed for invalid inputs.
- → At the end, if all fields have valid and correct data, we can confirm that the form can be submitted successfully.

Scope

- → We will be performing functional testing, since we have to verify that the software (in this case, our website) performs its intended functions correctly. (i.e the fields in our form)
- → We will be performing validation of error messages.
- → A very crucial part is the submission of the form and afterwards, the server response handling.

Test Environment

→ OS: Windows 11

→ Chrome (Latest Version 126.0.6478.127)

→ Framework: Selenium with pytest

→ Python Version: 3.8 +

Test Data

- → Valid data and invalid data for each respective field of the form.
- → Different pairs of combinations of form data to test different scenarios.
- → Example:
 - a. Full Name
 - b. Email Address
 - c. Password
 - d. Confirm Password
 - e. Date of Birth
 - f. Gender
 - g. Newsletter Subscription

Test Scenarios

1. Full Name Field

- a. Enter valid full name
- b. Enter empty full name
- c. Enter special characters and numbers in full name

2. Email Address Field

- a. Enter valid email address
- b. Enter invalid email address format
- c. Enter empty email address

3. Password Field

- a. Enter valid password (at least 8 characters)
- b. Enter password with less than 8 characters
- c. Enter empty password

4. Confirm Password Field

- a. Enter matching confirm password
- b. Enter non-matching confirm password
- c. Enter empty confirm password

5. Date of Birth Field

- a. Enter valid date of birth
- b. Enter future date of birth
- c. Enter empty date of birth

6. Gender Field

- a. Select each gender option
- b. Leave gender unselected

7. Newsletter Subscription Field

- a. Select "Yes"
- b. Select "No"
- c. Leave subscription unselected

8. Submit Button

- a. Click submit with all valid inputs
- b. Click submit with one or more invalid inputs
- c. Verify successful form submission and server response

Test Execution Schedule

The testing will be executed in the following phases:

- → Phase 1: Preparation of test data and test environment setup.
- → Phase 2: Execution of test scenarios and defect logging
- → Phase 3: Retesting and regression testing
- → Phase 4: Test closure and reporting

Risks and Assumptions

- → Potential server downtime, browser compatibility issues.
- → Changes in form design or functionality during testing may affect the test results.
- → If the form has been implemented according to the specified requirements and is accessible in the test environment.

Task 2:

Write test cases for at least three scenarios covering different aspects of the registration form. Each test case should include:

- Test Case ID
- **Test Case Description**
- Preconditions
- Test StepsExpected ResultsPost-conditions

Test Case 1: Valid Registration

Test Case ID:

→TC_01

Test Case Description:

→ Verify that the registration form accepts valid inputs and successfully submits the data.

Preconditions:

→ The user is on the registration form page.

Test Steps:

- 1. Enter "John Doe" in the Full Name field.
- 2. Enter "johndoe@example.com" in the Email Address field.
- 3. Enter "Password123!" in the Password field.
- 4. Enter "Password123!" in the Confirm Password field.
- 5. Select a valid Date of Birth.
- 6. Select "Male" for Gender.
- 7. Select "Yes" for Newsletter Subscription.
- 8. Click the Submit button.

Expected Results:

- → The form should be submitted successfully.
- → A success message should be displayed (e.g., "Registration successful").
- → The user should be redirected to a welcome or login page.

Post-conditions:

→ The user account should be created in the database.

Test Case 2: Password Mismatch

Test Case ID:

→TC_02

Test Case Description:

→ Verify that the registration form displays an error when the Password and Confirm Password fields do not match.

Preconditions:

→ The user is on the registration form page.

Test Steps:

- 1. Enter "Jane Doe" in the Full Name field.
- 2. Enter "janedoe@example.com" in the Email Address field.
- 3. Enter "Password123!" in the Password field.
- 4. Enter "Password321!" in the Confirm Password field.
- 5. Select a valid Date of Birth.
- 6. Select "Female" for Gender.
- 7. Select "No" for Newsletter Subscription.
- 8. Click the Submit button.

Expected Results:

- → An error message should be displayed near the Confirm Password field (e.g., "Passwords do not match").
- → The form should not be submitted.

Post-conditions:

→ The user should remain on the registration form page with previously entered data (excluding passwords).

Task 3: Invalid Email Format

Test Case ID:

→TC_03

Test Case Description:

→ Verify that the registration form displays an error when the Email Address field contains an invalid email format.

Preconditions:

→ The user is on the registration form page.

Test Steps:

- 1. Enter "Alice Doe" in the Full Name field.
- 2. Enter "alice.doe" in the Email Address field.
- 3. Enter "Password123!" in the Password field.
- 4. Enter "Password123!" in the Confirm Password field.
- 5. Select a valid Date of Birth.
- 6. Select "Other" for Gender.
- 7. Select "Yes" for Newsletter Subscription.
- 8. Click the Submit button.

Expected Results:

→ An error message should be displayed near the Email Address field (e.g., "Please enter a valid email address").

→ The form should not be submitted.

Post-conditions:

→ The user should remain on the registration form page with previously entered data (excluding passwords).

Test Scenarios: Positive

Positive Scenarios:

- 1. Valid Input Data:
 - a. Enter a valid full name (e.g., "John Doe").
 - b. Enter a valid email address (e.g., "john.doe@example.com").
 - c. Enter a password that meets the criteria (e.g., "Password123").
 - d. Confirm the password by re-entering it.
 - e. Select a valid date of birth.
 - f. Choose a gender.
 - g. Opt for or against the newsletter subscription.
 - h. Click the "Submit" button.

Expected Outcome: The form submits successfully, and the user receives a confirmation message indicating successful registration.

- 2. Successful Password Match:
 - a. Enter a valid full name.
 - b. Enter a valid email address.
 - c. Enter a password that meets the criteria.
 - d. Confirm the password by re-entering it.
 - e. Select a valid date of birth.
 - f. Choose a gender.
 - g. Opt for or against the newsletter subscription.
 - h. Click the "Submit" button.

Expected Outcome: The form submits successfully without any error messages, and the user receives a confirmation message indicating successful registration.

Test Scenarios: Negative

Negative Scenarios:

- 1. Invalid Email Format:
 - a. Enter a valid full name.
 - b. Enter an invalid email address (e.g., "john.doe@com").
 - c. Enter a password that meets the criteria.
 - d. Confirm the password by re-entering it.
 - e. Select a valid date of birth.
 - f. Choose a gender.
 - g. Opt for or against the newsletter subscription.
 - h. Click the "Submit" button.

Expected Outcome: The form displays an error message indicating an invalid email format and does not submit.

- 2. Password Mismatch:
 - a. Enter a valid full name.
 - b. Enter a valid email address.
 - c. Enter a password that meets the criteria.
 - d. Enter a different password in the confirm password field.
 - e. Select a valid date of birth.
 - f. Choose a gender.
 - g. Opt for or against the newsletter subscription.
 - h. Click the "Submit" button.

Expected Outcome: The form displays an error message indicating that the passwords do not match and does not submit.