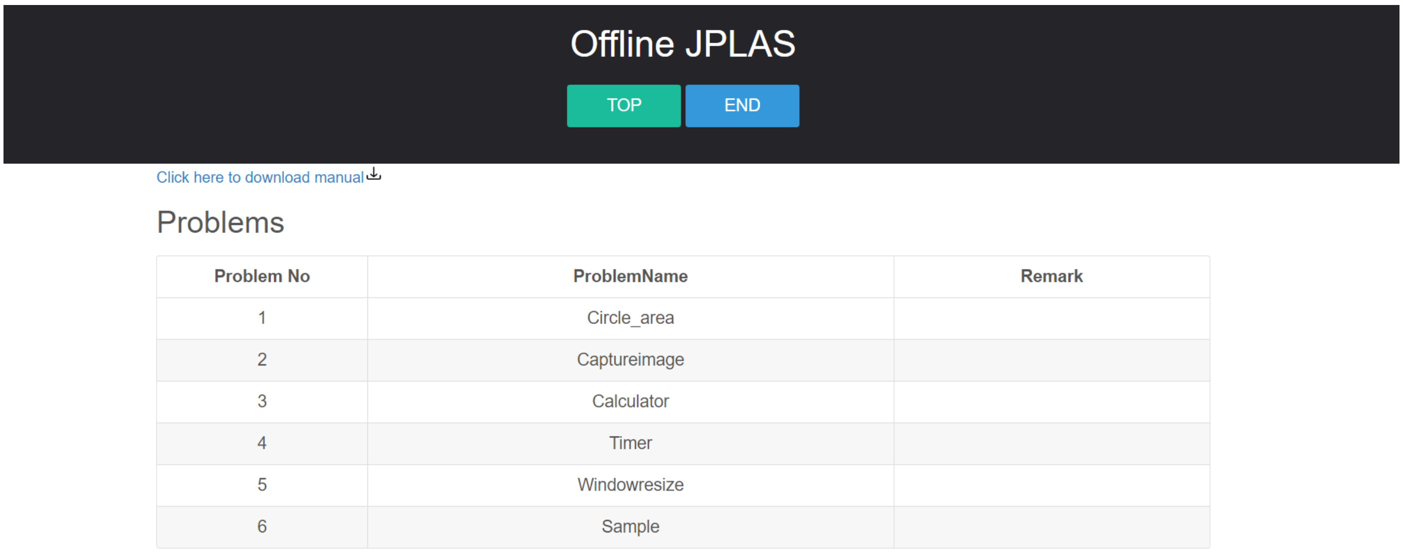
JavaScript JPLAS System

A study of Unit Testing Tool for Web-Client Application by using Selenium

User Manual

1. User Interface of Offline JPLAS



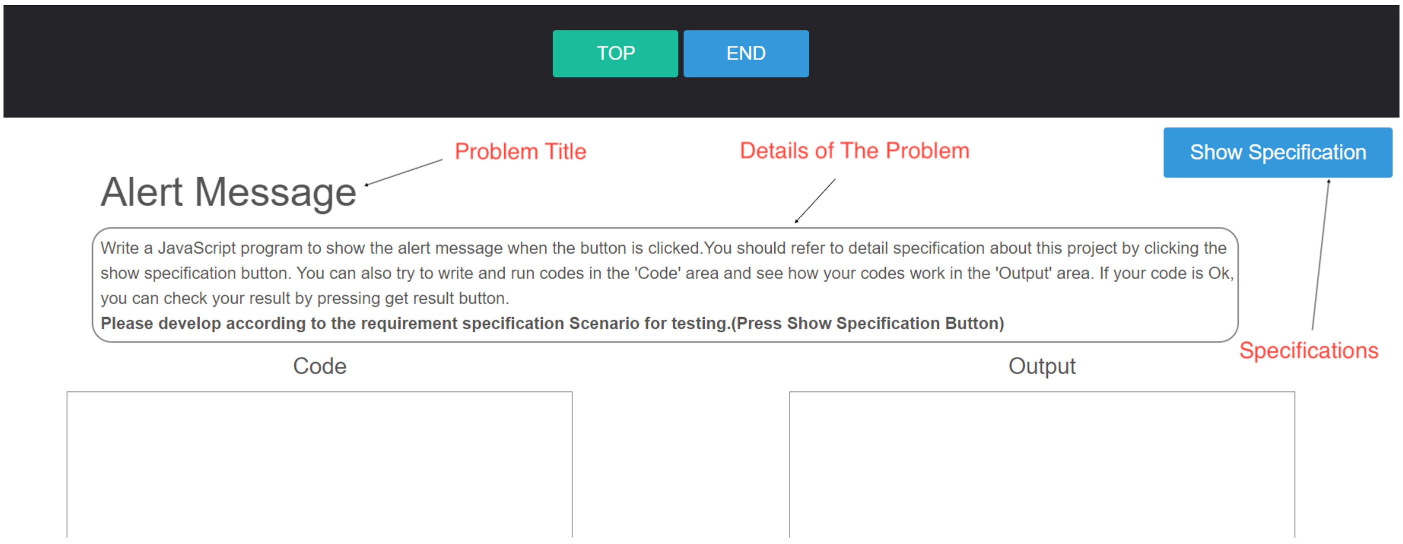
Problems

Problem No	ProblemName	Remark
1	Circle_area	
2	Captureimage	
3	Calculator	
4	Timer	
5	Windowresize	
6	Sample	

Fig1: Problems list and User Manual

2. Problem Content

Problem content will be as below. There will be problem title, details of the problem and Specifications



