SE-2226  
ASSIGNMENT 2  
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1. Test Cases for Registration Form Fields (Equivalent Class Partitioning

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| --- | --- | --- | --- | --- | --- |
| Test Case ID | Field | Test Input | Expected Result | Actual Result | Status |
| TC\_01 | |  | | --- | | First Name |  |  | | --- | |  | | John | The input is accepted, and no error message is displayed. |  |  |
| TC\_02 | First Name | 12345 | An error message: "Invalid first name" is displayed. |  |  |
| TC\_03 | Last Name | Doe | The input is accepted, and no error message is displayed. |  |  |
| TC\_04 | Last Name | Doe@123 | An error message: "Invalid last name" is displayed. |  |  |
| TC\_05 | Email | test@example.com | The input is accepted, and no error message is displayed. |  |  |
| TC\_06 | Email | test@ | An error message: "Invalid email format" is displayed. |  |  |
| TC\_07 | Phone | 1234567890 | The input is accepted, and no error message is displayed. |  |  |
| TC\_08 | Phone | abc1234567 | An error message: "Invalid phone number" is displayed. |  |  |
| TC\_09 | Adress | |  | | --- | | 123 Main Street |  |  | | --- | |  | | The input is accepted, and no error message is displayed. |  |  |
| TC\_10 | Adress | (Empty) | An error message: "Address is required" is displayed. |  |  |
| TC\_11 | State | Maine (US) | The input is accepted, and no error message is displayed. |  |  |
| TC\_12 | State | (Empty) | An error message: "State selection is required" is displayed. |  |  |

#### **2. Test Cases Using Pairwise Method**

Pairwise testing ensures testing combinations of input fields for compatibility.

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| --- | --- | --- | --- | --- | --- |
| Test Case ID | First Name | Last Name | Email | Phone | Expected Result |
| TC\_13 | John | Doe | test@example.com | |  | | --- | |  |  |  | | --- | | 1234567890 | | All inputs are valid. The registration is successful. |
| TC\_14 | John | Doe123 | test@example.com | abc1234567 | Last Name and Phone fields are invalid. Errors are displayed for both fields. |
| TC\_15 | (Empty) | Doe |  | |  | | --- | | 1234567890 |  |  | | --- | |  | | Errors for missing First Name and invalid Email are displayed. |
| TC\_16 | John123 | (Empty) | test@example.com | |  | | --- | | abc@#$%^& |  |  | | --- | |  | | Errors for invalid First Name, missing Last Name, and invalid Phone are shown. |

3. Smoke Test Suite

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Test Case ID** |  |  | | --- | |  | | |  | | --- | |  |  |  | | --- | | **Scenario** | | |  | | --- | |  |  |  | | --- | | **Steps** | | |  | | --- | |  |  |  | | --- | | **Expected Result** | |
| TC\_17 | Verify "Submit My Registration" | 1. Open the form. 2. Fill out all mandatory fields. 3. Click "Submit." | The form is submitted successfully, and a confirmation message appears. |
| TC\_18 | Validate mandatory fields | 1. Open the form. 2. Leave all fields empty. 3. Click "Submit." | Error messages for all mandatory fields are displayed. |
| TC\_19 | Validate valid email submission | 1. Enter "test@example.com" in the Email field. 2. Click "Submit." | The email is accepted, and no error message is displayed. |
| TC\_20 | Validate invalid email submission | 1. Enter "test@" in the Email field. 2. Click "Submit." | An error message: "Invalid email format" is displayed. |

4. Regression Test Suite

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Scenario** | |  | | --- | |  |  |  | | --- | | **Steps** | | |  | | --- | |  |  |  | | --- | | **Expected Result** | |
| TC\_21 | Verify Phone field validation | 1. Enter "1234567890" in the Phone field. 2. Click "Submit." | The input is accepted, and no error message is displayed. |
| TC\_22 | Verify dropdown field consistency | 1. Open the State dropdown. 2. Verify all listed states are correct. | The dropdown lists all states, with no changes or missing options. |
| TC\_23 | Check error message consistency | 1. Enter invalid input in the Last Name field. 2. Click "Submit." | The same error message ("Invalid last name") is displayed as in previous builds. |
| TC\_24 | Validate field persistence | 1. Fill out all fields. 2. Click "Submit." 3. Return to the form | Previously entered data is retained in the fields, if session persistence is enabled. |

#### **5. Test Suite Summary**

**Smoke Test Goals:**

* Ensure critical functionality works, like field validation and form submission.
* Verify mandatory fields trigger correct error messages.

**Regression Test Goals:**

* Check consistency of previous validations and features.
* Ensure error handling, dropdown values, and other functionalities remain intact after updates.