

Assignment 2: JavaScript

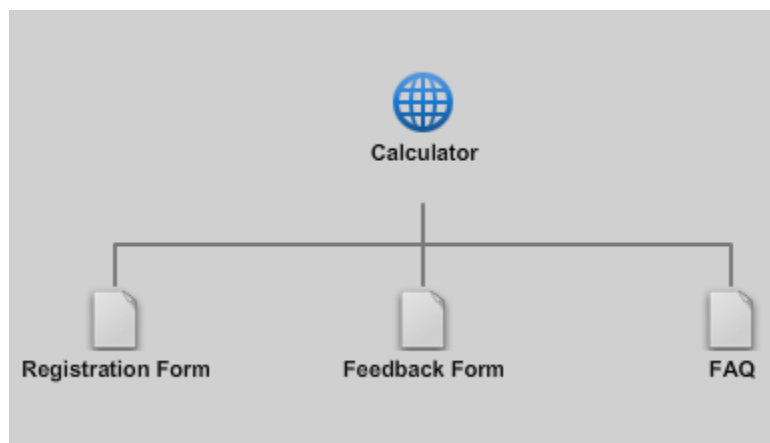
Overview

JavaScript is perhaps the only truly web programming language. While there are exceptions, JavaScript for the most part runs in your browser. It doesn't typically run on a server. Each browser implements its own JS Scripting Engine. Because of this each browser will often have difference that can make JS painful. Therefore, libraries like Dojo, jQuery, and prototype have arisen.

This is a sample JavaScript file that copies one field to another:

```
<html>
<head>
<script type="text/javascript">
function cp0{
    document.getElementById("field2").value=
    document.getElementById("field1").value;
}
</script>
</head>
<body>
Field1: <input type="text" id="field1" value="Hello World!" /> <br />
Field2: <input type="text" id="field2" /> <br />
<br />
Click the button to copy the content of Field1 to Field2.
<br />
<button onclick="cp0;">Copy Text</button>
</body>
</html>
```

In this assignment, you will create a simple website to provide a simple online calculator that you will write. The site should have the following structure (use relative links), and I'd like to see your mad CSS foo at work:



So there are four pages total. You should be able to navigate easily from all the pages (that includes going between pages). Before you get started, work through these:

<http://www.codecademy.com/courses/javascript-intro>
<http://learn.appendto.com/>
<http://javascript.info/tutorial/introduction-browser-events>

All Pages: Should use a common css file where appropriate (if there is a page that has it's own either create a second css file or use a script block. All pages should navigate well between each other. Zip the entire thing and submit it to blackboard.

Calculator: Develop a HTML/Javascript calculator. You customer tells you he likes the way this looks:
<http://learnjavafx.typepad.com/.a/6a00e54f133d698834010536422a08970b-800wi>

Reading:

<http://kalyan-city.blogspot.com/2009/11/simple-javascript-calculator-code.html>

*Note: this guy uses document.calculator.number1.value to get access to values. document.getElementById is a better approach. Try using this approach instead. <http://www.tizag.com/javascriptT/javascript-getelementbyid.php>

<http://jsmadeeasy.com/javascripts/Calculators/Basic%20Calculator/index.htm>

Here is another basic calculator. This guy uses the eval() method. What does it do?

Feedback form: The feedback form is for people to send feedback. It should collect email and comment. Email must be a validate email address and comment must not be empty. On this one, I want you to validate using document.getElementById() only approach.

**NOTE: You don't have to worry about actually sending it someplace. Just validate the input when you click the button to submit.*

Registration Form: The registration form is to signup for more services. You should capture, Name, Email, phone, how you heard about the site. All of these are required field, and email/phone must be validate for it's type. Use Java Script to validate the form. On this one, I want you to use jQuery

Reading:

<http://www.impressivewebs.com/jquery-tutorial-for-beginners/>

<http://www.impressivewebs.com/jquery-tutorial-beginners.pdf>

<http://www.w3schools.com/jquery/default.asp>

http://docs.jquery.com/Tutorials:Getting_Started_with_jQuery

<http://docs.jquery.com/Plugins/Validation>

Model this behaviour <http://yensdesign.com/tutorials/validateform>

*BTW... right click and view source. Analyze how these folks are doing this.

**NOTE: You don't have to worry about actually sending it someplace. Just validate the input when you click the button to submit.*

FAQ: Should list 10 questions and answers using javascript collection that writes to the screen. You should be able to sort and filter these 10 questions.

Reading:

JS Only Approach:

<http://stackoverflow.com/questions/7160263/can-javascript-or-jquery-sort-a-json-array-on-multiple-criteria>

JQuery Approach: <http://www.designchemical.com/blog/index.php/jquery/sort-items-alphabetically-using-jquery/>
<http://kilianvalkhof.com/2010/javascript/how-to-build-a-fast-simple-list-filter-with-jquery/>
<http://listjs.com/examples/standard.html>