

**School of Computing**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 21CSC303J**

**Course Name: Software Engineering and Project Management**

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| --- | --- |
| **Experiment No** | 11 |
| **Title of Experiment** | Test Cases |
| **Name of the candidate** | Ponnuri Aniruddha |
| **Team Members** | Vamshi Gadde (RA2112704010017)  Y Shabanya Kishore (RA2112704010018) |
| **Register Number** | RA2112704010015 |
| **Date of Experiment** | 26/03/2024 |

**Mark Split Up**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Description** | **Maximum Mark** | **Mark Obtained** |
| 1 | Exercise | 5 |  |
| 2 | Viva | 5 |  |
| **Total** | | **10** |  |

**Staff Signature with date**

**Aim**

To develop the test cases manual for the SRM Research Hub

**Team Members:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S No** | **Register No** | **Name** | **Role** |
| **1** | **RA2112704010015** | **Ponnuri Aniruddha** | **Rep** |
| **2** | **RA2112704010018** | **Y Shabanya Kishore** | **Member** |
| **3** | **RA2112704010017** | **Vamshi Gadde** | **Member** |

**Functional Test Case**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test ID | Test Scenario | Test Case | Execution Steps | Expected Outcome | Actual Outcome | Status | Remarks |
| 1 | Verify User Registration | Accept Valid SRM Registration Number | 1. User clicks on "User Registration" link.  2. Enter a valid SRM registration number (e.g., RA2112704010015).  3. Click "Register" button. | User should be directed to the next page for entering more user details. |  |  |  |
| 2 | Verify User Registration | Don't Accept Invalid Registration Number | 1. User clicks on "User Registration" link.  2. Enter an invalid registration number (e.g., incorrect format or non-existent number).  3. Click "Register" button. | An error message should be displayed indicating invalid registration number format. |  |  |  |
| 3 | Verify User Login | Successful Login with Valid Credentials | 1. Enter a registered email address in the username field.  2. Enter the corresponding password in the password field.  3. Click "Login" button. | User should be successfully logged in and directed to the user dashboard. |  |  |  |
| 4 | Verify User Login | Failed Login with Invalid Username | 1. Enter an unregistered email address in the username field.  2. Enter a valid password. 3. Click "Login" button. | An error message should be displayed indicating invalid username or password. |  |  |  |
| 5 | Verify User Login | Failed Login with Incorrect Password | 1. Enter a registered email address in the username field. <br> 2. Enter an incorrect password. <br> 3. Click "Login" button. | An error message should be displayed indicating invalid username or password. |  |  |  |
| 6 | Verify Research Paper Upload | Upload a Valid PDF Document | 1. Navigate to the "Upload Research Paper" section.  2. Select a valid PDF document from the local storage.  3. Click "Upload" button. | The document should be uploaded successfully, and a confirmation message displayed. |  |  |  |
| 7 | Verify Research Paper Upload | Upload an Unsupported File Format | 1. Navigate to the "Upload Research Paper" section.  2. Select a file with an unsupported format (e.g., .docx).  3. Click "Upload" button. | An error message should be displayed indicating invalid file format. |  |  |  |

**Non-Functional Test Cases**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test ID | Test Scenario | Test Case | Execution Steps | Expected Outcome | Actual Outcome | Status | Remarks |
| 1 | Performance Testing | Load Capacity | 1. Simulate concurrent user logins with increasing load. <br> 2. Monitor response times and system performance. | The application should maintain acceptable response times and functionality under increasing load. |  |  |  |
| 2 | Usability Testing | User Interface Clarity | 1. Recruit users from the target audience (students, faculty, researchers). <br> 2. Observe users interacting with the application and record their feedback. | Users should find the interface intuitive and easy to navigate. |  |  |  |
| 3 | Security Testing | Data Encryption | 1. Use security testing tools to scan for vulnerabilities related to data encryption. | All user data and research papers should be encrypted in transit and at rest. |  |  |  |

Result:

Thus, the test case manual has been created for the SRM Research Hub.