

Lesson 11 Demo 11

Running Mocha in Browser

Objective: To run the Mocha testing file on the browser for interactive and visual testing

Tools Required: Visual Studio

Prerequisites: Knowledge of HTML, CSS, JavaScript, and Mocha testing module

Steps to be followed:

1. Create the project structure in VS Code and an index.html file
2. Add an external third-party Mocha and Chai library

Step 1: Create the project structure in VS Code and an index.html file

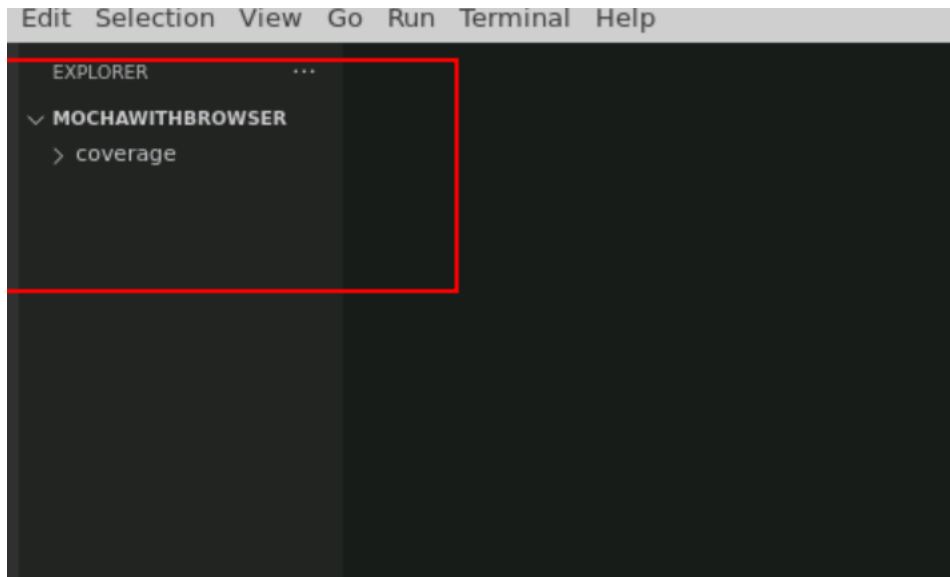
1.1 Run the below code to create a working directory to hold the application:

```
mkdir mochawithbrowser  
cd mochawithbrowser
```

A terminal window screenshot showing the execution of two commands. The first command is 'mkdir mochawithbrowser' and the second is 'cd mochawithbrowser'. Both commands and their outputs are highlighted with a red rectangular box. The terminal title bar indicates the current directory is ~/Desktop/mochawithbrowser.

```
1: labuser@ubuntu2204: ~/Desktop/mochawithbrowser  
labuser@ubuntu2204:~/Desktop$ mkdir mochawithbrowser  
labuser@ubuntu2204:~/Desktop$ cd mochawithbrowser  
labuser@ubuntu2204:~/Desktop/mochawithbrowser$
```

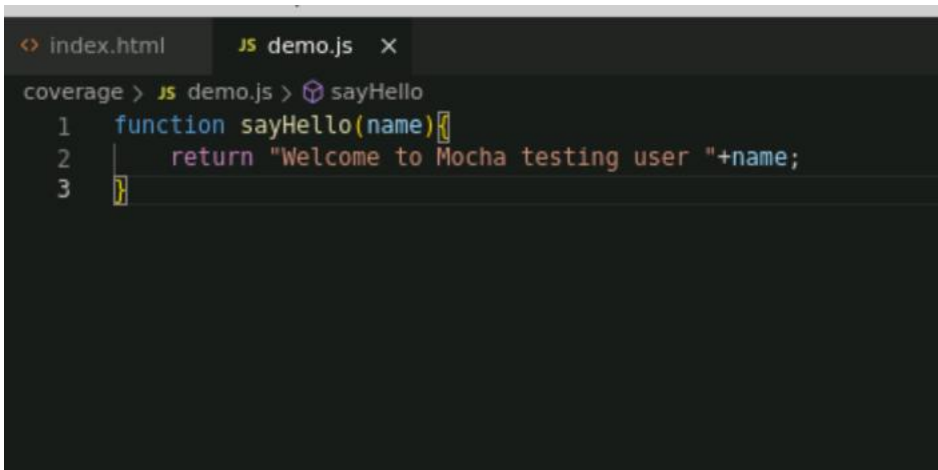
1.2 Open the folder in VS Code IDE



1.3 Create an **index.html** file and add the code as shown below:

```
index.html x
coverage > index.html > html > head > meta
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width, initial-scale=1.0">
7      <title>Document</title>
8  </head>
9  <body>
10     |
11 </body>
12 </html>
```

