Basic Selectors

element	All HTML elements with that element name
#id	elements whose ID attribute has the value specified
.class	elements whose class attribute has the value specified
selector, selector2	elements that match more then one selector/.add()

Hierarchy

ancestor descendant

An element that is a descendant of another element (e.g. li a)

parent > child

An element that is a direct child of another element

previous + next

adjacent sibling selector only selects elements that are immediately followed by the previous element

previous - sibling

sibling selector will select any elements that are a sibling of the previous element

jQuery Controls CSS Styles

use the css() method to set CSS styles using jQuery:

```
$(“div”).css(“background-color”, “orange”);
```

jQuery Controls CSS Styles

to toggle class (e.g., on every click) alternating adding the class, then removing it, adding it, …etc.

```
        $("div#doToggle").click(function(){
        $("p").toggleClass(“classSuperBold");  });
```

clicking on the div with id=“doToggle” will alternately add and remove the classSuperBold class from all paragraphs

jQuery Attribute Selectors

jQuery Attribute Selectors using [Xpath]

$(“[style]”)

refers to all elements with a ‘style’ attribute

$(“[style=‘text-decoration:underline;’]”)

refers to all elements with style=“text-decoration: underline;”

$(“[style!=‘text-decoration:underline;’]”)

refers to all elements with a ‘style’ attribute NOT equal to style=‘text-decoration:underline;’

! Exclamation means NOT

jQuery Attribute Selectors using Xpath

```
$(“[style*=‘text-decoration:underline;’]”)
```

refers to all elements with a ‘style’ attribute that contain text-decoration:underline; within it

* asterisk is an important syntax part

jQuery Attribute Selectors using Xpath

$(“[src$=‘.jpg’]”)

refers to all elements with a ‘src’ attribute that ends with .jpg

$ dollar sign specifies suffix

$(“[name^=‘address’]”)

Refers to all elements with a ‘name’ attribute (think form elements) that *starts with* exactly address

^ - starts exactly with

jQuery Attribute Selectors using Xpath example

```
<input name=“login1” />
<input name=“login2” />
<input name=“prolog” />
<div name=“logistics” />
```

Statement:

```
$(“input[name*=‘log’]”).val(“has log in it!”);
```

Output:

All 3 input elements will have the value set to: “has log in it!”

Event Functions

```
$("div#dragon").click(function(event){
        event.preventDefault();
        $(this).hide("slow"); });
```

-when the <div> with id=“dragon” is clicked, jQ prevents any default functionality and hides the <div>

-‘event’ is the variable name we used as a parameter: function(event) or function(e), and after: e.preventDefault();

-hide() - built-in effect provided by jQuery

-This has to be launched from the ready event

Event Functions

```
<script type="text/javascript">
        $(document).ready(function(){
        $("div#wrapper").click(function(e){
                e.preventDefault();
                $(this).hide("slow");
                });         //end of click event
        });         //end of ready event
 </script>
```

Callback

Callback – a function that is passed as an argument to another function and is executed after its parent function has completed

```
$.get(“myPage.html”, callBackFunction);
```

First parameter is the URL to get

Second parameter is the name of the function to call after getting the URL

Callback with Parameters

Typical way the two parameters (arguments) are passed into the function:

```
          par1 = “cat”;
          par2 = “dog”;
someFunction(par1, par2);
```

In jQuery: passing paramenters into the function you want to call:

```
           $.get(“myPage.html”, function(){
                     callBackFunction(par1, par2);
          });
```

Chaining

The process of placing several methods in the same selector is caled chaining:

```
$(“div”).hide().delay(500).fadeIn(1400);
```

Events

.on() method used to handle all events

```
$(‘li’).on(‘click’,function() {
        $(this).addClass(‘complete’);
});
```

1) Sll li elements
2) On() method with click event and an anonymous function that adds a value of complete to the class attribute

.hide() Effect

.hide()

```
$(this).hide("slow");
```

hides the current element

```
$(“#footer”).hide();
```

hides the element with id=“footer”

```
$(“a”).hide(“fast”);
```

hides all the <a> elements

Effects

.hide()	displays selected elements
.show()	hides selected elements
.toggle()	toggles between showing and hiding
.fadeIn()	fades in selected elements making them opaque
.fadeOut()	fades out selected elements
.fadeTo()	changes opacity selected elements
.fadeToggle()	hides or shows selected elements by changing their opacity

