

JavaScript: JS30 I

Week 2: Advanced Functions, the DOM & jQuery

More on Functions

- Functions can be assigned to variables!
- <http://jsfiddle.net/zymSYS/REu39/>

More on Functions

- Functions don't need names!
- <http://jsfiddle.net/zymSYS/B2Yn4/>

Variable Scope

- Up until now our variables have all been global, that that's BAD!
<http://jsfiddle.net/zymsys/UnZe8/>
- We can solve this by giving our variables local scope:
<http://jsfiddle.net/zymsys/d2NWX/>

Variable Scope

- Variables which aren't defined with 'var' are automatically global, which is BAD.
- So ALWAYS declare your variables with 'var'.
- Wrapping code in a function is another way to avoid placing anything in the global scope.

Closures

- Variables in JavaScript are visible within the closure they are defined in.
- Closures are usually functions
- <http://jsfiddle.net/zymSYS/Lu8Kz/>

Parameters are References

- When you pass a parameter to a function you pass a reference to it, not a copy of it.
- <http://jsfiddle.net/zymSYS/tL9GX/>

The Document Object Model (DOM)

- The DOM is an object oriented interface which allows JavaScript to interact with web content.
- <http://jsfiddle.net/zymsys/xef4K/>
- <http://jsfiddle.net/zymsys/MDTb8/>

Working with the DOM is Difficult

- In the last example we saw how difficult it can be to do something as simple as tweak an element's style
- There's a lot of that to deal with, and the cross-browser issues that follow
- This is why libraries like jQuery are so popular

jQuery

- Here's the same example with jQuery:
- <http://jsfiddle.net/zymSYS/JmdMM/>

Popular Libraries

These are just a few of the more popular libraries:

- <http://jquery.com/>
- <http://developer.yahoo.com/yui/>
- <http://dojotoolkit.org/>
- <http://mootools.net/>

jQuery FTW!

- jQuery is very popular:
 - Easy to find solutions with Google
 - Lots of plugins and examples
 - Lots of other libraries already depend on jQuery
- jQuery is expressive and relatively easy

jQuery Events

- Here's an update to our jQuery example:
- <http://jsfiddle.net/zymsys/JmdMM/3/>
- No impact on our global namespace!

jQuery Animation

- jQuery makes animation easy, just don't get carried away!
- <http://jsfiddle.net/zymsys/FaB2f/>

jQuery UI

- User interface widgets and visual effects
- Plenty of demos on the jQuery UI site:

<http://jqueryui.com/demos/>

Next Week

- Practical JavaScript
 - Form Validation
 - AJAX
 - Rich User Interfaces
 - Requests?