Write a JavaScript program to show the alert message when the button is clicked.You should refer to detail specification about this project by clicking the show specification button. You can also try to write and run codes in the 'Code' area and see how your codes work in the 'Output' area. If your code is Ok, you can check your result by pressing get result button.
Please develop according to the requirement specification Scenario for testing.(Press Show Specification Button)

Fig2: Problem Content with label

2.1 Problem Title

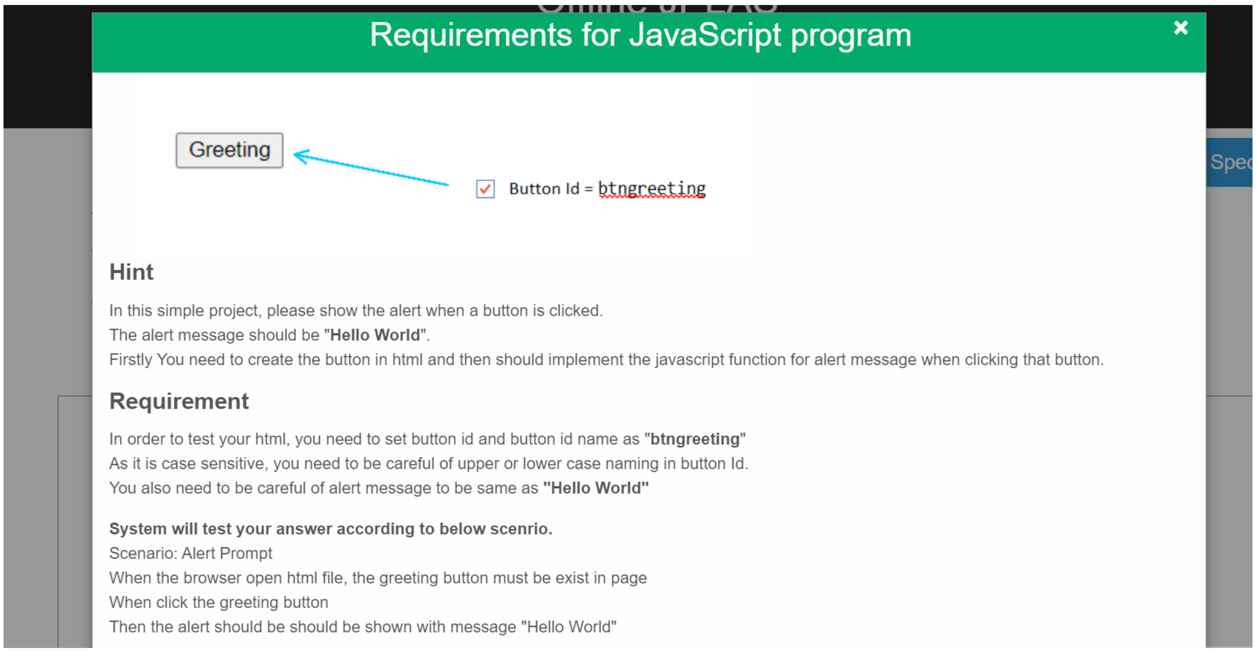
This is the title of the problem. In this sample, it is ‘Alert Message‘.

