

jQuery
slido.com #UMSI-3-31



What is jQuery?

- A JavaScript library
- “Better” than js in that you can do more in less, but can be harder to read at first.

```
$(document).ready(function(){
    $("p").click(function(){
        $(this).hide();
    });
});
```



How it works

- You need to add jQuery library to use jQuery
 - Download the jQuery library from jQuery.com
 - Include jQuery from a CDN, like Google
- If users have already loaded jQuery, it will be loaded from cache when they visit your site, which means faster loading time.



jQuery syntax

`$(selector).action()`

- A **\$** sign to define/access jQuery
- A **(*selector*)** to "query (or find)" HTML elements
- A jQuery ***action*()** to be performed on the element(s)



Document ready

```
$(document).ready(function(){  
    // jQuery methods go here...  
});
```

or

```
$(function(){  
    // jQuery methods go here...  
});
```

- Prevents any jQuery code from running before the document is loaded



Examples

- `$(this).hide()` - hides the current element.
- `$("p").hide()` - hides all `<p>` elements.
- `$(".test").hide()` - hides all elements with `class="test"`.
- `$("#test").hide()` - hides the element with `id="test"`.
- https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_hide



Selectors and Events

- This is the same as the selectors in CSS and the events in JS
- https://www.w3schools.com/jquery/jquery_selectors.asp
- https://www.w3schools.com/jquery/jquery_events.asp
- Attempt the Slido surveys (taken from sites above)



Events vs Effects

- Events are what **WE** do, effects are what **jQuery** can do
 - Hide, Show, Toggle, Slide, Fade, and Animate.
 - https://www.w3schools.com/jquery/jquery_hide_show.asp
- Syntax
 - `$(selector).hide(speed,callback);`
 - `$(selector).show(speed,callback);`



Speed

- "slow", "fast", or milliseconds.
- https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_hide_slow



Callback (aka using “function”

- With:
 - https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_hide_callback
- Without:
 - https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_hide_no_callback



Using the libraries

- <https://jqueryui.com/draggable/>



Other cool stuff

- Mouse events
 - https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_event_mouseenter_mouseover
- Animation
 - <https://codepen.io/ColleenEMc/pen/EEjoWL?editors=1010>



This is just a taste

- The key to transitioning easily from one aspect to another is feeling comfortable with the basics (HTML, CSS, JavaScript)
- Adding in some of your programming knowledge (string concatenation, literals and variables, function definitions vs function calls, etc...)
- But acknowledging there will be some clunky inconsistencies



Getting Started

- Always have a “go to” for coding help.
- StackOverflow is good for specific questions. (But rarely the first answer is the best one.)
- W3schools is good for general knowledge.
- https://www.w3schools.com/jquery/jquery_ref_html.asp



Changing HTML content

- Return content:

`$(selector).html()`

- Set content:

`$(selector).html(content)`

- Set content using a function:

`$(selector).html(function(index,currentcontent))`



Form values

- Return the value attribute:

`$(selector).val()`

- Set the value attribute:

`$(selector).val(value)`

- Set the value attribute using a function:

`$(selector).val(function(index,currentvalue))`



Form values

- Return the value attribute:

`$(selector).val()`

- Set the value attribute:

`$(selector).val(value)`

- Set the value attribute using a function:

`$(selector).val(function(index,currentvalue))`



CSS values

- To return the value of a specified CSS property:

```
css("propertyname");
```

- To set a specified CSS property:

```
css("propertyname","value");
```

- To set multiple CSS properties:

```
css({"propertyname":"value","propertyname":"value",...  
});
```



Properties

- Return the value of a property:

`$(selector).prop(property)`

- Set the property and value:

`$(selector).prop(property,value)`

- Set property and value using a function:

`$(selector).prop(property,function(index,currentvalue))`

- Set multiple properties and values:

`$(selector).prop({property:value,
property:value,...})`



Review

- Set Content and Attributes:

https://www.w3schools.com/jquery/jquery_dom_set.asp

- Get Content and Attributes:

https://www.w3schools.com/jquery/jquery_dom_get.asp

- css Methods

https://www.w3schools.com/jquery/jquery_css.asp



JS vs jQuery – Selectors

- By Id
 - = `document.querySelector("#id");`
 - = `$("#id");`
- By Tag Name
 - = `document.querySelectorAll("p");`
 - = `$("p");`
- By Class Name
 - = `document.querySelectorAll(".intro");`
 - = `$(".intro");`



JS vs jQuery – HTML elements

- Set Text Content

- `element.textContent = "Hi!";`
- `myElement.text("Hi!");`

- Get Text Content

- `... = element.textContent;`
- `... = element.text();`

- Set HTML Content

- `element.innerHTML = "<p>Hi</p>";`
- `element.html("<p>Hi</p>");`

- Get HTML Content

- `... = element.innerHTML;`
- `... = element.html();`



JS vs jQuery – CSS Styles

- Hide

- `element.style.display="none";`
- `element.hide();`

- Show

- `element.style.display ="";`
- `element.show();`

- Color

- `element.style.color="red";`
- `element.css("color","red");`

- Get Attribute

- `...= element.src`
- `...= element.attr("src");`



Acknowledgements

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