

Experiment 5

Student Name: Rahul Saxena

UID: 24MCI10204

Branch: MCA (AI-ML)

Section/Group: MAM - 3(B)

Semester: II

Subject Name: Software Testing [24CAH-654]

Aim: Using Selenium IDE, create automated test scripts for any of the web applications, execute them, and analyze the results.

Definition: Selenium is an open-source framework used for automating web browsers, enabling developers and testers to write scripts in various languages to test web applications across different browsers and platforms.

Steps:

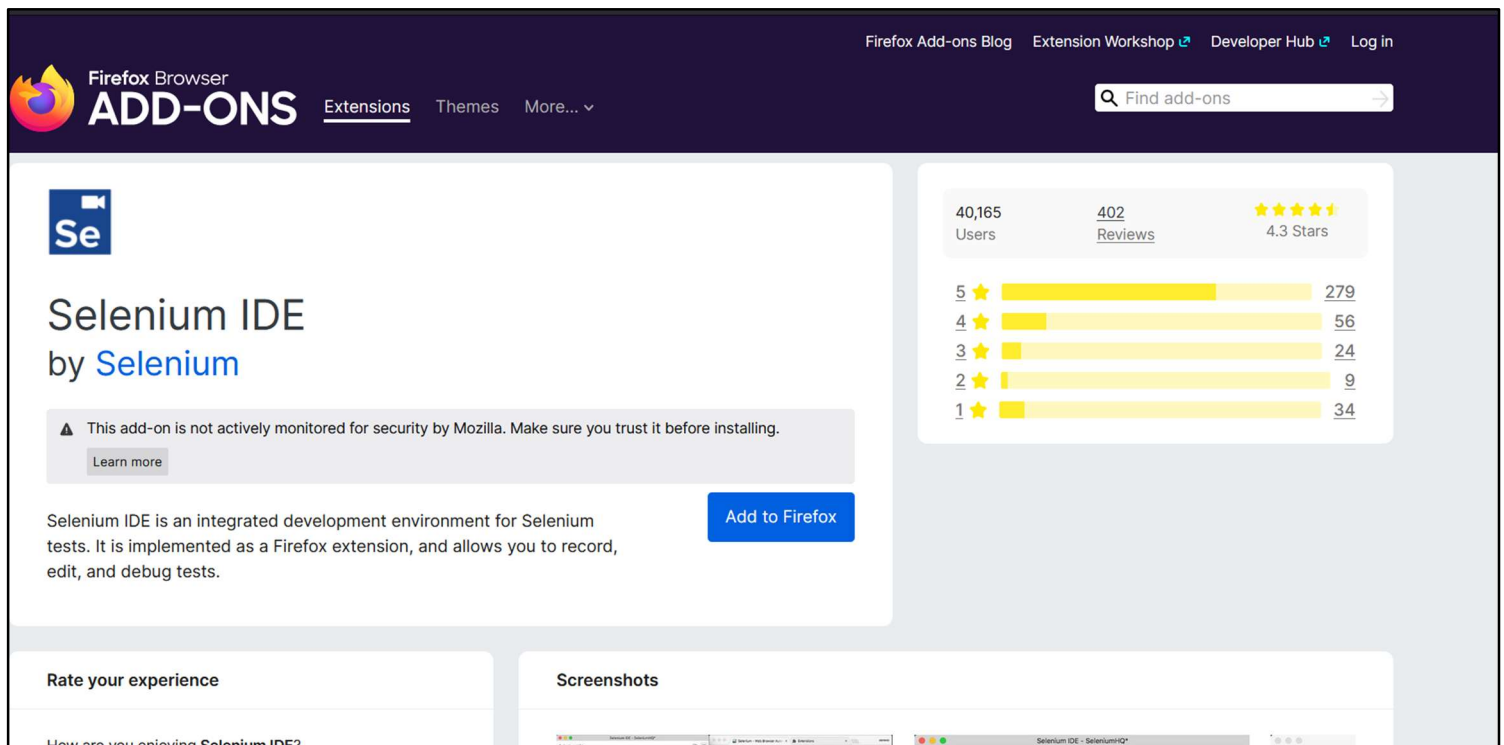
- Step 1: Install Selenium IDE Extension
 - Open Google Chrome or Mozilla Firefox.
 - Go to the Firefox Add-ons (for Firefox).
 - Search for "Selenium IDE".
 - Click "Add to Firefox and confirm the installation.
 - Once installed, you will see the Selenium IDE icon in the browser toolbar.
- Step 2: Open Selenium IDE
 - Click on the Selenium IDE icon in the browser toolbar.
 - The Selenium IDE window will open with options to create a new test case.
- Step 3: Create a New Project and Test Case
 - Click "Create a New Project" and name it (e.g., "Login Test").
 - Click on "Record a new test".
 - Enter the URL of the web application you want to test (e.g., <https://example.com>).
 - Click "Start Recording"—a new browser window opens where all actions will be recorded.
- Step 4: Record a Login Test
 - In the new browser window, enter a username and password in the login fields.
 - Click the Login button.
 - Wait for the page to load and verify successful login (e.g., check if the dashboard

