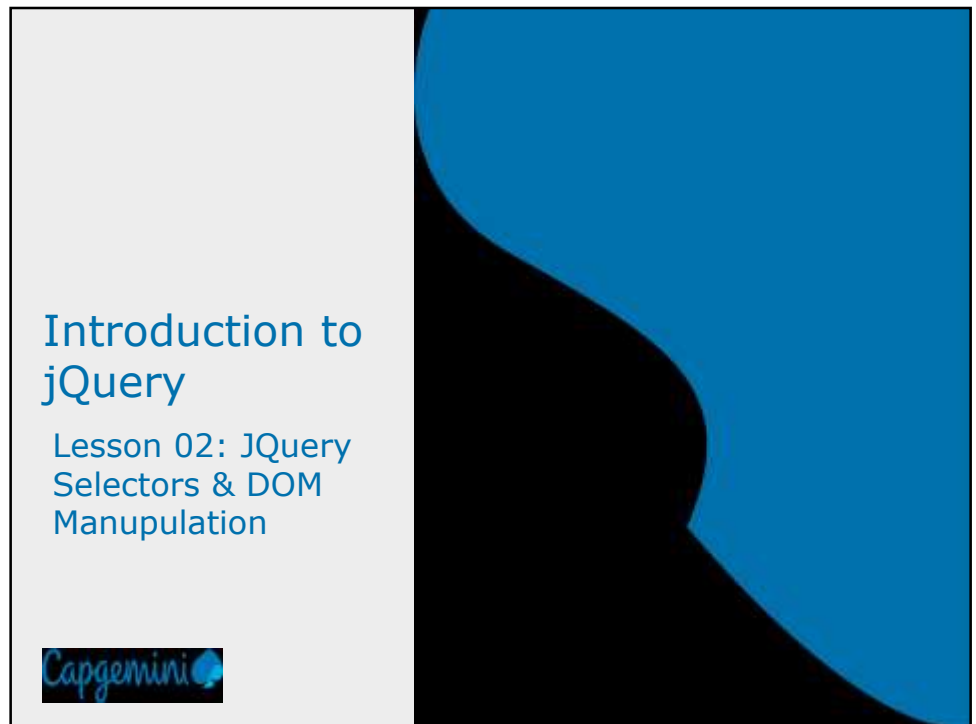


Instructor Notes:



Instructor Notes:

Explain the lesson coverage

Lesson Objectives

- Introduction to Selectors
- Using Different JQuery Selectors
- Iterating Through Nodes
- Working with Attributes and DOM Content
- DOM Insertion and Removal



Instructor Notes:

Additional notes for instructor

2.1 : Introduction to Selectors

Introduction to selectors



- jQuery uses same CSS selectors to style and manipulate elements on the page.
- CSS selectors select elements to add style where as jQuery selectors select elements to add behavior.
- Selectors allow page elements to be selected.
- Single or Multiple elements are supported.
- A Selector identifies an HTML element / tag that will be manipulated with jQuery Code.
- Selector Syntax
 - `$(selectorExpression)`
 - `jQuery(selectorExpression)`

Instructor Notes:

Additional notes for instructor

2.2. Using Different JQuery Selectors

Tag Selector



➤ Selecting single tag takes the following syntax

- \$('p') - selects all <p> elements
- \$('a') - selects all <a> elements

➤ To reference multiple tags, use the (,) to separate the elements

- \$('p, a, span') - selects all paragraphs, anchors and span elements

Add the notes here.

Instructor Notes:

Additional notes for instructor

2.2. Using Different JQuery Selectors

Id Selector

- It is used to locate the DOM element very fast.
- Use the # character to select elements by ID
 - \$('#myID') – selects <div id="myid"> element

Add the notes here.

Instructor Notes:

Additional notes for instructor

2.2. Using Different JQuery Selectors

Class Selector



- Use the (.) character to select elements by class name
 - `$('.myclass')` - selects `<div class="myclass">` element
- To reference multiple tags, use the (,) character to separate the class name.
 - `$('.blueDiv,.redDiv')` - selects all the elements containing the class `blueDiv` and `redDiv`
- Tag names can be combined with elements name as well.
 - `$(div.myclass')` - selects only `<div>` tags with `class="myclass"`

Add the notes here.

Instructor Notes:

Additional notes for instructor

2.2. Using Different JQuery Selectors

Attribute Selector



➤ Use brackets [attribute] to select based on attribute name and/or attribute value

- \$('a[title]') - selects all anchor elements that have a title attribute
- \$('a[title="trainer"]') - selects all <a> elements that have a "trainer" title attribute value

Add the notes here.

Instructor Notes:

Additional notes for instructor

2.2. Using Different JQuery Selectors

Form Element Selectors



➤ To select all input elements

- \$(':input') - selects input, select, textarea, button, image, radio etc
- \$(':input[type="radio"]') - selects all radio buttons
- \$(':text') - selects all textboxes
- \$(':checkbox') - selects all checkboxes
- \$(':radio') - selects all radio buttons

Add the notes here.