1.4 Create a **demo.js** file, which contains JavaScript code



```

index.html JS demo.js x
coverage > JS demo.js > sayHello
1 function sayHello(name){
2   return "Welcome to Mocha testing user "+name;
3 }
  
```

Step 2: Add an external third-party Mocha and Chai library

2.1 Add CSS file

```

<link
  rel="stylesheet"
  href="https://cdnjs.cloudflare.com/ajax/libs/mocha/3.1.0/mocha.min.css"
/>
  
```

2.2 Add external Mocha and Chai library

```

<!-- mocha (test runner) -->
<script
  src="https://cdnjs.cloudflare.com/ajax/libs/mocha/3.1.0/mocha.min.js"></script>

<!-- chai (assertion library) -->
<script
  src="https://cdnjs.cloudflare.com/ajax/libs/chai/3.5.0/chai.min.js"></script>
  
```

2.3 Add the container

```

<!-- container that will display test results -->
<div id="mocha"></div>
  
```

2.4 Include external demo.js file in the index.html page

<!-- You can load the test from source file or write the code-->

```
<script src="demo.js"></script>
```

2.5 Add the script mocha code to test it

```
<script>
  // setup test helpers
  mocha.setup("bdd");
  // your tests here
  describe("test suite", function () {
    it("should work", function () {
      let result = sayHello("Ajay")
      chai.assert.equal(result, "Welcome to Mocha testing user Ajay");
    });
  });
  // run tests
  mocha.run();
</script>
```

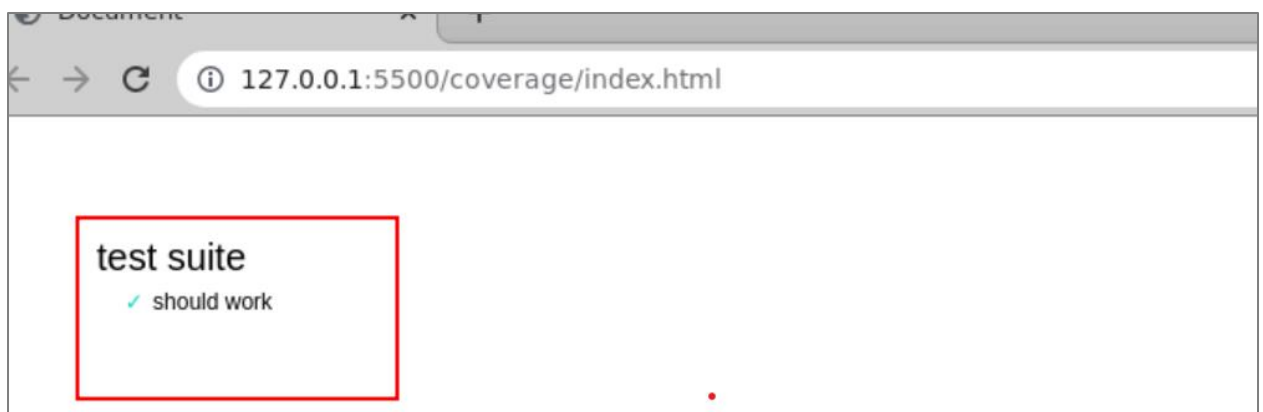
2.6 Verify the final `index.html` page

```

> index.html x  JS demo.js
coverage > > index.html > html > body > script
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta charset="UTF-8">
5    <meta http-equiv="X-UA-Compatible" content="IE=edge">
6    <meta name="viewport" content="width=device-width, initial-scale=1.0">
7    <title>Document</title>
8    <!-- styling for the test results -->
9    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/mocha/3.1.0/mocha.min.css"/>
10 </head>
11 <body>
12   <!-- container that will display test results -->
13   <div id="mocha"></div>
14   <!-- mocha (test runner) -->
15   <script src="https://cdnjs.cloudflare.com/ajax/libs/mocha/3.1.0/mocha.min.js"></script>
16   <!-- chai (assertion library) -->
17   <script src="https://cdnjs.cloudflare.com/ajax/libs/chai/3.5.0/chai.min.js"></script>
18   <!-- You can load the test from source file or write the code-->
19   <script src="demo.js"></script>
20   <!-- Code to test it -->
21   <script>
22     // setup test helpers
23     mocha.setup("bdd");
24     // your tests here
25     describe("test suite", function () {
26       it("should work", function () {
27         chai.assert(true);
28       });
29     });
30     // run tests
31     mocha.run();
32   </script>
33 </body>
34 </html>

```

2.7 Run the `index.html` page on the browser



By following these steps, you have successfully set up a project to run Mocha tests in the browser, enabling interactive and visual testing for improved development and debugging experiences.