

## 7. jQuery - Introduction & Usage

jQuery is a lightweight, "write less, do more", JavaScript library.

The purpose of jQuery is to make it much easier to use JavaScript on website.

The jQuery library contains the following features:

- HTML/DOM manipulation
- CSS manipulation
- HTML event methods
- Effects and animations
- AJAX
- Utilities

The jQuery library is a single JavaScript file, and you reference it with the HTML `<script>` tag (notice that the `<script>` tag should be inside the `<head>` section):

```
<head>
  <script src="jquery-3.3.1.min.js"></script>
</head>
```

**Basic syntax is:** `$(selector).action()`

**Example:** `$(this).hide()` - hides the current element.

### jQuery Selectors:

Syntax	Description
<code>\$("*")</code>	Selects all elements
<code>\$(this)</code>	Selects the current HTML element
<code>\$("p.intro")</code>	Selects all <code>&lt;p&gt;</code> elements with class="intro"
<code>\$("p:first")</code>	Selects the first <code>&lt;p&gt;</code> element
<code>\$("ul li:first")</code>	Selects the first <code>&lt;li&gt;</code> element of the first <code>&lt;ul&gt;</code>
<code>\$("ul li:first-child")</code>	Selects the first <code>&lt;li&gt;</code> element of every <code>&lt;ul&gt;</code>
<code>\$("[href]")</code>	Selects all elements with an href attribute
<code>\$("a[target='_blank']")</code>	Selects all <code>&lt;a&gt;</code> elements with a target attribute value equal to "_blank"
<code>\$("a[target!='_blank']")</code>	Selects all <code>&lt;a&gt;</code> elements with a target attribute value NOT equal to "_blank"
<code>\$(":button")</code>	Selects all <code>&lt;button&gt;</code> elements and <code>&lt;input&gt;</code> elements of type="button"
<code>\$("tr:even")</code>	Selects all even <code>&lt;tr&gt;</code> elements
<code>\$("tr:odd")</code>	Selects all odd <code>&lt;tr&gt;</code> elements

### jQuery Event Methods:

Mouse Events	Keyboard Events	Form Events	Document/Window Events
Click	Keypress	Submit	Load
Dblclick	Keydown	Change	Resize
Mouseenter	Keyup	Focus	Scroll
Mouseleave		Blur	Unload

Example:

```
$("#p").click();
```

or

```
$("#p").click(function () {  
    // action goes here!!  
});
```

**\$(document).ready()** - The `$(document).ready()` method allows us to execute a function when the document is fully loaded. This event is already explained in the jQuery Syntax chapter.

```
$(document).ready(function () {  
    console.log("ready!");  
});
```

**click()** - The `click()` method attaches an event handler function to an HTML element. When user clicks on that element callback function is called.

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

**hover()** - callback function is called when user hovers on that html element.

```
$("#p1").hover(function () {  
    alert("You entered p1!");  
}, function () {  
    alert("Bye! You now leave p1!");  
});
```

**focus()** - The function is executed when the form field gets focus:

```
$("#input").focus(function () {  
    $(this).css("background-color", "#cccccc");  
});
```

**blur()** - The function is executed when the form field loses focus

```
$("#input").blur(function () {  
    $(this).css("background-color", "#ffffff");  
});
```

The **on()** Method: The `on()` method attaches one or more event handlers for the selected elements.

```
$("#p").on({  
    mouseenter: function(){  
        $(this).css("background-color", "lightgray");  
    },  
    mouseleave: function(){  
        $(this).css("background-color", "lightblue");  
    },  
    click: function(){  
        $(this).css("background-color", "yellow");  
    }  
});
```