

jQuery

Week 04 TCNJ Web Design 2

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jQuery

- jQuery is easier to write than Javascript
- jQuery gives effects that would work with all browsers

(Better in compatibility than css3 effects)



<http://jquery.com/>

jQuery Usages

- Photo Gallery
- Transition effects
- Simple animation
- Enhanced Navigation Bar

And more...

Javascript & Jquery comparison

Javascript

```
var divs
=document.getElementsByTagName
  ('div');

for (i = 0; i < divs.length; i++) {
divs[i].style.display = 'none';
}
```

Jquery

```
$("#div").hide();
```

jQuery philosophy

1. Find some HTML
2. Do something to it

1.Find

$\$(\text{"div"})$

2.Do something

```
.fadeOut();
```

jQuery

Find \$ (put selector name here)

`$(“div”)`

`$(“#myId”)`

`$(“.myClass”)`

`$(“li:first”)`

`$(“a[target=_blank]”)`



Do .add action here(and arguments);

`.addClass(“redbox”);`

`.fadeOut();`

`.html(“<p>hello</p>”);`

`.html(function(i){ return
“<p>hello “ + i + “</p>”});`

How to use JQuery in the page

1.Download JQuery Library

<http://code.jquery.com/jquery-1.7.1.min.js>

How to use JQuery in the page

2.Link JQuery Library

```
<head>
```

```
<script src="scripts/jquery-1.6.2.min.js">
```

```
</script>
```

```
</head>
```

How to use JQuery in the page

3. Write jQuery script.

```
<script>
```

select

action

```
$(element). dosomething();
```

```
});
```

```
</script>
```

Calling jQuery function

jQuery () = \$ ()

This is a shortcut. These two
does the same thing

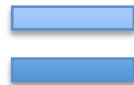
```
<script>  
jQuery(element).dosomething();  
</script>
```

```
<script>  
$(element).dosomething();  
</script>
```

Run function after page loads

```
$(document).ready(function(){  
  //code here will execute after DOM is ready  
});
```

This is a shortcut. These two
does the same thing



```
$(function(){  
  //code here will execute after DOM is ready  
});
```

\$(document).ready makes jQuery codes to load earlier than any other codes with priority right after your DOM is ready.

jQuery Selectors

jQuery way-ID selectors

```
$('#message')
```

Javascript way – ID selector

```
document.getElementById('message');
```

jQuery way-Element Selectors

```
$('a')
```

Javascript – Element Selectors

```
document.getElementsByTagName('a');
```

jQuery way-Class selector

```
$('.myClass')
```

Javascript – Class Selectors

```
document.getElementById('myid').className
```

jQuery Selectors

jQuery Advanced Selectors

`$('#navBar a')` **Descendent Selector**

`$('body > p')` **Child Selector**

`$('h2 + div')` **Adjacent sibling**

`$('img[alt]')` **Attribute selectors**

jQuery filters

`$('tr:even')`

`$('p:first');`

`$('a:not([href^="http://"])`

`$('li:has(a)')`

`$('a:contains(Click Me!))')`

`$('div:hidden')`

jQuery Effects

- Techniques for adding animation
 - Fade In and Out
 - Slide Up and Down
 - Show and Hide

and more...

jQuery Effects

jQuery library provides several techniques for adding animation to a web page.

```
.show();
```

```
.hide();
```

```
.toggle();
```

```
.fadeIn(2000);
```

```
.fadeOut();
```

```
.slideUp();
```

```
.slideDown();
```

```
.animate({marginLeft: "400px"}, 2000);
```

More on <http://api.jquery.com/category/effects/>

jQuery CSS

- Get CSS attributes
- Set CSS attributes

and more...

jQuery CSS

jQuery methods to get and set CSS-related properties of elements CSS

```
.addClass("myClass");  
.removeClass("myClass");  
.css( "color");  
.width();  
.height();  
.position();  
.scrollLeft();  
.scrollTop();
```

More on <http://api.jquery.com/category/css/>

jQuery Events

- To handle behavior when the user interacts with the browser

Ex)

```
$("#button").live('click', function(){ something();});
```

jQuery Events

Browser Event

.ready()

.load()

Form Events

.focus()

.submit()

.blur()

.select()

Mouse Events

.click()

.hover()

.mousemove()

.toggle()

.mouseup()

Keyboard Events

.keydown()

<http://api.jquery.com/category/events/>

jQuery Tutorials

- jQuery tutorials for designers

<http://webdesignerwall.com/tutorials/jquery-tutorials-for-designers>

<http://jqueryfordesigners.com/>

- Video tutorial for jQuery absolute beginners

<http://net.tutsplus.com/articles/web-roundups/jquery-for-absolute-beginners-video-series/>

- Books

[JavaScript and jQuery The Missing Manual, Oreilly Media](#)

http://www.teaching.jeanhochu.com/tcnj/web2/notes/textbooks/jquery_javascript/JavaScript_and_jQuery_The_Missing_Manual.pdf

jQuery more References

- jQuery Documentation

<http://docs.jquery.com/>

- Plugins (jQuery has hundreds of plugins !)

<http://plugins.jquery.com/jquery>

- UI Set of official user interface components

<http://jqueryui.com>