2.2 Details of the Problem

In here, there would be instructions what kind of web functions you have to implement.In this sample,you have to implement a function that shows alert message when a button is clicked.

2.3 Specifications

This will be dialog when you clicked the specification button. It will be shown as the following.



Requirements for JavaScript program

Hint

In this simple project, please show the alert when a button is clicked.
The alert message should be "**Hello World**".
Firstly You need to create the button in html and then should implement the javascript function for alert message when clicking that button.

Requirement

In order to test your html, you need to set button id and button id name as "**btngreeting**"
As it is case sensitive, you need to be careful of upper or lower case naming in button Id.
You also need to be careful of alert message to be same as **"Hello World"**

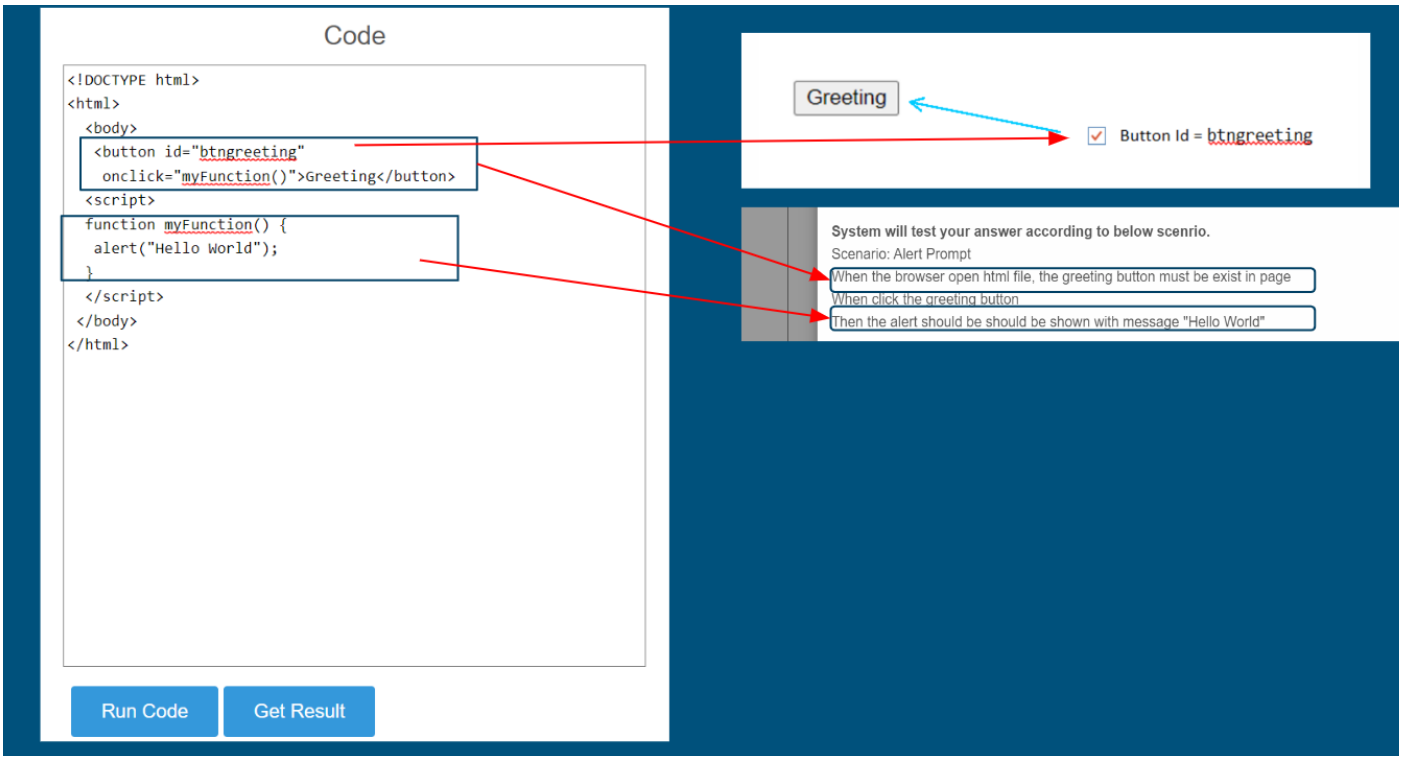
System will test your answer according to below scenrio.
Scenario: Alert Prompt
When the browser open html file, the greeting button must be exist in page
When click the greeting button
Then the alert should be should be shown with message "Hello World"

