Test Plan for Registration Form

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Introduction

This test plan outlines the strategy and approach for testing the online registration form of a website. The form collects user information and validates the input fields before submitting the data to the server.

Objectives

- Ensure that the registration form accepts valid inputs and rejects invalid inputs.

- Verify that appropriate error messages are displayed for invalid inputs.

- Confirm that the form successfully submits the data to the server upon correct completion.

Scope

The scope of this testing includes functional testing of the registration form fields, validation messages, and form submission process.

Test Environment

- Browser: Chrome

- Operating System: Windows

- Testing Tools: Cypress, Postman (for API testing)

- Test Server: Staging server with the registration form deployed

Test Data

- Full Name: "John Doe", "J", ""

- Email Address: "john.doe@example.com", "john.doe@", "john.doe"

- Password: "password123", "pass", ""

- Confirm Password: "password123", "pass", ""

- Date of Birth: "1990-01-01", "01-01-1990", ""

- Gender: "Male", "Female", "Other", ""

- Newsletter Subscription: "Yes", "No"

Test Scenarios

- Positive Scenarios:

  - User registers with valid information.
  - User opts for newsletter subscription.

- Negative Scenarios:

  - User leaves mandatory fields empty.
  - User enters mismatched passwords.

Test Execution Schedule

- Test Planning: 1 days

- Test Case Design: 1 days

- Test Environment Setup: 1 day

- Test Execution: 1 days

- Test Reporting: 1 days

Risks and Assumptions

- Risks: Delays in environment setup, unexpected bugs, and server downtime.

- Assumptions: All necessary resources and tools will be available, and the registration form functionality will remain unchanged during testing.

Test Cases

Test Case 1

ID: TC001

Description: Verify that the user can register with valid information.

Preconditions: The registration form page is accessible.

Test Steps: 1. Navigate to the registration form.

2. Enter "Hassan Raza" in the Full Name field.
3. Enter "hassanraza7241@gmail.com" in the Email Address field.
4. Enter "hassanali123" in the Password field.
5. Enter "hassanali123" in the Confirm Password field.
6. Enter "2002-08-14" in the Date of Birth field.
7. Select "Male" for Gender.
8. Select "Yes" for Newsletter Subscription.
9. Click the Submit button.

Expected Results: The form is submitted successfully, and a confirmation message is displayed.

Post-conditions: The user is registered in the system.

Test Case 2

ID: TC002

Description: Verify that an error message is displayed for empty mandatory fields.

Preconditions: The registration form page is accessible.

Test Steps: 1. Navigate to the registration form.
2. Leave the Full Name field empty.
3. Enter "hassanraza7241@gmail.com" in the Email Address field.
4. Enter "hassanali123" in the Password field.
5. Enter "hassanali123" in the Confirm Password field.
6. Enter "2002-08-14" in the Date of Birth field.
7. Select "Male" for Gender.
8. Select "Yes" for Newsletter Subscription.
9. Click the Submit button.

Expected Results: An error message is displayed indicating that the Full Name field is mandatory.

Post-conditions: The form is not submitted.

Test Case 3

ID: TC003

Description: Verify that an error message is displayed for mismatched passwords.

Preconditions: The registration form page is accessible.

Test Steps: 1. Navigate to the registration form.
2. Enter "Hassan Raza" in the Full Name field.
3. Enter "hassanraza7241@gmail.com" in the Email Address field.
4. Enter "hassanali123" in the Password field.
5. Enter "hassanali321" in the Confirm Password field.
6. Enter "2002-08-14" in the Date of Birth field.
7. Select "Male" for Gender.
8. Select "Yes" for Newsletter Subscription.
9. Click the Submit button.

Expected Results: An error message is displayed indicating that the passwords do not match.

Post-conditions: The form is not submitted.

Scenario Identification

Positive Scenarios

- Scenario 1: User registers with valid information
  - Steps: Fill out all fields with valid data and submit the form.
  - Expected Outcome: Form submission is successful, and a confirmation message is displayed.

- Scenario 2: User opts for newsletter subscription
  - Steps: Fill out all fields with valid data, select "Yes" for Newsletter Subscription, and submit the form.
  - Expected Outcome: Form submission is successful, and the user is subscribed to the newsletter.

Negative Scenarios

- Scenario 3: User leaves mandatory fields empty

  - Steps: Leave one or more mandatory fields empty and submit the form.
  - Expected Outcome: An error message is displayed indicating the mandatory fields that need to be filled.

- Scenario 4: User enters mismatched passwords

  - Steps: Enter different values in the Password and Confirm Password fields and submit the form.
  - Expected Outcome: An error message is displayed indicating that the passwords do not match.

Test Writing

Automated Test Scripts

Listing 1: Cypress Script for Positive Scenarios

```
describe('Registration Form Tests', () => {
  it('User registers with valid information', () => {
    cy.visit('https://example.com/register');

    cy.get('#fullName').type('Hassan Raza');
    cy.get('#email').type('hassanraza7241@gmail.com');
    cy.get('#password').type('hassanali123');
    cy.get('#confirmPassword').type('hassanali123');
    cy.get('#dob').type('2002-08-14');
    cy.get('#gender').select('Male');
    cy.get('#newsletter').check('No');
    cy.get('#submit').click();

    cy.contains('Registration successful').should('be.visible');
  });

  it('User opts for newsletter subscription', () => {
    cy.visit('https://example.com/register');

    cy.get('#fullName').type('Hassan Raza');
    cy.get('#email').type('hassanraza7241@gmail.com');
    cy.get('#password').type('hassanali123');
    cy.get('#confirmPassword').type('hassanali123');
    cy.get('#dob').type('2002-08-14');
    cy.get('#gender').select('Male');
    cy.get('#newsletter').check('Yes');
    cy.get('#submit').click();

    cy.contains('Registration successful').should('be.visible');
    cy.contains('You have been subscribed to the newsletter').should('be.
        visible');
  });
});
```