**EAST WEST UNIVERSITY**

**Software Quality Assurance:**

**CSE 435(2)**

**Project Report**

**Tittle: Online Forum**

Submitted To:

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**What is Test case?**

A test case is a document, which has a set of test data, preconditions, expected results and post conditions, developed for a particular test scenario in order to verify compliance against a specific requirement.

Test Case acts as the starting point for the test execution, and after applying a set of input values, the application has a definitive outcome and leaves the system at some end point or also known as execution post condition.

**Test case on online forum**

**TC01: Redirected to clicked page from Home page**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
|  | Click on navigation menu I.e.  “Post” or “Create Post” or “Problems” | Problems | Redirected to Problems page |

**TC02: Log in with valid inputs**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.**  **3.** | Enter valid email address  Enter valid password  Click on Sign in Button | [“example@gmail.com](mailto:**example@gmail.com)”  ‘Bd1272727’ | User should be able to login |

**TC03: Log in with invalid inputs**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.**  **3.** | enter valid email address  enter e invalid password  Click on Sign in Button | “[example@gmail.com](mailto:example@gmail.com)”  ‘a@09409’ | Show alert to enter invalid password |

**TC04: invalid logging when required inputs are blank**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.**  **3.** | Provide Valid email address  Leave password fields blank  Click on Sign in Button | “[example@gmail.com](mailto:example@gmail.com)”  “ ” | Show alert to enter the required fields |

**TC05: Registration with valid inputs**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.**  **3.**  **4.**  **5.** | Enter valid user name  Enter email address  Enter valid password  Enter Confirm password  Click on Register button | ‘Alis’  ‘Alis@gmail.com’  ‘Bd1272727’  ‘Bd1272727’ | Registration done. |

**TC06: Registration with invalid inputs**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.**  **3.**  **4.**  **5.** | Enter valid user name  Enter email address  Enter valid password  Enter invalid Confirm password  Click on Register button | ‘Alis’  ‘Alis@gmail.com’  ‘Bd1272727’  ‘bdjhegsrb87687’ | Show alert, Password not matched. |

**TC07: Registration with blank input**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.**  **3.**  **4.**  **5.** | Enter valid user name  Enter email address  Leave password fields blank  Leave Confirm password fields blank  Click on Registration button | ‘Alix’  “[example@gmail.com](mailto:**example@gmail.com)”  “ ”  “ ” | Show alert to enter the required fields |

**TC08: Show Post Details with or without logged in**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.** | Click on any Post |  | Post is shown with details and with all comments. |

**TC09: Check about section**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.** | Click on About from any page |  | Show description about forum. |

**TC010: Check Create Post (logged in)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.** | Click Create Post  Check if user logged in |  | If user is logged in, redirected to create a new post page. |

**TC011: Check Create Post (Not Logged in)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.** | Click Create Post  Check if user logged in |  | If user is not logged in, show Error. |

**TC012: Making a Post with valid inputs when user is already logged in**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.**  **3.** | Enter Title  Enter Body  Click Post it | “Top 10 Data mining Algorithm”  “Something which I want to put on my Page.” | Post successfully created. |

**TC013: Making a Post with invalid inputs when user is already logged in**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.**  **3.** | Enter Title  Enter Body  Click Post it | “ ”  “ ” | Show alert to enter the required fields |

**TC014: Add comment with valid input when user is already logged in**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.** | Enter the Comment  Click on add comment | “I like this topic” | Display comment with time. |

**TC015: Add comment with blank input when user is already logged in**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.**  **2.** | Enter the Comment  Click on add comment | “ ” | Show alert to enter the required fields |

**TC016: Logout option**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.** | Click on Logout |  | Logged out from the forum, Redirected to home page. |

**TC017: If user is not logged in**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step No** | **Step Details** | **Test Data** | **Expected Results** |
| **1.** | Navigate to Home page |  | Show on the top of the page log in and register button. |

**Pairwise Testing:**

Pairwise testing is an effective test case generation technique that is based on the observation that most faults are caused by interactions of at most two factors. Pairwise-generated test suites cover all combinations of two therefore are much smaller than exhaustive ones yet still very effective in finding defects.

**Pairwise Testing On Registration:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name**  **(3)** | **Email**  **(3)** | **Password**  **(3)** | **Confirm Password**  **(3)** |
| Valid | Valid | Valid | Valid |
| Valid | Invalid | Invalid | Invalid |
| Valid | Blank | Blank | Blank |
| Invalid | Valid | Invalid | Blank |
| Invalid | Invalid | Blank | valid |
| Invalid | Blank | valid | Invalid |
| AlphaSpecial Character | Valid | Blank | Invalid |
| AlphaSpecial Character | Invalid | valid | Blank |
| AlphaSpecial Character | Blank | invalid | Valid |

**Pairwise Testing On Login:**

|  |  |
| --- | --- |
| **Email** | **Password** |
| Valid | Valid |
| Valid | Invalid |
| Valid | Blank |
| Invalid | Invalid |
| Invalid | Blank |
| Invalid | valid |
| Blank | Blank |
| Blank | Valid |
| Blank | Invalid |

**What is Traceability Matrix?**

Requirement Traceability Matrix or RTM captures all requirements proposed by the client or software development team and their traceability in a single document delivered at the conclusion of the life-cycle. In other words, it is a document that maps and traces user requirement with test cases. The Requirements Traceability Matrix (RTM) is a document that links requirements throughout the validation process. The purpose of the Requirements Traceability Matrix is to ensure that all requirements defined for a system are tested in the test protocols.

**Traceability Matrix**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ReqNo | R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 |
| Module Name | Log in | Register | Create post | Show post | About | Add comment | logout | Navigation To home page |
| Test Cases |  |  |  |  |  |  |  |  |
| Total | 3 | 3 | 4 | 1 | 1 | 2 | 1 | 2 |
| TC 1 |  |  |  |  |  |  |  | **×** |
| TC 2 | **×** |  |  |  |  |  |  |  |
| TC 3 | **×** |  |  |  |  |  |  |  |
| TC 4 | **×** |  |  |  |  |  |  |  |
| TC 5 |  | **×** |  |  |  |  |  |  |
| TC 6 |  | **×** |  |  |  |  |  |  |
| TC 7 |  | **×** |  |  |  |  |  |  |
| TC 8 |  |  |  | **×** |  |  |  |  |
| TC 9 |  |  |  |  | **×** |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ReqNo | R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 |
| Module Name | Log in | Register | Create post | Show post | About | Add comment | logout | Navigation  To home page |
| TC 10 |  |  | **×** |  |  |  |  |  |
| TC 11 |  |  | **×** |  |  |  |  |  |
| TC 12 |  |  | **×** |  |  |  |  |  |
| TC 13 |  |  | **×** |  |  |  |  |  |
| TC 14 |  |  |  |  |  | **×** |  |  |
| TC 15 |  |  |  |  |  | **×** |  |  |
| TC 16 |  |  |  |  |  |  | **×** |  |
| TC 17 |  |  |  |  |  |  |  | **×** |