



MIS3690 WEB TECHNOLOGIES

BABSON COLLEGE
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BASICS OF JQUERY



WHAT IS JQUERY?

- A library (or collection) of JavaScript functions
 - Created using JavaScript
 - Functions that we typically write and pre-created for you
 - Must know how to refer to and use functions
 - It is open-source (free for developers and users)
- Where is this library?
 - Can download from : <http://jquery.com/download/> and linked as a local file.
 - Other place to get it: [Github](#)
 - Can also be linked as a remote file (see template for *how*)

JQUERY SYNTAX

`$(selector).action()`

- `action()` is a jQuery function
- Selector – a HTML tag
 - Defines the element that triggers the `action ()`
 - Also defines the element that is changed/manipulated by the `action ()`
- Examples of selectors:
 - `"h1"` – applies the action to all h1 elements
 - `"#one"` – applies the action to the element with id="one"
 - `".me"` – applies the action to the element with class="me"

A SHORT SAMPLE LIST OF SELECTORS

- `$("h1")` – selects all `<h1>` elements
- `$("#one")` – selects all elements with `id = "one"`
- `$(".two")` – selects all elements with `class = "two"`
- `$("#p#one")` – selects all `<p>` elements with `id="one"`
- `$("h1.two")` – selects all `<h1>` elements with `class = "two"`
- `$("p:first")` – selects the first `<p>` element
- `$("ul li:first")` – selects the first `` element under the first `` element
- `$("*")` – selects ALL elements on the page (wild card)
- `$("[href]")` – selects all elements with the "href" attribute defined.
- `$("tr:even")` – selects even `<tr>` elements ("tr:odd" – selects all odd elements)

JQUERY ACTION EXAMPLES

- Change all <h1> elements to have a Navy font
 - `$("#h1").css ("color", "Navy");`
- Add a border (3px, black, solid) to a paragraph with id "one"
 - `$("#p#one").css ("border", "3px solid black");`
- Change font color and font weight of all elements with the class "fcfw"
 - `$(".fcfw").css ({ "color": "Navy", "font-weight" : "bold" });`
 - Notice the use of the curly parenthesis within the regular parenthesis (only needed when multiple CSS definitions are defined in a single statement).
 - Notice the difference between the first example (where only one CSS definition was defined) and this example

DEFINING EVENTS WITH SELECTORS

```
$ (Selector).event ( function ()  
{  
    // Actions here  
    } );
```

Element that triggers
the function

This does not change when
you write the actual code

Example: Change the text within a <h1> tag when the <button> element is clicked.

```
$ ("button").click ( function ()  
{  
    $ ("h1").text("New Text Here");  
});
```

Element that is changed by
the function

DEFINING EVENTS WITH SELECTORS

```
$ (Selector).event ( function ()  
    {  
        $(this).action()  
    } );
```

Example: Change the text within a <h1> tag when the <h1> element is clicked.

```
$ ("h1").click ( function ()  
    {  
        $(this).text("New Text Here");  
    } );
```

In this example, we are interacting with an element <h1> and changing the same element <h1> . jQuery uses "this" selector to refer to the same element

SAMPLE JQUERY ACTION FUNCTIONS – THESE COME FROM THE LIBRARY

- `.hide()` – Hide an element on the page
- `.show()` – Unhide an element on the page
- `.toggle()` – Hide/unhide toggle
- `.fadeIn(speed)` – Unhide in slow motion
 - Speed options: "fast", "slow", # milliseconds
- `.fadeOut (speed)` – Hide in slow motion
 - Speed options: "fast", "slow", # milliseconds
- `.fadeTo(speed, opacity)` – unhide to some extent
 - Smaller the "opacity" number (between 0 and 1), the more faded it looks
- `.alert("message")` – Same as for JS
- `.css("property", "value")` – Apply CSS to an element
 - Example: `css("color", "blue")`