Fig3: Dialog when clicked Specification button

- In Fig3, there is a sample UI that needs to be implemented. There is a button and the id element should be given as “btngreeting”.
- The paragraph with “Hint” title shows the general flow of the problem. In here, it describes an event of button click action.
- The last paragraph shows that how submitted source code will be tested according to the below scenario.
    - Testing will be carried out serially from up to down. For example, the system will check there is a button in the html page and then it will check the alert function is working or not.

3. TEST AUTOMATION

Source code should be adjusted with test scenario according to figure4.



```
<!DOCTYPE html>
<html>
  <body>
   <button id="btngreeting"
    onclick="myFunction()">Greeting</button>
  <script>
  function myFunction() {
   alert("Hello World");
  }
  </script>
 </body>
</html>
```

System will test your answer according to below scenrio.
Scenario: Alert Prompt
When the browser open html file, the greeting button must be exist in page
When click the greeting button
Then the alert should be should be shown with message "Hello World"

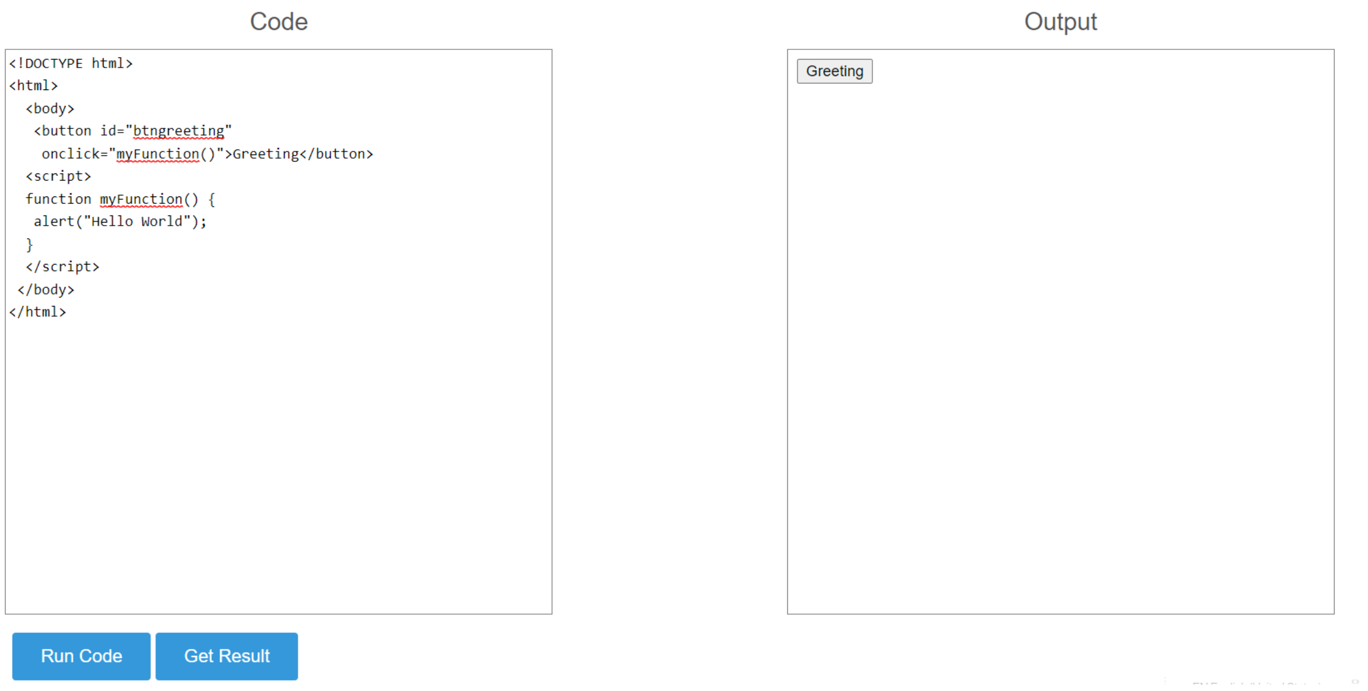
Fig4 : Testing Work Flow

Your code will be tested as shown in Figure 5 according to the Scenarios written in the Specifications. In this sample scenario,

