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Javascript Specialist Designation Program

Lab Exercise #2

Now that you know more about working with Javascript and creating variables, let's practice some of those skills.

Lab Instructions

1) Run your Brackets development environment.

2) With Brackets running, choose File → New to open a new document. You should see the cursor flashing on the first line.

3) Immediately save your document using File →Save from the drop-down menus. Navigate to a folder where you'd like to save your lab exercise. Save your lab under the file name **second_javascript_lab.html**

Saving your lab at this point will allow you to take advantage of the syntax highlighting features available in brackets.

4) First you will need to key in the basic document structure. Be careful to key in the HTML5 code below exactly as it appears.

```
<!DOCTYPE html>
<html>
   <head>
      <title>Lab #2</title>
   </head>
   <body>
   </body>
<html>
```

We're using **Lab #2** as the content for the title tag in this case.

5) In the body of the document add a heading 1 tag with the content "Let's do some math!". Your code should look like this:

```
<h1>Let's do some math!<h1>
```

6) Now we're going to add two input boxes and one button that will interact with Javascript. Using a button tag, placed after the previous <h1> tag, add an "Add!" message. Then, create two input boxes using the input tags. Give each input the type number.

Afterwards, give each element an id of "inputOne", "inputTwo" and "addingButton". Your code should look something like this:

```
<button id="addingButton">Add!</button>

<input id="inputOne" type="number" />

<input id="inputTwo" type="number" />
```

7) Let's add some Javascript so that you can input two numbers on your web page and on the click of a button, an alert will give you the answer.

Let's go ahead and create a separate Javascript file. Within the Brackets editor, click File →New.

Immediately save your document using File →Save from the drop-down menu. Save under the file name **main.js**.

8) Create a script tag right above the body tag and link it to the Javascript file.

```
<script src="main.js"><script>
```

The HTML file is now aware of the Javascript file that exists within the folder.

9) Open your **main.js** file and create the window.onload function. This function will run as soon as the HTML file loads.

Inside the window.onload function, you will add the function for the "Add!" button. Your code should look something like this:

```
window.onload = function() {

document.getElementById("addingButton")
.addEventListener("click", addNumbers);

}
```

10) The "addNumbers" function has not yet been created, so let's go ahead and create the addNumbers function that will alert the answer.

```
function addNumbers(e) {

var answer = "";

answer += +
document.getElementById('inputOne').value
++
document.getElementById('inputTwo').value

alert(answer)

}
```

Your code should look something like this:

```
window.onload = function() {
document.getElementById('addingButton').addEventListener('click', addNumbers);

};

function addNumbers(e) {

var answer = "";

answer += + document.getElementById('inputOne').value + +
document.getElementById('inputTwo').value

alert(answer)

};
```

11) Click File Save to save the current version of your document. Navigate to the HTML document using your operating system and double click it. The document should open in your default browser.

Input different numbers and watch them add up!

Challenge Yourself

Enhance your skills by attempting the exercises below.

1) Create a function that will multiply the numbers instead of adding them, then change the button to reflect those changes.

2) Put your site on the web. We've arranged a special deal with Blue Host. Visit **http://www.bluehost.com/track/learntoprogra m/** and click "Get Stated Now." You will be able to access web hosting plans as low as $3.49 a month. Once Blue Host takes you through the process of creating your domain and web server upload your lab and post the URL for the others in the class to see.