**Setting up Unit Testing locally**

Guide for installing and setting up the needed libraries and frameworks to allow local testing of JS code working with the DOM for the [“JavaScript HYPERLINK "https://softuni.bg/courses/javascript-advanced"Advanc HYPERLINK "https://softuni.bg/courses/javascript-advanced"ed HYPERLINK "https://softuni.bg/courses/javascript-advanced"” course @ SoftUni](https://softuni.bg/courses/javascript-advanced).

**Install**

In order to test JS code easily we'll install the testing framework - **Mocha** and an assertion library to go with it - **Chai**.  
Setting up testing of the DOM requires some additional libraries - **jsdom** to simulate the DOM and **jsdom-global** a small helper library which takes care of the **jsdom** setup for us. We'll also install **jquery** for easier manipulation of the DOM.

* Install **Mocha** globally, we can do it from cmd or from the Webstorm terminal (they're equivalent):





* Install **Chai** globally ( the same way as above):  
  

<https://www.npmjs.com/package/jsdom-global> ;) ==>

npm install --save-dev --save-exact jsdom jsdom-global

* Install **jsdom** globally:  
  
* Install **jsdom-global** globally:  
  
* Install **jquery** globally:  
  

**Setup**

We can setup the libraries for global use by adding a NODE\_PATH variable in the registries:

**setx NODE\_PATH %AppData%\npm\node\_modules**

**set NODE\_PATH=%AppData%\npm\node\_modules**



**Usage**

In order to load and use a library we need to **require** it in the JavaScript file:



Keep in mind that **jsdom-global** requires you to have installed **jsdom** and must also be executed (thus the double brackets**()**). You also have to require **jquery** after the DOM has been loaded.

In order to set up the HMTL that is going to be used you can pass it as text to **document.body.innerHTML** as follows:



Here's an example setup:

|  |
| --- |
| **example.js** |
| **let** expect = require(**'chai'**).expect; **let** jsdom = require(**'jsdom-global'**)(); **let** $ = require(**'jquery'**);  **document**.**body**.**innerHTML** = **`<div id="wrapper">  <input type="text" id="name">  <input type="text" id="income">  </div>`**;  **let** *testedFunction* = **function** () {  *//Some code* };  describe(**'testedFunction'**,**function** () {  *//Tests here* }); |