# MIS3690 WEB TECHNOLOGIES

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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 : <a href="http://jquery.com/download/">http://jquery.com/download/</a> and linked as a local file.
    - Other place to get it: <u>Github</u>
  - 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 <h l > 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 ()
                                                                         This does not change when
                                 // Actions here
                                                                         you write the actual code
                           } );
Element that triggers
the function
   Example: Change the text within a <h | > tag when the <button > element
   is clicked.
              $ ("button").click (function (
                  $("h|").text("New Text Here");
            });
```

Element that is changed by the function

#### DEFINING EVENTS WITH SELECTORS

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

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 <hl> elements
- \$ ("#one") selects all elements with id = "one"
- \$(".two") selects all elements with class = "two"
- \$("p#one") selects all elements with id="one"
- \$("h1.two") selects all <hl> elements with class = "two"
- \$("p:first") selects the first 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 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 CLASS**

■ More examples on using jQuery.