



Test Automation Mentoring Program: Advanced

UI TESTING. HOME TASK

Tech stack: JavaScript

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INTRODUCTION

You will be working with Report Portal application deployed locally on your workstation during all the mentoring program.

The scope of this task is to work with advanced Selenium features and try the other web-testing framework. The goals of this module are:

- Use advanced features of web-testing framework – Pure Selenium.
- Get started with Selenium Grid/Selenoid/Browser requests.
- Try alternative solution.

Work primarily with feature of report portal which was chosen previously:

1. Launches
2. Dashboards
3. Widgets
4. Filters

MARKS

Points	Mark	Description
1	0.5	Unsatisfactory
2	1	Unsatisfactory
3	1.5	Unsatisfactory
4	2	Satisfactorily
5	2.5	Satisfactorily
6	3	Satisfactorily
7	3.5	Good
8	4	Good
9	4.5	Excellent
10	5	Excellent

Home task is DONE if more than (\geq) 4 points received.

Mentor can take away points if Mentee's code quality does not meet his/her requirements.

DEADLINE

It's expected that Mentee completes a task in 2 weeks. The deadline can be adjusted in case of:

1. Vacation
2. Illness
3. Business trip
4. Exceptional case

Before adjusting the deadline please notify and confirm with Coordinator about changes.

PRECONDITION

1. Mentee has a sample test project implemented.
2. The project contains 2 different test runners – use one that was added in Module #2 – TEST RUNNERS.

TASKS

1. ALTERNATIVE TOOL

Complexity	Points	Necessity
Basic	2	Task is Mandatory

TASK

1. Add alternative web-testing framework to your project, the one you haven't worked with. Consider one of below groups:
 - a. **Non-webdriver based** – Cypress/Puppeteer/TestCafe
 - b. **Webdriver based** – Nightwatch/Protractor/WebdriverIO

If currently you work with webdriver based framework – chose any from non-webdriver based and vice versa.

Choose the most suitable architectural approach. Add logging of actions with elements.

2. Configure Waiters for web elements.
3. Implement screenshot taker utility. Configure it to take screenshots on verification fail/exceptions.

DEFINITION OF DONE

Your project contains alternative Web-Testing framework with configured waiters and logging.

Your project contains screenshot taker utility.

2. ACTIONS. JS EXECUTOR

Complexity	Points	Necessity
Basic	2	Task is Mandatory

TASK

1. Implement Drag & Drop, Elements Resize.
2. Implement below features using JS executor (or alternative):
 - a. Scroll to element
 - b. Verification if element is scrolled into view
 - c. Click

Choose the most suitable architectural approach.

DEFINITION OF DONE

Your project contains implemented JS and Actions implemented for elements.

3. IMPLEMENT TESTS

Complexity	Points	Necessity
Basic	2	Task is Mandatory

TASK

Implement tests using advanced features added in tasks #1 and #2.

For instance, if chosen Dashboards feature, you can verify that dashboard widgets can be resized:

- a. Selected size is saved.
- b. The other widgets move while resizing.
- c. The Content of widget resizes as well.

NOTE: Drag & Drop, Elements Resize can be used only in dashboards. So, if you chose any other feature - to work with such functionality you should create appropriate pages. You can limit number of tests by 1 in this case.

DEFINITION OF DONE

Test project contains required tests. All tests work and passing.

4. GRID/SELENOID/BROWSER REQUESTS INTERCEPTOR

Complexity	Points	Necessity
Intermediate	2	Task is Optional

TASK

Do one of the following:

1. Set up the tests to run using either Selenium Grid or Selenoid in multiple browsers (for webdriver based frameworks),
2. Intercept Browser requests and verify a response to browser (for non webdriver frameworks).

DEFINITION OF DONE

Test running using either Selenium Grid or Selenoid (for webdriver based frameworks).

Browser requests are intercepting and verifying (for non webdriver frameworks).

5. TOOL EVALUATION

Complexity	Points	Necessity
Advanced	2	Task is Optional

TASK

Evaluate both used frameworks (one that was added in current module and initially) and create a table containing advantages/disadvantages.

DEFINITION OF DONE

A table containing advantages/disadvantages was sent to your Mentor.

Ver.	Description of Change	Author	Date
1.0	Initial Version	Yury Karpinski	14-Oct-2020
1.1	Updated: Structure	Yury Karpinski	24-Jan-2020