

Software Testing Assessment

This assessment explores the critical aspects of software testing, including methodologies, best practices, and the importance of identifying and addressing defects early in the development cycle. By demonstrating a comprehensive understanding of testing principles and techniques.

Functional Test

- Do exploration testing for the basic functions of <u>owasp juice app</u>.
- Do exploration testing for the basic functions of wikiapp.
- ** Find most of possible bugs then write a bug report for each one.

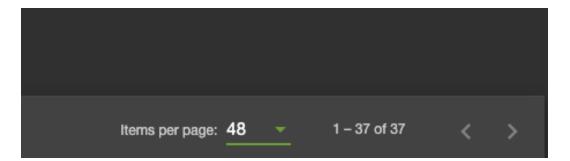
E2E Web Automation

This section contains automation tasks for evaluate candidate in web automation please navigate to this <u>link</u>.

Note: Use any automation framework suitable for you.

Task 1:

Create an automation script navigate to provided web application then Scroll down to the end of page then change items per page to the maximum number and assert that home page displays all of items.



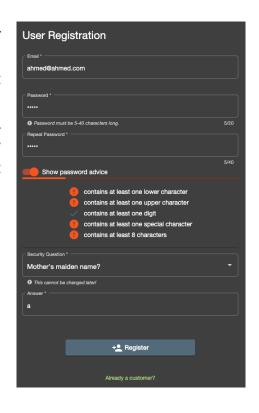
Task 2:

Create an automation script navigates to provided web application, let your script click on the first product 'Apple Juice' then assert that there is an popup appeared and image of product exists. Then if there is an review click on it to expand this review. Wait for couple of second then close product form.



Task 3:

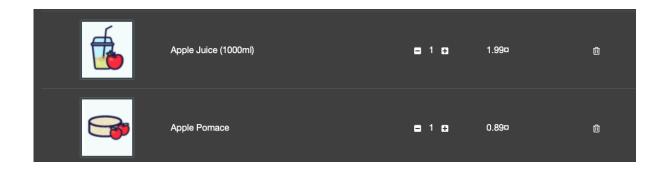
Create an automation script that navigates to user registration page then assert that frontend team added an input validation by clicking on all fields without adding any values on it this must trigger a validation message. Fill registration form fields with required data [Self Generated Information] and click on show password advice then register to application. Assert the successful message of registration. App will redirect to login page use same generated information to login to web application.



Task 4:

Create an automation script that login via valid generated credentials and at product page add five different product to basket and assert that cart number changed to five also assert that a there is a success popup message appearing at every time you add product to basket. Navigate to your basket and increase number of any product then delete it from basket then assert that total price has been changed. The final step click on checkout and add address information then select delivery method. App will navigate to payment screen assert that your wallet has not money so select option to add a credit card information then continue purchase.

Note: Generate random card information will be accepted.



E2E Mobile Automation

This section contains automation tasks for evaluate candidate in mobile automation using appium. First please download this sample app 'Wikipedia' from this <u>link</u>

Task 1:

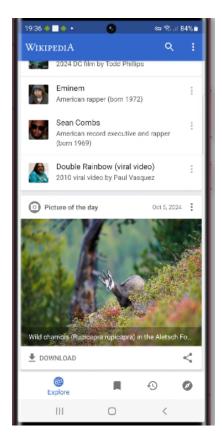
Create an appium script that launch provided app then scroll down to the end then click on three icons My lists, History and nearby and wait for three seconds at every page. The last step the go back to home by click on browse icon then scroll up to first topic of app.

Task 2:

Create an appium script that launch provided app, at search bar search for "New York" then assert that search bar expanded with returned results. Double click on close search button to clear and return to home page.

Task 3:

Create an appium script that launch provided app, click on settings icon then disable all options and go back to home page.



Logical and security testing

In this section candidate must find security and logical vulnerabilities, git clone this <u>project</u>. Provided project is a flask based app contains four main apis install and follow instruction then run app and start find logical and security vulnerabilities. <u>List all findings</u> as bug reporting with risk scoring.

Just focus on

- /client_registeration
- /client_login

Performance Testing

This section contains tasks that evaluate candidate ability to execute performance testing

Task 1:

Please perform performance testing on Provided Flask APP

- Perform load testing on endpoint /client_register
- Perform stress testing on /client_login
- Perform BDD load testing [/client_register & /client_login] providing random data at each iteration

NOTE ** Assume that server handle 10 requests at same time. Export results as report

NOTE ** BDD API script must be suitable to be integrated with CI/CD as regression testing script

Task 2:

Using apptim tool please measure performance of our wikipedia app and export report.

Test mangement

This pdf contains couple of user stories read it carefully then

- Create test plan for provided user stories
- Create Risk based testing (RBT)
- Write possible test cases for each user story [Acceptance and Edge Cases]
- Create test runs

NOTE ** Please include all solutions and reports at your repository