

# JavaScript Workshop

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## JavaScript Libraries Overview



# What is a JavaScript library?

- A collection of reusable JavaScript functions.
- These functions are wrapped in a JavaScript object(s). This allows encapsulation of the code so it will not be affected by other scripts or libraries that your site may use.
- Libraries can be used for animation, DOM manipulation, drag and drop, interface widgets, or just extensions or simplifications to the existing JavaScript language.
- Makes RAD (Rapid Application Development) available for client web applications. Can be used to create more complex web sites that interact (Ajax) with server-side scripts that pull information from databases.

# Issues with using libraries

- Can slow down your web page. Every library has to be loaded in the cache.
- Just like with JavaScript, it should not be used just to use it. There must be a reason or need for its use.
- Strive for unobtrusiveness. Will your web page work if JavaScript is disabled or unavailable?
- Can hinder you from learning. It is always important to have some knowledge of the “behind-the-scenes” in case you have to do custom development.

# Popular JavaScript libraries

- Prototype - <http://www.prototypejs.org/>
- script.aculo.us - <http://script.aculo.us/>
- jQuery - <http://jquery.com/>
- MooTools - <http://mootools.net/>
- YUI! - <http://developer.yahoo.com/yui/>

# jsUtility: Create your own library

- If you have functions that you currently use, you can easily create your own library. This gives you an idea of how the popular commercial libraries are created.
- It can be functions that you have created yourself to solve a particular web task or others code that you have incorporated yourself (give credit if you have).
- This simple library (jsUtility) is a collection of other well-known functions that have been created by other developers.
- The functions are wrapped in a custom object using object literal notation.

# jsUtility methods (functions)

- `addLoadEvent (func)` – Very common function written by Simon Willison to execute any function(s) after the DOM has been loaded. (see [post](#) on site for more information)
- `$ (id)` – Shortcut function for `document.getElementById`, that is used by libraries such as Prototype.
- `getText (node)` – A function to easily get the text from the first child of an element. Written by Chris Heilmann
- `setText (node)` – A function to easily set the text of the first child text node of an element. Written by Chris Heilmann.
- `getCookie`, `setCookie` and `deleteCookie` – These functions easily create, retrieve and delete cookies. Written by Peter Paul Koch.

# How to use the jsUtility library

- Include the .js file in your web page:

```
<script type="text/javascript" src="jsUtility.js"></script>
```

- Create an instance of the object:

```
var js = jsUtility;
```

- Start using the methods of the object:

```
js.addLoadEvent(func);  
var element = js.$(id);  
js.getCookie(name);
```

- JavaScript Workshop website:  
<http://www.javascriptworkshop.com>
- Any questions?  
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