Javascript Specialist Designation Program

Lab Exercise #12

We've been grabbing data from the DOM since the beginning of the course but now we have a much better understanding of the DOM. Let's put it to the test.

Lab Instructions

1) Run your Brackets development environment, create a new file and quickly save it under the file name **twelfth_javascript_lab.html**

2) Key in the basic HTML document structure and set **Lab #12** as the content for the title tag.

3) In the body of the HTML document add a heading 1 tag with the content, "Highlight bold words on hover".

4) We're going to create a paragraph with several bold words. Let's start by opening a <p> tag and adding two event listeners inside the tag.

First, "onmouseover", this will shoot off a function named purpleWords(). Afterwards, let's add the event listener "onmouseout" that will shoot off the function returnColor().

Your code should look something like this:

```
<h2>Highlight bold words on hover</h2>

<p onmouseover="purpleWords()"
onmouseout="returnColor()"></p>
```

5) To create bold words in HTML we use the <strong> tag. Any word inside a <strong> tag will be bold.

Inside the content of the <p> tag let's type out a simple paragraph.

```
<p onmouseover="greenWords()"
onmouseout="returnColor()">
LearnToProgram.tv is one of the best
programming courses that will advance
your coding skills and pave the way to a
better future. </p>
```

6) Choose 4 or 5 words from the paragraph and enclose them using a <strong> tag.

I chose the following words:

```
<strong>LearnToProgram.tv</strong> is one
of the <strong>best</strong> programming
courses that will advance your coding
<strong>skills</strong> and pave the
<strong>way</strong> to a better future.
```

7) Now for some Javascript. Create a separate Javascript file and quickly save it as **main.js**.

Link the HTML file to the Javascript file.

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

8) Open your **main.js** file and create the first function when a mouse hovers over a bold word, "purpleWords()".

Inside the purpleWords() function, we're going to first declare a variable called, "boldWords". The "boldWords" variable will search the document for all elements with the tag name "strong".

```
var boldWords =
document.getElementsByTagName('strong');
```

9) Once we have gathered all elements with the tag name "strong", run them through a for loop. The for loop iterator will start at 0, it will be less than the length of "boldWords", and will increment by 1 each time.

Inside the for loop, change each instance of "boldWords" to the color purple by using style and color.

```
for (var i = 0; i < boldWords.length;
i++) {

boldWords[i].style.color = 'purple';

}
```

10) Great! Now for the returnColor() function, let's do the exact same thing but change the color back to black instead.

```
function returnColor() {

  var boldWords =
  document.getElementsByTagName('strong');

  for (var i = 0; i < boldWords.length;
  i++) {
  boldWords[i].style.color = 'black';

  }

 }
```

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.

Hover over the bold words in your paragraph and watch the magic happen! Change the color in your Javascript to add your favorite color.

Challenge Yourself

Enhance your skills by attempting the exercises below.

1) Write a JavaScript program to remove items from a dropdown list. Look up the remove() function.

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.