- Firstly, system will find the button with the “btngreeting” id
- Then it will click the button
- And check where the alert is prompt properly or not

4. CODING AND PREVIEW

You can write the coding as show in Figure 6 as following. If you click the run code button after you have written code ,the preview will be shown in right side as in Figure 5.



Code

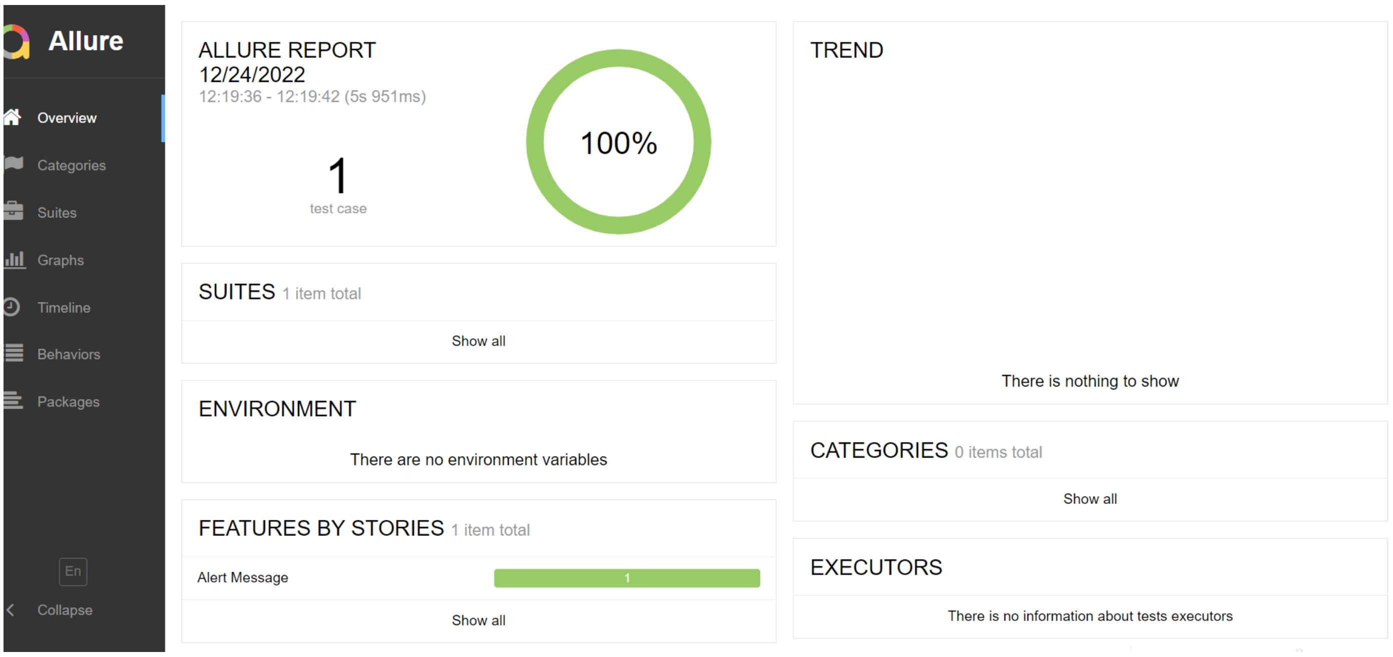
```
<!DOCTYPE html>
<html>
  <body>
   <button id="btngreeting"
    onclick="myFunction()">Greeting</button>
  <script>
  function myFunction() {
   alert("Hello World");
  }
  </script>
 </body>
</html>
```

Output

Fig5: Preview Layout

5. Allure Report

① Testing report will be like that after pressing "Get Result".



