jQuery

(JavaScript Library)

jQuery is a **JavaScript** library designed to simplify HTML DOM tree traversal and manipulation

jQuery

1

jQuery

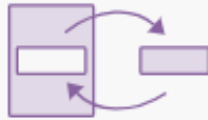- Selecting elements

```javascript
// jQuery, select all instances of .box
$(".box");

// Instead, select the first instance of .box
document.querySelector(".box");

// …or select all instances of .box
document.querySelectorAll(".box");
```

```javascript
// with jQuery
// Hide all instances of .box
$(".box").hide();

// Without jQuery
// Iterate over the nodelist of elements to hide all instances of .box
document.querySelectorAll(".box").forEach(box => { box.style.display = "none" })
```

jQuery

- Working with events

```javascript
// With jQuery
$(".button").click(function(e) { /* handle click event */ });
$(".button").mouseenter(function(e) {  /* handle click event */ });
$(document).keyup(function(e) {  /* handle key up event */  });

// Without jQuery
document.querySelector(".button").addEventListener("click", (e) => { /* ... */ });
document.querySelector(".button").addEventListener("mouseenter", (e) => { /* ... */ });
document.addEventListener("keyup", (e) => { /* ... */ });
```

```javascript
// With jQuery
// Trigger myEvent on document and .box
$(document).trigger("myEvent");
$(".box").trigger("myEvent");

// Without jQuery
// Create and dispatch myEvent
document.dispatchEvent(new Event("myEvent"));
document.querySelector(".box").dispatchEvent(new Event("myEvent"));
```

3

jQuery

- Styling

```javascript
// With jQuery
// Select .box and change text color to #000
$(".box").css("color", "#000");


// Without jQuery
// Select the first .box and change its text color to #000
document.querySelector(".box").style.color = "#000";
```

```javascript
// With jQuery
// Hide and show and element
$(".box").hide();
$(".box").show();

// Without jQuery
// Hide and show an element by changing "display" to block and none
document.querySelector(".box").style.display = "none";
document.querySelector(".box").style.display = "block";
```

```javascript
// With jQuery
// Pass multiple styles
$(".box").css({
  "color": "#000",
  "background-color": "red"
});


// Without jQuery
// Set color to #000 and background to red
var box = document.querySelector(".box");
box.style.color = "#000";
box.style.backgroundColor = "red";

// Set all styles at once (and override any existing styles)
box.style.cssText = "color: #000; background-color: red";
```

jQuery

- Document ready

```javascript
// With jQuery
$(document).ready(function() {
  /* Do things after DOM has fully loaded */
});


// Without jQuery
// Define a convenience method and use it
var ready = (callback) => {
  if (document.readyState != "loading") callback();
  else document.addEventListener("DOMContentLoaded", callback);
}


ready(() => {
  /* Do things after DOM has fully loaded */
});
```

5

jQuery

- Working with classes (single, multiple)

```javascript
// With jQuery
// Add, remove, and the toggle the "focus" class
$(".box").addClass("focus");
$(".box").removeClass("focus");
$(".box").toggleClass("focus");

// Without jQuery
// Add, remove, and the toggle the "focus" class
var box = document.querySelector(".box");
box.classList.add("focus");
box.classList.remove("focus");
box.classList.toggle("focus");
```

```javascript
// Remove the "focus" class and add "blurred"
document.querySelector(".box").classList.replace("focus", "blurred");
```

```javascript
// Add "focus" and "highlighted" classes, and then remove them
var box = document.querySelector(".box");
box.classList.add("focus", "highlighted");
box.classList.remove("focus", "highlighted");
```

jQuery

- Network requests with .get() or .ajax()

```javascript
// With jQuery
$.ajax({
    url: "data.json"
}).done(function(data) {
    // ...
}).fail(function() {
    // Handle error
});


// Without jQuery
fetch("data.json")
    .then(data => {
        // Handle data
    }).catch(error => {
        // Handle error
    });
```

jQuery

- Creating elements

```
// Create a div & span
$("<div/>");
$("<span/>");

// Create a div and a span
document.createElement("div");
document.createElement("span");
```

jQuery

- Updating the DOM

```javascript
// With jQuery
// Update the text of a .button
$(".button").text("New text");
// Read the text of a .button
$(".button").text(); // Returns "New text"


// Without jQuery
// Update the text of a .button
document.querySelector(".button").textContent = "New text";
// Read the text of a .button
document.querySelector(".button").textContent; // Returns "New text"
```

```javascript
// Create div element and append it to .container
$(".container").append($("<div/>"));

// Create a div and append it to .container
var element = document.createElement("div");
document.querySelector(".container").appendChild(element);
```

Enjoy your fast development with jQuery