Website Feature Testing Using Selenium and Katalon

Deadline	**22/5/2024, 5:00 PM**
Team Structure	**The project can be conducted either solo by a single individual or as a group of two members.**

Objective

- The purpose of this document is to outline the requirements for testing website features using Selenium and Katalon.

Scope

This project aims to perform automated testing on all features of a website using Selenium and Katalon. Login and signup functionalities will be tested using Selenium, while other features will be tested using Katalon.

Functional Requirements

Login Feature Testing (Selenium)

- **Requirement ID: FR-01**
- **Description: The system must verify the correctness of the login functionality.**
- **Acceptance Criteria:**
  - o **The system should validate correct login credentials and grant access to the user.**
  - o **The system should display an error message for incorrect login credentials.**
- **Test Cases:**
  - a. **Test case to verify successful login with valid credentials.**
  - b. **Test case to verify error message display for invalid credentials.**
- **Tools Used: Selenium for scripting, Katalon for test execution.**

Signup Feature Testing (Selenium)

- **Requirement ID: FR-02**
- **Description: The system must verify the correctness of the signup functionality.**
- **Acceptance Criteria:**
  - o **The system should allow users to create a new account with valid information.**
  - o **The system should display appropriate error messages for invalid or incomplete information.**
- **Test Cases:**
  - a. **Test case to verify successful signup with valid information.**
  - b. **Test case to verify error message display for incomplete signup information.**
- **Tools Used: Selenium for scripting, Katalon for test execution.**

Other Feature Testing (Katalon)

- **Requirement ID: FR-03**

- **Description:** The system must verify the correctness of all other website features.
- **Acceptance Criteria:**
  - Various website features including but not limited to search, navigation, forms, etc., should function correctly.
  - Errors or inconsistencies in feature behavior should be identified and reported.
- **Test Cases:**
  - Test cases covering all other website features.
- **Tools Used: Katalon for scripting and test execution.**

Non-Functional Requirements

Performance

- **Requirement ID:** NFR-01
- **Description:** The testing process should not significantly impact the website's performance.
- **Acceptance Criteria:**
  - The test scripts should execute within a reasonable time frame.
  - The testing process should not overload the server.

Reliability

- **Requirement ID:** NFR-02
- **Description:** The testing results should be reliable and consistent.
- **Acceptance Criteria:**
  - Test scripts should be robust enough to handle variations in website elements.
  - Test results should be reproducible across multiple executions.

Tools and Technologies

- **Selenium:** Used for automating web application testing across different browsers.
- **Katalon Studio:** Integrated development environment for generating and executing Selenium tests.

Deliverables

- **Test Scripts:**
  - Selenium scripts for login and signup functionalities.
  - Katalon scripts for testing other website features.
- **Test Execution Reports:**
  - Detailed reports generated after each test execution.
  - Reports to include test results, pass/fail status, and any detected issues.
- **Documentation:**
  - Detailed documentation outlining test scenarios, scripts, and configurations.
  - User manuals for executing tests using Selenium and Katalon.

Assumptions and Constraints

- Assumption: The website under test is accessible and functional.

- Constraint: Limited testing resources may impact the depth and coverage of testing.

- A thorough Testing of your graduation project is highly recommended

References

- Selenium Documentation: [https://www.selenium.dev/documentation/]

- Katalon Documentation: [https://docs.katalon.com]