

# JavaScript Workshop

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November 2007 Meeting

Prototype Library Basics

# Prototype Library

- JavaScript library (more of a framework actually) written by Sam Stephenson. The library is used by many commercial [websites](#) such as NBC, ESPN, CNN, etc.
- Was the first JavaScript library to get mainstream support among web developers. Is used as a foundation for other JavaScript libraries such as [script.aculo.us](#), included in the installation of [Ruby on Rails](#) and web applications like [WordPress](#).
- Provides helper functions for Forms, DOM, OOP, Ajax and extends existing JS objects. It is called a framework on the website because it is so robust that it practically recreates the JavaScript language to a certain extent.

# Getting started

- Download the latest version:  
<http://www.prototypejs.org/download>

- Include the prototype.js in your web page:

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

- You normally don't need to do anything special (creating instances) to use Prototypes functions. Just use them directly like you would with any JavaScript function.

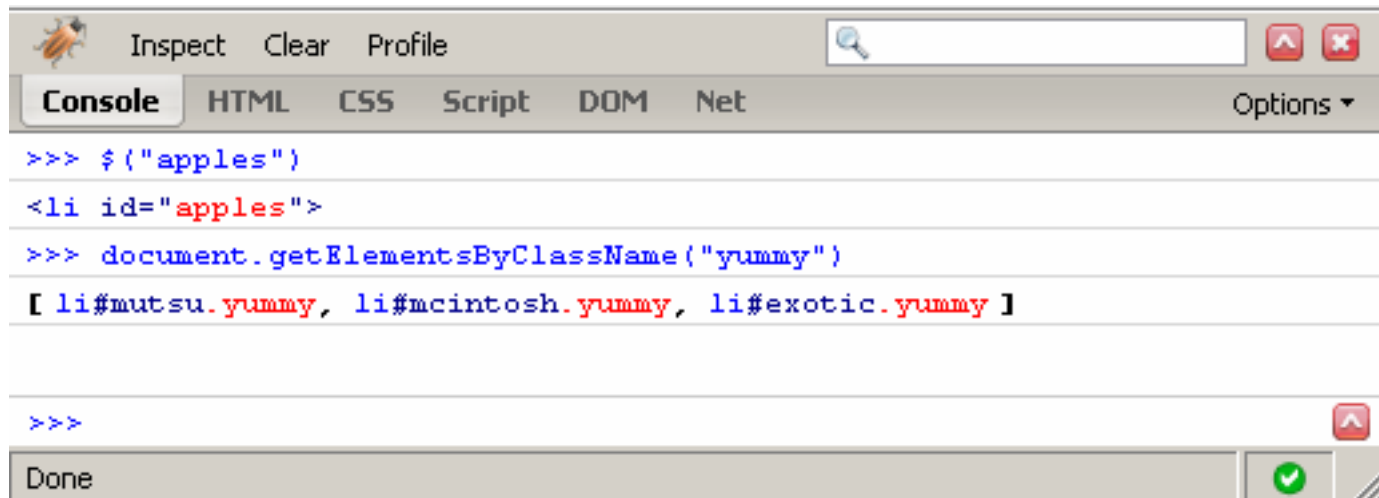
*\$(id) – gets an element by ID*

*\$\$ (CSS rule) – array of elements using standard CSS selector syntax*

*\$F(element) – gets value of any form element*

# Using Firebug to test

- [Firebug](#) has a Console that allows you to test your scripts on your page directly. It will make debugging a whole lot easier and you can quickly test out the Prototype functions very easily.
- Just include any .js files in the *<head>* section and test away!



The screenshot shows the Firebug Console window with the following content:

```
Inspect Clear Profile
Console HTML CSS Script DOM Net Options
>>> $("apples")
<li id="apples">
>>> document.getElementsByClassName("yummy")
[ li#mutsu.yummy, li#mcintosh.yummy, li#exotic.yummy ]
>>>
```

Done

# Categories of the **many** functions in Prototype

- Ajax
- Array
- Class
- Date
- Element
- Enumerable
- Event
- Form
- Form.Element
- Function
- Hash
- Object
- ObjectRange
- PeriodicalExecuter
- Position
- Prototype
- String
- Template
- TimedObserver
- Utility

Review them on the [API Documentation](#) page.

# Any issues with using Prototype?

- Just One: The current release (1.5.1) is a whopping 95K.
- Currently, there is no compressed version, but you can use Dojo ShrinkSafe or Douglas Crockford's JSMin to reduce the file size.

Dojo ShrinkSafe: <http://alex.dojotoolkit.org/shrinksafe/>

JSMin: <http://www.crockford.com/javascript/jsmin.html>

- **Personal Opinion:** I like ShrinkSafe better because it has an online version that creates a reduced copy of your code. I was able to reduce the file size to 65k.

# Next meeting: Script.aculo.us Library Basics

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