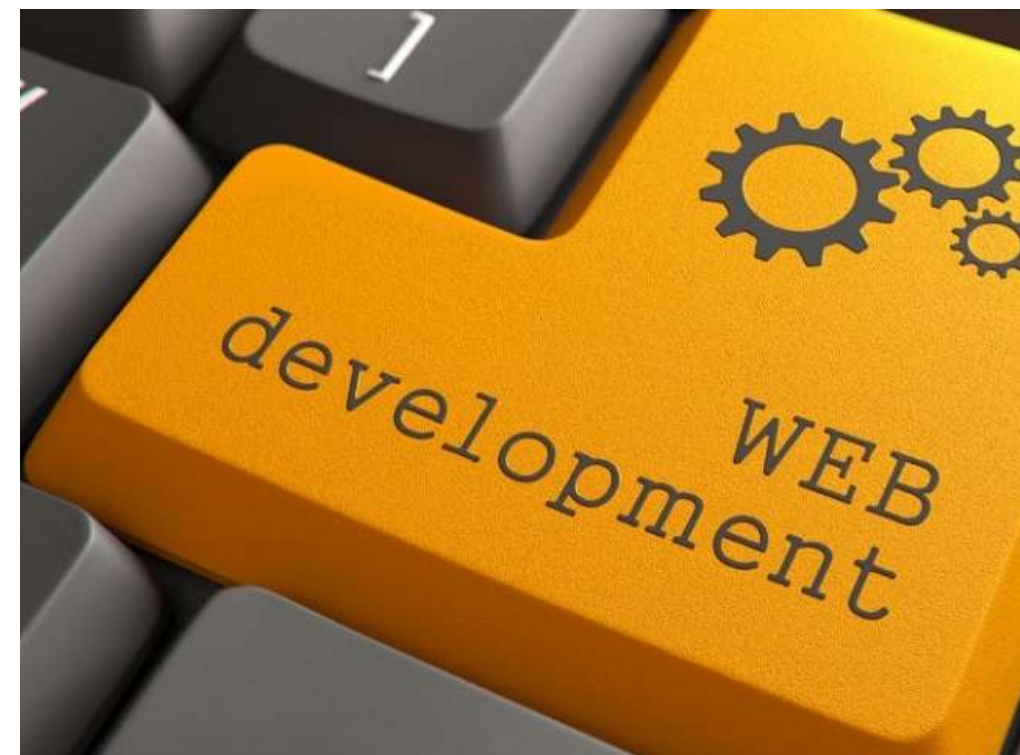# CSCI 165
Introduction to the Internet and the World Wide Web
Lec 3: Graphics II

Jetic Gū

Overview

- Focus: Web Development

- Architecture: Internet

- Core Ideas:

  1. JQuery and Graphics

  2. Basic Animation

jQuery Continued

Yap.

jQuery Stuff

- To use jQuery

  - Load the jQuery library using `<script>`

  - Prepare jQuery code inside a `setup()` function

  - Load the `setup()` function in `jQuery(document).ready(setup)`

jQuery Stuff

- Hint: in jQuery, you can use `$(…)` to replace `jQuery(…)`

- The following are identical:

  - ```
    jQuery('p').click(say_cheese)
    $('p').click(say_cheese)
    ```

  - ```
    jQuery('#changeme').html('Somebody clicked me.')
    $('#changeme').html('Somebody clicked me.')
    ```

- Why? Because programmers are lazy, and we couldn't be bothered to type 5 more letters

Concept

jQuery Stuff

- Change class
  ```
  $('#element').attr('class', 'highlight')
  ```

- Change CSS
  ```
  newstyle = {
      'color': '#f60',
      'font-size': '1.5em'
  }  // this is a js object, similar to python dict
  $('#element').css(newstyle)
  ```

- `newstyle` is a javascript object, similar to a python dict. The syntax is a bit different from in CSS files.

  - All keys and values need to be inside a pair of quotation marks.

Technical

jQuery Animation

- jQuery can animate any "numeric" CSS property. e.g.

  - `font-size`: 10pt -> 20pt

  - `height` and `width`: 1pt -> 10pt

  - `opacity`: 0.5 -> 1

  - What if you are not sure? Try it!

Technical

jQuery Animation

- First:
```
oldstyle = {
    'color': '#f60',
    'font-size': '1.5em'
}
$('#element').css(oldstyle)
```

- Animate:
```
newstyle = {
    'color': '#fff',
    'font-size': '15em'
}
$('#element').animate(newstyle, 2000)
```

- `2000` here is the time for which this animation takes

Example

jQuery Animation (Fun)

- Fun fact: `animation` is a CSS attribute, just like `font-size`!

- Try:

  - In your CSS file, add:
    ```
    @keyframes meow {
        from {background-color: red;}
        to {background-color: yellow;}
    }
    ```

  - In your javascript (control.js), change the following
    ```
    'animation': 'meow 1s linear 0s infinite alternate'
    ```

Example