Instructor Notes:

Additional notes for instructor

2.2. Using Different JQuery Selectors

Using Filters in Selector



- `:contains()` will select elements that match the contents.
 - `$('div:contains("Capgemini")')` - selects div's which contains the text Capgemini(match is case sensitive)
- `$('element:odd')` and `$('element:even')` is the jQuery syntax for selecting odd and even positions respectively.
 - Index is 0 based. Odd returns(1,3,5...) and Even returns (0,2,4...)
- `$('element:eq())`, `$('element:gt())`, `$('element:lt())` are index-related selectors will select elements related to specific index (JavaScript arrays use 0-based indexing)
 - `:eq(index)` – equal selector
 - `:gt(index)` – greater than selector
 - `:lt(index)` – less than selector

Add the notes here.

Instructor Notes:

Additional notes for instructor

2.2. Using Different JQuery Selectors



Using Filters in Selector

- `$('element:first')` and `$('element:last')` is the jQuery syntax for selecting the first and last element within the matched set.
 - `$('span:first')` returns the first span element in the DOM
- `$('element:first-child')` and `$('element:last-child')` is the jQuery syntax for selecting the first child and last child of every element group.
 - `$('span:first-child')` returns the span which is a first child for all the groups

Add the notes here.

Instructor Notes:

Additional notes for
instructor

Demo

➤ [Selectors-Intro.html](#)



Add the notes here.

Instructor Notes:

Additional notes for instructor

2.3. Iterating Through Nodes

Iterating through Nodes



- `.each(function(index,Element))` is used to iterate through jQuery objects

```
$('#div').each (function (index){  
  alert(index+'='+$(this).text());  
});
```

- Iterates through each div element and returns its index number and text

```
$('#div').each (function  
(index,element){  
  alert(index+'='+$(element).text());  
});
```

Instructor Notes:

Additional notes for instructor

2.3. Iterating Through Nodes

Iterating through Nodes



- The `this.PropertyName` statement can be used to modify an object's properties directly.

```
$( 'div' ).each (function (index){  
  this.title = "Index = "+index;  
});
```

- Iterates through each div and modifies the title. If the property does not exist, it will be added

Instructor Notes:

Additional notes for instructor

2.4. Working with Attributes and DOM Content



Working with Attributes and DOM Content

- Object attributes can be used using `attr()`:
 - `var val = $('#customDiv').attr('title');` - Retrieves the title attribute value
- `.attr(attributeName,value)` is the method used to access an object's attributes and modify the values.
 - `$('#img').attr('title','Image title');` - changes the title attribute value to Image title.
- To modify multiple attributes, pass JSON object.

```
$('#img').attr({  
  "title": "image title",  
  "style" : "border:2px solid black"  
});
```

Instructor Notes:

Additional notes for instructor

2.5. DOM Insertion and Removal



DOM Insertion and Removal

- To insert new nodes four methods are available in jQuery
- Appending adds children at the end of the matching elements
 - .append()
 - .appendTo()
- Prepending adds children at the beginning of the matching elements
 - .prepend()
 - .prependTo()
- To wrap the elements use .wrap()
- To remove nodes from an element use .remove()

Instructor Notes:

Additional notes for
instructor

Demo

➤ [jQuery-DOM-Manipulation.html](#)



Add the notes here.

Instructor Notes:

Additional notes for instructor

Summary

- Selectors allow any type of HTML element to be located in an HTML Page
- Key jQuery Selector character include:
 - # for ID selection
 - . for class selection
- Mastering selectors is the key to being productive with jQuery!
- jQuery Selectors can be combined with DOM functions to perform a variety of functionality
 - Iterate through elements
 - Add Elements
 - Remove Elements
 - Wrap Elements



Add the notes here.

Instructor Notes:

Answers for the Review

Questions 1: A

Questions 2: Selector

Questions 3: A

Review Question

➤ Question 1 : jQuery uses CSS selectors to select elements?

- A. True
- B. False

➤ Question 2 : A _____ is used by jQuery to locate and return an element from the web page

➤ Question 3 : With jQuery, look at the following selector: `$("div.intro")`. What does it select?

- All div elements with class="intro"
- The first div element with class="intro"
- The first div element with id="intro"
- All div elements with id="intro"



Add the notes here.

Instructor Notes:

Answers for the Review

Questions 1: A

Questions 2: Selector

Questions 3: A

Review Question

➤ Question 4 : Which jQuery method is used to set one or more style properties for selected elements?

- `css()`
- `style()`
- `html()`
- `text()`

➤ Question 5 : Which of the snippets below creates a new div and appends it to the first span on the page?

- `$('#span').createElement('div','This is a new div!');`
- `$('#<div>',{html:"This is a new div"}).appendTo('span:first');`
- `$('#span').html('<div>This is a new div!</div>')`



Add the notes here.