1. **INTRODUCTION**

This test plan aims to define the strategy for evaluating the functionality, usability, and security of the online registration form. Given the importance of this form in the user onboarding process, comprehensive testing is imperative to verify its performance across a range of scenarios.

1. **OBJECTIVE**

This test plan aims to ensure the registration form's functionality by validating that it accepts correct input and provides error messages for invalid entries. It will also assess usability by confirming the form is user-friendly and error messages are clear. Security will be verified by checking that password fields meet security standards and that user data is transmitted securely. Compatibility will be tested across various browsers and devices, and performance will be evaluated based on responsiveness and load times under different conditions.

1. **SCOPE**

This test plan aims to ensure the registration form's functionality by validating that it accepts correct input and provides error messages for invalid entries. It will also assess usability by confirming the form is user-friendly and error messages are clear. Security will be verified by checking that password fields meet security standards and that user data is transmitted securely. Compatibility will be tested across various browsers and devices, and performance will be evaluated based on responsiveness and load times under different conditions.

Validation of each input field.

Error message display and handling.

Submission process and server communication.

Compatibility with major browsers and devices.

1. **TEST ENVIRONMENT**

| COMPONENT | DETAILS |
| --- | --- |
| Hardware | Desktop and mobile devices (latest models) |
| Operating System | Windows 11, macOS 14, iOS 17, Android 14 |
| Browser | Chrome (latest version), Firefox (latest version), Safari (latest version), Edge (latest version |

1. **TEST SCENARIOS**

**5.1 Input Field Validation**

* Verify that the Full Name field accepts valid names.
* Verify that the Email Address field accepts valid email formats.
* Verify that the Password field enforces a minimum of 8 characters.
* Verify that the Confirm Password field matches the Password field.
* Verify that the Date of Birth field accepts valid date formats.
* Verify that the Gender field allows selection among Male, Female, and Other.
* Verify that the Newsletter Subscription field accepts Yes or No.

**5.2 Error Message Validation**

* Verify appropriate error messages for empty Full Name.
* Verify appropriate error messages for invalid Email Address formats.
* Verify error messages for passwords less than 8 characters.
* Verify error messages when Confirm Password does not match Password.
* Verify error messages for invalid Date of Birth.
* Verify error messages when no Gender is selected.

**5.3 Form Submission**

* Verify successful form submission with valid data.
* Verify data transmission to the server upon successful submission.
* Verify form reset and clear functionalities.

**5.4 User Experience**

* Verify form layout and alignment across different devices and browsers.
* Verify accessibility features like keyboard navigation and screen reader compatibility.

1. **TEST EXECUTION SCHEDULE**

**Day 1-2:**

Set up the test environment and prepare the test data.

Conduct initial functional testing to verify basic form functionality.

**Day 3-4:**

Perform comprehensive functional testing to cover all input fields and validation rules.

Validate error messages for incorrect or incomplete inputs.

Conduct usability testing to assess the overall user experience.

**Day 5:**

Execute compatibility testing across various browsers and devices to ensure consistent behavior.

**Day 6:**

Conduct security testing to identify potential vulnerabilities, particularly in the password fields.

Perform performance testing to evaluate the response time of the form and submission process.

**Day 7:**

Document test results and findings.

Identify and report bugs for resolution.

Retest fixed issues to ensure all defects are addressed.

1. **RISKS & ASSUMPTIONS**

**Risks:**

Incomplete or ambiguous requirements may lead to misinterpretation of test cases.

**Assumptions:**

Requirements are clearly defined and communicated.

The development team will provide timely fixes for identified defects.

1. **CONCLUSION**

This test plan is intended to confirm the proper operation of the registration form, improve user experience, and ensure the security of user data. By executing this plan, we will identify and correct any issues before the form's launch.

1. **ATTACHMENT/ REFERENCES**