Effects

Fades all paragraphs to 75% opacity

```
$(‘p’).fadeTo(‘normal’, .75);
```

Effects

```
$(‘#menu’).mouseover(function() {
        $(‘#submenu’).show();
});

$(‘#button’).click(function() {
        $(‘#instructiomns’).fadeToggle (500);
});
```

.animate() Effect

Example : effects.html

```
$(function() {
  $('h2').hide().slideDown();
  var $li = $('li');
  $li.hide().each(function(index) {
    $(this).delay(700 * index).fadeIn(700);
  });
  $li.on('click', function() {
    $(this).fadeOut(700);
  });
});
```

Effects

.slideUp()	shoes selected elements with a sliding motion
.slideDown()	hides selected elements with a sliding motion
.slideToggle()	hides or shows selected elements with a sliding motion
.delay()	delays execution of subsequent items in queue
.stop()	stops an animation it is currently running
.animate()	creates custom animation

.animate() Effect

Ex: jQuery_animate.html
image id="pic"

Clicking the div will shrink the image over 3 seconds to disappear

Clicking the div again will expand the image over 3 seconds to full size

Opacity and position will remain adjusted, however

.animate() Effect

Image id="img1"

Clicking the div will shrink the image over

3 seconds until it disappears

Clicking the div again will expand the image over 3 seconds until it is full size again

.animate() Effect

```
.animate({
//styles you want to change
} [, speed][, easing][,complete]);
```

Speed indicates the duration of animation in milliseconds

Easing

- linear- the speed of animation is uniform
- swing- speeds up in the middle of the transition and slower at the start and end

Complete calls a function that should run when the animation has finished

.animate() Effect

```
$(‘#message’).animate( {
        left: ‘650px’,
        opacity: .5,
        fontsize: ‘24px’
},
1500
});
```

.animate() Effect

```
$(‘#message’).click(function() {
$(this).animate( {
          left: ‘+=50px’
},
1500);
});
```

.animate() Effect

```
$('#message').slideUp(1000, 'linear');
```

.animate() Effect

Example : animate.html

```
$(function() {
  $('li').on('click', function() {
    $(this).animate({
      opacity: 0.0,
      paddingLeft: '+=80'
    }, 500, function() {
      $(this).remove();
    });
  });
});
```

.animate() Effect

Ex. jQuery_animate_opacity.html

```
$(document).ready(function(){
                $('#pic2').animate({'opacity' : 1}).hover(function() {
                        //on hover, change opacity to 50%
                        $(this).animate({'opacity' : .5});
                }, function() {
                //on exit hover, change opacity back to 100%
        $(this).animate({'opacity' : 1});
        });
});
```

School of Design

.html() method

.html()

.text()

Both retrieve and update the content of elements.

When .html() method is used to retrieve information from a jQuery selection, it retrieve only the HTML inside the first element in the matched set, along with any of its descendants

.html() method

```
$(‘ul’).html();

<li id=“one”><em>fresh</em> figs </li>
<li id=“two”>pine nuts </li>
<li id=“three”>honey</li>
<li id=“four”>vinegar</li>

$(‘li’).html();

<em>fresh</em> figs
```

Note: Only the content of the first li element

.text() method

When .text() method is used to retrieve information from a jQuery selection, it returns the content from every element in the jQuery selection, along with the text from any descendants

```
$(‘ul’).text();
```

```
Fresh figs
Pine nuts
Honey
vinegar
```

```
$(‘li’).text();
```

```
Fresh figspine nutshoney vinegar
```

Note: this returns the content of <li> elements including spaces between words, but there are no spaces between list items

.html() method

Example: get-html-fragment.htnl

```
$(document).ready(function() {
  var $listHTML = $('ul').html();
  $('ul').append($listHTML);
});
```

.html() method

.html()		gives selected element the new content

.text()		gives selected element the new text content

.replaceWith()	replaces every selected element with a new content

.remove()		removes all of the elements in the matched set

```
$('li.hot').html(function() {
        return '<em>' + $(this.text() + '</em>';
});
```

1. Return indicates that content should be returned by the function
2. <em> tags are placed arund the text content of the list item
3. This refers to the current list item. $(this) places that element in a new jQuery object so that you can use jQuery methods on it

.html() method

Example: changing-content.html

```
$(function() {
  $('li:contains("pine")').text('almonds');
  $('li.hot').html(function() {
    return '<em>' + $(this).text() + '</em>';
  });
  $('li#one').remove();
});
```