- appears).
- Stop the recording by clicking "Stop Recording" in Selenium IDE.
- Save the test case with a meaningful name (e.g., LoginTest).
- Step 5: Execute the Test Script
 - Click the "Run Current Test" button to execute the test.
 - Observe the execution—Selenium IDE will simulate user actions and attempt to log in.
 - If the test passes, a green checkmark appears next to each step.
 - If the test fails, a red cross appears, indicating errors.
- Step 6: Analyse the Test Results
 - Check the Log Panel at the bottom of Selenium IDE for test execution details.
 - View error messages (if any) and debug issues.
 - Modify test scripts if necessary (e.g., add waits for elements to load).
 - Re-run the test after making corrections.

Website Tested:

<https://monkeytype.com/login>

Selenium IDE: Install by clicking “Add to Firefox” Button.



The screenshot shows the Firefox Add-ons page for Selenium IDE. The page header includes the Firefox Browser logo, "ADD-ONS", and navigation links for Extensions, Themes, and More... A search bar is also present. The main content area features the Selenium IDE logo, a warning message about security monitoring, and a description of the add-on as an integrated development environment for Selenium tests. A blue "Add to Firefox" button is prominently displayed. To the right, a statistics box shows 40,165 users, 402 reviews, and a 4.3-star rating. Below this, a star rating breakdown is provided. At the bottom, there are sections for "Rate your experience" and "Screenshots".

Rating	Count
5 Stars	279
4 Stars	56
3 Stars	24
2 Stars	9
1 Star	34

Test Script:

Command	Target	Value
1. ✓ open	/login	
2. ✓ set window size	1530x780	
3. ✓ click	name=current-email	
4. ✓ type	name=current-email	saxenaa332@gmail.com
5. ✓ click	name=current-password	
6. ✓ type	name=current-password	Rahul@9852
7. ✓ click	css=signIn	
8. ✓ select	css=.yearSelect:nth-child(1)	label=last 12 months
9. ✓ select	css=.yearSelect:nth-child(1)	label=last 12 months

Test Log:

Log	Reference
Running 'expeiment5'	
1. open on https://monkeytype.com/login	OK
2. setWindowSize on 1525x816	OK
3. Trying to find name=current-email...	OK
4. type on name=current-email with value saxenaa332@gmail.com	OK
5. click on name=current-password	OK
6. type on name=current-password with value Rahul@9852	OK
7. click on css=.signIn	OK
8. Trying to find css=.yearSelect:nth-child(1)...	OK
9. select on css=.yearSelect:nth-child(1) with value label=last 12 months	OK
'expeiment5' completed successfully	

Learning Outcome:

- Writing Modular Code: Learned how to write reusable and modular methods for basic arithmetic operations.
- User Input Validation: Gained experience in handling invalid inputs gracefully to enhance user experience.
- Test-Driven Development: Developed and ran test cases to ensure the correctness of individual components.