



Computer Science E-75

Building Dynamic Websites

Harvard Extension School

<http://www.cs75.net/>

Lecture 9: Ajax

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DOM

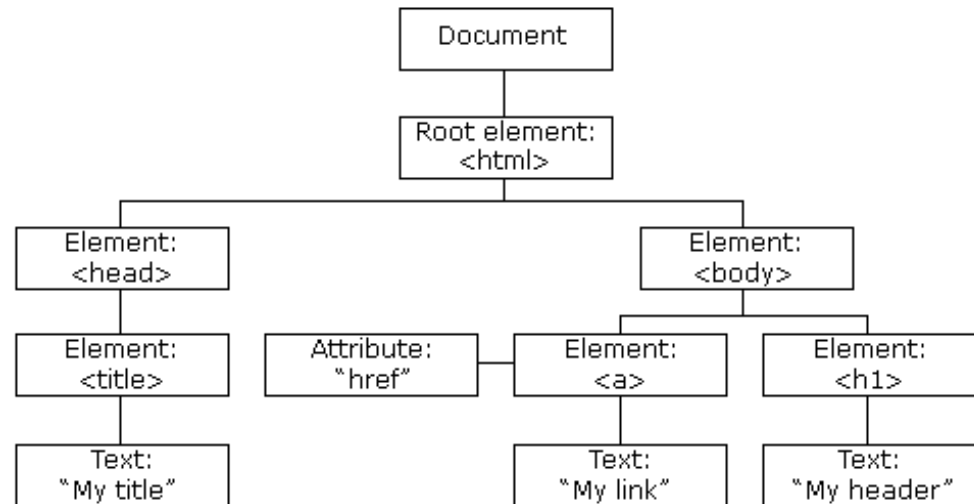
```
<!DOCTYPE html PUBLIC
  "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>My title</title>
  </head>
  <body>
    <a href="">My link</a>
    <h1>My header</h1>
  </body>
</html>
```

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DOM

- HTML DOM Reference
http://www.w3schools.com/html/dom/dom_reference.asp
- DOM (Document Object Model) Reference
<http://www.javascriptkit.com/domref/>
- DOM objects and methods
<http://www.howtocreate.co.uk/tutorials/javascript/domstructure>

XMLHttpRequest

- XMLHttpRequest Object
Microsoft Developer Network
[http://msdn2.microsoft.com/en-us/library/ms535874\(VS.85\).aspx](http://msdn2.microsoft.com/en-us/library/ms535874(VS.85).aspx)
- XMLHttpRequest
Mozilla Developer Center
<http://developer.mozilla.org/en/docs/XMLHttpRequest>
- The XMLHttpRequest Object
World Wide Web Consortium
<http://www.w3.org/TR/XMLHttpRequest/>

Methods

- abort()
- getAllResponseHeaders()
- getResponseHeader(header)
- open(method, url)
- open(method, url, async)
- open(method, url, async, user)
- open(method, url, async, user, password)
- send()
- send(data)
- setRequestHeader(header, value)

Properties

- onreadystatechange
- readyState
 - 0 (uninitialized)
 - 1 (open)
 - 2 (sent)
 - 3 (receiving)
 - 4 (loaded)
- responseBody
- responseText
- responseXML
- status
 - 200 (OK)
 - 404 (Not Found)
 - 500 (Internal Server Error)
 - ...
- statusText

Content Types

- XHTML (text/html)
- XML (text/xml)
- JSON (application/json)

http://www.quirksmode.org/blog/archives/2005/12/the_ajax_respon.html

JSON

- ASP.
- ActionScript:
 - ActionScript1.
 - ActionScript2.
 - ActionScript3.
 - JSONConnector.
- C.
 - JSON_checker.
 - JSON parser.
 - json-c.
 - M's JSON parser.
 - YAJL.
- C++:
 - TinyJSON.
 - jsoncpp.
 - zoolib.
 - Jaula.
 - JOST.
 - JSON Spirit.
- C#:
 - JSON_checker.
 - Jayrock.
 - Json.NET - LINQ to JSON.
 - JSONSharp.
 - LitJSON.
 - JSON for .NET.
 - JsonFx.
 - JsonExSerializer.
- ColdFusion:
 - ColdFusion 8.
 - CFJSON.
 - toJSON.
- D.
- Delphi:
 - Delphi Web Utils.
 - JSON Delphi Library.
 - JSON Toolkit.
- E.
- Erlang.
- Haskell:
 - JSON.hs.
 - HaskellNet.
- haXe.
- Java:
 - org.json.
 - org.json.me.
 - Json-lib.
 - JSON Tools.
 - org.json.simple.
 - Stringtree.
 - SOJO.
 - VRaptor.
 - Restlet.
 - Jettison.
 - json-taglib.
 - FLEXJSON.
 - XStream.
 - JsonMarshaller.
 - Flexjson.
 - Jackson JSON Processor.
 - JON tools.
- JavaScript.
- Lasso.
- Lisp:
 - Common Lisp.
 - Emacs Lisp.
 - Chicken Scheme.
 - MZScheme.
- LotusScript:
 - JSON LS.
 - JSON Reader/Writer.
- Lua:
 - Json4Lua.
 - Json.lua.
- Objective C:
 - BJSONAdditions.
 - Cocoa JSON Framework.
- Objective CAML.
- OpenLaszlo.
- Perl.
- PHP:
 - PHP 5.2.
 - json.
 - Services_JSON.
 - Zend_JSON.
 - JSONRPC.
 - Solar_Json.
 - SCA_SDO.
 - Comparison of php json libraries.
- Pike:
 - Public.Parser.JSON.
 - Public.Parser.JSON2.
- pl/sql.
- PowerShell.
- Prolog.
- Python:
 - python-cjson.
 - simplejson.
 - python-json.
 - demjson.
 - pyparsing.
 - Choosing a Python JSON Translator.
- R.
- REALbasic.
- Rebol.
- Ruby.
- Squeak.
- Tcl.

PHP + JSON

- `json_encode($value)`
<http://us3.php.net/manual/en/function.json-encode.php>
- `eval(string)`
<http://www.json.org/js.html>

Progress...

- Ajax loading gif generator
<http://www.ajaxload.info/>
- AJAX Activity indicators
<http://mentalized.net/activity-indicators/>
- . . .

http://ajaxpatterns.org/Progress_Indicator



YUI Connection Manager

<http://developer.yahoo.com/yui/connection/>



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