**Boundary Value Analysis for sample Form:**

**Website:** <https://www.ict360.com/>

**Form:** update profile for faculty

**Input Fields for Validation**

1. **Name Field:**
   * Minimum length: 3 characters
   * Maximum length: 50 characters
2. **Age Field:**
   * Minimum: 18
   * Maximum: 65
3. **Password Field:**
   * Minimum length: 8 characters
   * Maximum length: 20 characters

**Test Cases for Boundary Value Analysis:**

**Name :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Input Value** | **Expected Outcome** | **Remarks** |
| TCN001 | 2 characters | Error: "Name too short" | Below minimum boundary |
| TCN02 | 3 characters | Success: Accepted | At lower boundary |
| TCN03 | 4 characters | Success: Accepted | Above lower boundary |
| TCN04 | 49 characters | Success: Accepted | Below upper boundary |
| TCN05 | 50 characters | Success: Accepted | At upper boundary |
| TCN06 | 51 characters | Error: "Name too long" | Above upper boundary |

**Age Field**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Input Value** | **Expected Outcome** | **Remarks** |
| TCA07 | 17 | Error: "Age must be at least 18" | Below minimum boundary |
| TCA08 | 18 | Success: Accepted | At lower boundary |
| TCA09 | 19 | Success: Accepted | Above lower boundary |
| TCA10 | 64 | Success: Accepted | Below upper boundary |
| TCA11 | 65 | Success: Accepted | At upper boundary |
| TCA12 | 66 | Error: "Age exceeds the limit" | Above upper boundary |

**Password Field**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Input Value** | **Expected Outcome** | **Remarks** |
| TCP13 | 7 characters | Error: "Password too short" | Below minimum boundary |
| TCP14 | 8 characters | Success: Accepted | At lower boundary |
| TCP15 | 9 characters | Success: Accepted | Above lower boundary |
| TCP16 | 19 characters | Success: Accepted | Below upper boundary |
| TCP17 | 20 characters | Success: Accepted | At upper boundary |
| TCP18 | 21 characters | Error: "Password too long" | Above upper boundary |

**Test Execution Summary**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field** | **Total Test Cases** | **Passed** | **Failed** | **Remarks** |
| Name Field | 6 | 6 | 0 | All boundaries handled correctly |
| Age Field | 6 | 6 | 0 | No issues identified |
| Password Field | 6 | 6 | 0 | Validations functioning as expected |

**Conclusion:**

The form validation feature successfully handles input boundaries for all fields tested using Boundary Value Analysis. No errors or discrepancies were observed during the test execution. The feature is deemed ready for deployment, with robust handling of edge cases and input ranges.