# OIM3690 - Web Technologies

# Intorduction to jQuery

# What is jQuery

- **jQuery** is a fast, small, and feature-rich JavaScript library.
    - It simplifies HTML document traversing, event handling, animating, and Ajax interactions.
    - **jQuery** is designed to make it easier to navigate a document, select DOM elements, create animations, handle events, and develop Ajax applications.
    - It is an open-source library and available on GitHub
- To use jQuery
    - It can be downloaded and included in a web page from official website.
    - It can linked as a remote file via Google CDN.
- Although **jQuery** has been widely used for many years, it is kind of outdated in modern web development.

# jQuery Syntax

```
$(selector).action()
```

- `action()` is a jQuery function that performs some operation on the selected element(s)
- `selector` specifies which element(s) to select
  - the **element** that **triggers** the **action**
  - also could be the **element** that is changed/manipulated by `action()`
  - Examples of selectors:
    - `"h1"` – **all** `h1` elements
    - `"#one"` – the element with `id="one"`
    - `".me"` – **all** the elements with `class="me"`

# jQuery 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 "nav"

```
$(".nav").css ({"color":"Navy", "font-weight":"bold"});
```

# Defining Events with Selectors

- Syntax

```
$(selector).event(function ()
{
  // actions here
});
```

- Example:

```
// change the text within a <h1> tag when <button> is clicked
$("button").click(function ()
{
  $("h1").text("New Text Here");
});
```

# jQuery Action Function Examples

- `.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"` , # of milliseconds

- `.fadeOut (speed)` — hide in *slow* motion

- `.fadeTo(speed, opacity)` — adjust the *opacity*

- `.css("property","value")` — apply *CSS* to an element
  - e.g. `css("color","blue")`

**Questions?**

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