MIS3690 WEB TECHNOLOGIES

BABSON COLLEGE

TOIM DIVISION

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"

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**
});

This does not change when you write the actual code

Element that triggers the function

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

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 <li> element under the first <ul> 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)

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")`

NEXT WEEK

■ More examples on using jQuery.