ALLURE REPORT
12/24/2022
12:19:36 - 12:19:42 (5s 951ms)

1
test case

100%

TREND

There is nothing to show

SUITES 1 item total

Show all

ENVIRONMENT

There are no environment variables

CATEGORIES 0 items total

Show all

FEATURES BY STORIES 1 item total

Alert Message 1

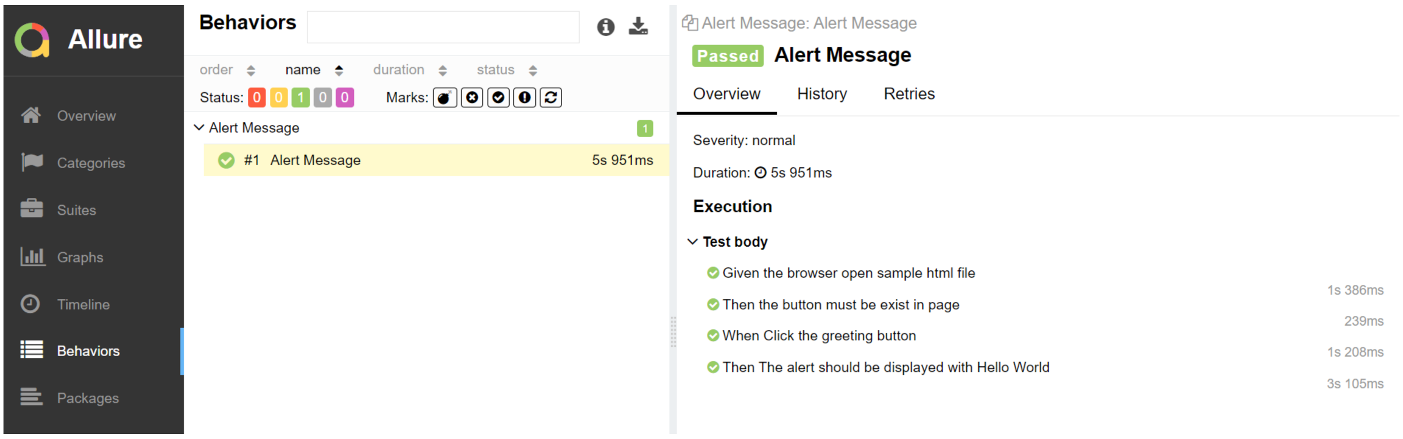
Show all

EXECUTORS

There is no information about tests executors

Fig6: Test Report with Allure

② Passed Test result can be seen like this.



Alert Message 1
#1 Alert Message 5s 951ms

Alert Message: Alert Message
Passed Alert Message

Severity: normal
Duration: 5s 951ms

Execution

Test body
Given the browser open sample html file 1s 386ms
Then the button must be exist in page 239ms
When Click the greeting button 1s 208ms
Then The alert should be displayed with Hello World 3s 105ms

Fig7: Test Report with Allure

6. ERRORS CONDITIONS

If you don't set button id or text input id according to Specifications,,you will see the error message as below.

```
selenium.common.exceptions.TimeoutException: Message:
Stacktrace:
#0 0x562f550322a3 &lt;unknown&gt;
#1 0x562f54df0f77 &lt;unknown&gt;
#2 0x562f54e2d80c &lt;unknown&gt;
#3 0x562f54e2da71 &lt;unknown&gt;
#4 0x562f54e67734 &lt;unknown&gt;
#5 0x562f54e4db5d &lt;unknown&gt;
#6 0x562f54e6547c &lt;unknown&gt;
#7 0x562f54e4d903 &lt;unknown&gt;
#8 0x562f54e20ece &lt;unknown&gt;
#9 0x562f54e21fde &lt;unknown&gt;
#10 0x562f5508263e &lt;unknown&gt;
#11 0x562f55085b79 &lt;unknown&gt;
#12 0x562f5506889e &lt;unknown&gt;
#13 0x562f55086a83 &lt;unknown&gt;
#14 0x562f5505b505 &lt;unknown&gt;
#15 0x562f550a7ca8 &lt;unknown&gt;
#16 0x562f550a7e36 &lt;unknown&gt;
#17 0x562f550c3333 &lt;unknown&gt;
#18 0x7f77a766bfa3 start_thread
```

Fig8: Error Report