Test Approaches

For the Buggy Car Rating website, I did both manual and automation testing. The listed defects have been found by both testing approaches. I chose Selenium framework with Java Script along with TestNG and Maven.

Functional testing by automation and manually

- Register users

- Login (did in api on postman as well)

- Browse different pages

- Vote (did in api on postman as well)

- Total votes and individual votes

- Profile page

- Other details can be seen from the bug report

Non-functional testing

- Usability and exploratory testing

- Performance testing - with Chrome dev tool and Jmeter

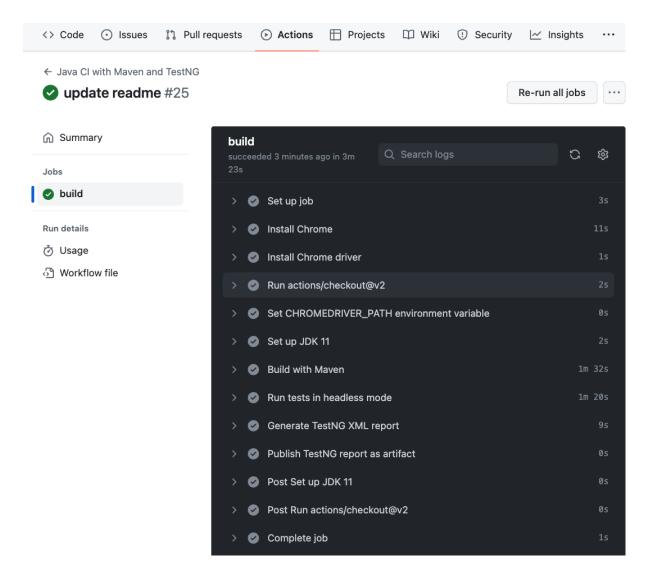- Load testing - Jmeter

- Security testing

Deployment of the test framework

- Selenium framework

- JDK

- Java

- Maven

- TestNG
  (Running performance: 9 test cases done within 30s locally and 3 minutes via CI/CI Github Actions)

- Test report is available to download and view in html format after each run

- Errors are recorded on test report

- Every pull & push will trigger to run tests automatically by Github Actions

Test Results

CI/CI test result - Snapshot from Github Actions

Local test result - Snapshot from Mac OS

(By the way screen recording of automation testing is available in
src/test/java/com/buggycar/resource folder)

Test	# Passed	# Skipped	# Retried	# Failed	Time (ms)	Included Groups	Excluded Groups
Surefire suite							
Surefire test	9	0	0	0	28,512		

Class	Method	Start	Time (ms)
Surefire suite			
Surefire test — passed			
com.buggycar.LinkTest	**linkModelTest**	1682246623066	632
	linkOverallTest	1682246624868	649
	linkTest	1682246621221	668
com.buggycar.LoginTest	**correctCredentialTest**	1682246626686	1480
	logoutTest	1682246631278	1296
	wrongCredentialTest	1682246629329	766
com.buggycar.ProfileTest	**profileTest**	1682246633762	2675
com.buggycar.RegisterTest	**registerTest**	1682246637569	1171
com.buggycar.VoteTest	**voteTest**	1682246639871	7754

Future work

- Add more test case
- Get list element
- Run test on different OS in CI/CD