Title: Web Application Quality Assurance Plan

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Date: 06/16/2024

**Introduction**

This test plan explains the method for testing the web application, which is intended for user authorization testing as part of COMP 10066 - Assignment #2. As an administrator, users may browse the application's displays, execute member-specific searches, and adjust user settings. The goal is to assess the application's functionality, stability, and resilience through a set of automated tests with Katalon Recorder.

Specifics on Hardware or Software:

* Hardware: The tests will be performed on a normal desktop computer that has the following specifications:

1. Processor: Intel Core i5 or higher
2. RAM: 8 GB or more
3. Storage: 256 GB SSD or higher

* Software:

1. Operating System: Windows 10 or higher / macOS Mojave or higher
2. Browser: Google Chrome (latest version), Mozilla Firefox (latest version)
3. Katalon Recorder: Katalon Automation Recorder extension installed in the browser

**Test Plan Scope**

* User Account Controls: The administrator should test the creation, updating, and deletion of user accounts.
* Member Functionality: Checking that all member-specific features and services are available and working.
* Navigation and Links: Checking sure all navigation links on the website work and connect to the relevant pages.
* Admin Functionality: Testing various administrative operations accessible to the admin user, such as enabling/disabling users and adjusting user roles.

**Items Out of Scope**

* Security Testing: The test strategy does not include security testing for problems like SQL injection and cross-site scripting (XSS).

**Test Cases Table**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Number** | **Test Name** | **Reason for the Test** | **Expected Result** | **Observed Result** |
| TC01 | Admin Login | Make sure A valid credential allows the admin to log in. | Admin logs in successfully and is redirected to the dashboard | Admin logs in successfully and is redirected to the dashboard |
| TC02 | Invalid Login | Check if your login information is invalid. | Login fails and an error message is displayed | Login fails and an error message is displayed |
| TC03 | Create User with Invalid Username | Use an incorrect username to confirm that user creation failed. | When attempting to create a user, an error notice appears. | When attempting to create a user, an error notice appears. |
| TC04 | Create password with valid information. | Use valid password to check if it takes or not. | The system will take password. | The system accept password with valid details. |
| TC05 | Create User with Invalid Password | Check that if the password is incorrect, the user creation failed. | An error notice appears when the user creation process fails. | An error notice appears when the user creation process fails. |
| TC06 | Delete User | Verify admin can delete a user | The user is removed from the user list and is no longer visible. | The user is removed from the user list and is no longer visible. |
| TC07 | Verify Email with wrong syntax(admin@admin) | To see if it accepts valid emails | Accepting only legitimate email addresses. | Accept all emails in which the user writes something after @. |
| TC08 | Verify Email With admin23@gmail.com | Verify User email with right email | Should accept only valid email address | Accepting valid email address. |
| TC09 | Verify Clear Button | Verify the clear button clears the input fields | All input fields are cleared when the clear button is clicked. | All input fields are cleared when the clear button is clicked. |
| TC10 | Logout | Verify user can log out successfully | After logging out, the user is taken back to the login screen. | After logging out, the user is taken back to the login screen. |
| TC11 | Edit User Details | Verify admin can edit user details | Updated user information is shown in the user list. | The user list is updated with the latest user information. |
| TC12 | Updating a User List | Verify That user list gets updated each time when new user added | User list is displayed with all new users. | User list is updates with all users |
| TC13 | Checking all other Buttons | Verify All buttons of website. | Should display content of each button. | Displaying content for each button. |

**Bug Summary**

Test Case Number: TC07

Description: The user creation form accepts invalid email addresses, such as "admin@admin," despite not following standard syntax. This bug could lead to the system storing invalid email addresses, potentially compromising data integrity and causing communication issues. Because of this fault, the system might store erroneous email addresses, risking data integrity and perhaps resulting in communication problems.

Supporting Test Cases:

* Verify Email with wrong syntax: mainly, this test case determines if the system can handle email formats that aren't valid. It was noticed that the system, regardless of the existence of a domain part, incorrectly accepts all email inputs as real if they contain the "@" character.

**Test Procedure**

* Launch the Browser:
* Open the browser where the Katalon Recorder extension is installed
* Open Katalon Recorder:
  + Click on the Katalon Recorder extension icon in the browser toolbar to open the Katalon Recorder interface.
* Load Test Suites:
  + Click on the "Open Test Suite" button in the Katalon Recorder interface.
  + Navigate to the folder where the test suites are stored.
  + Select the 1\_ADMIN.krecorder file and open it.
* Run the Admin Test Suite:
* Ensure that the ‘1\_ADMIN’ test suite is selected in the Katalon Recorder interface.
* Click the "Play" button to start executing the ‘1\_ADMIN’ test suite.
* Observe the test execution in the Katalon Recorder interface. Each test case within the suite will run sequentially.
* Once the test suite has finished, go over the outcomes. Red highlights will be applied to any test cases that fail.
* Load and Run the User Test Suite:
* Repeat the steps to load the ‘2\_USER.krecorder’ file.
* Ensure that the ‘2\_USER’ test suite is selected.
* Click the "Play" button to start executing the ‘2\_USER’ test suite.
* When the test is finished, observe how it is being executed and evaluate the outcomes.
* Review Test Results:
* In Katalon Recorder, navigate to the "Reports" tab to view detailed test execution reports.
* Go over each test case's outcomes to make sure all the tests were successful or to find any that weren't and require more research.
* Document Observations:
* When the test is being executed, note any inconsistencies or problems that you see. If more examination is required, include screenshots.
* Report Bugs:
* Provide the bug number, test case, bug description, and supporting test cases in the Bug Summary portion of the test plan if any bugs are discovered.

This process will allow another tester to verify the web application's operation by running the automated test scripts you've generated in Katalon Recorder.