

# **JQuery and YUI**

**CS 297**

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# JQuery

- Lightweight cross-browser JavaScript library
- Supports various browsers: IE 6.0+, Firefox 2+, Safari 3.0+, Opera 9.0+, and Chrome.
- Size: 68 KB (minified), 156KB (uncompressed)
- Features: easy DOM manipulations, Events, CSS manipulations, Effects/ animations, Ajax, plugins, and utilities.
- Most popular JavaScript framework used today.
- Used by big companies such as: Google, Digg, Netflix, CBS, Mozilla, etc.

# Intro to JQuery

- Focuses on retrieving elements from HTML pages and perform operations on them.
- Use function `$(element)` to retrieve HTML elements
- Example 1: `$( 'div#navbar' ).addClass( 'hidebar' )` will add `class="hidebar"` to the div with `id="navbar"`. Will cause `<div id="navbar" class="hidebar">`
- Example 2: `$.ajax({type: 'POST', url: 'get_suggestions.php', data: 'txt=hou', success: function(all_suggestions) { $( 'div#suggestions' ).html(all_suggestions) });` => Request a POST ajax request to server-side script `get_suggestions.php` with parameter 'hou' and assign the result to div with `id="suggestions"`.

# Intro to JQuery...

- Example 3 – Basic show and hide

`$('#div.options,p').hide();` => Hide the div and the p elements.

`$('#div.options,p').show();` => Show the div and the p elements.

- `$()` is “chainable” - JQuery  
`object.doThis().doThat().doAnother();`

# Learning JQuery

- <http://docs.jquery.com/Tutorials>
- <http://www.learningjquery.com/>
- “Jquery in Action” book by Bear Bibeault and Yehuda Katz.

# Yahoo! UI

- A set of utilities and controls (written w/ Javascript & CSS) to build richly interactive Web applications.
- Current version is YUI 3.
- YUI core is light ~ 31KB (minified)
- YUI Core: YAHOO global object, DOM collection, and Event utility.
- Many Utilities! Example: Animation, Browser History, Connection Manager, Cookie, DataSource, Drag and drop, Element, Get, ImageLoader, JSON, Resize, Selector, and YUI! Loader
- Many Controls – example: Slider, Calendar, etc.

# Intro to YUI

- YUI module is the single core dependency for all YUI 3.x implementations. Must be included on all pages that use YUI.
- To use YUI global object, include the seed script `<script src="http://yui.yahooapis.com/3.0.0/build/yui/yui-min.js"></script>`
- To create YUI instance: `var y = YUI();`
- To choose modules that you need to be loaded into your YUI instance: `YUI.use('module1', 'module2', ..., 'moduleN', function(Y) { ... });`

# Examples of YUI

```
<div id="demo">Drag Me</div>
```

```
#demo { height: 100px;width: 100px;border: 1px solid black;background-color:  
#8DD5E7;cursor: move; }
```

- YUI().use('dd-drag', function(Y) {

```
//Selector of the node to make draggable
```

```
var dd = new Y.DD.Drag({
```

```
node: '#demo'
```

```
});
```

```
});
```

- This will instruct YUI instance to load the drag module, and instantiate Drag instance on #demo node. The #demo div is now draggable.



# Examples of YUI...

- JSON module – transforming data to JSON format. JSON is a safe, efficient, and reliable data interchange format
- `YUI().use('json-parse', function (Y) {`

```
var jsonString = '{"products":['+  
  '{"id":1,"price":0.99,"inStock":true,"name":"grapes"},'+  
  '{"id":2,"price":3.5,"inStock":false,"name":"passion fruit"},'+  
  '{"id":3,"price":2.5,"inStock":true,"name":"bananas"}'+  
  ']}';  
try { var data = Y.JSON.parse(jsonString); }  
catch (e) { alert("Invalid product data"); }  
});
```

- **Note: Use `JSON.parse` instead of `eval()` as it is safer.**

# Examples of YUI...

- Event

```
<style type="text/css">
```

```
#container {background-color:#00CCFF; border:1px dotted black; padding:1em;
  cursor:pointer;}
```

```
</style>
```

```
<div id="container"><p>Click for Hello World alert.</p></div>
```

```
var helloWorld = function(e) { alert("Hello World!"); };
```

```
Y.on("click", helloWorld, "#container");
```

- Code will register the onclick event for the div with id “container”. The onclick event will run the helloWorld function.
- Similar to: `<div id="container" onclick="alert('Hello World!');return false;"><p>Click for Hello world alert.</p></div>`

# YUI (continued...)

- YUI 3 tutorials and demo:

<http://developer.yahoo.com/yui/3/>