

Introduction to jQuery

Dr.S.Nagender Kumar

What is jQuery?

(Write less, do more)

- jQuery is a fast and concise JavaScript Library that simplifies HTML document traversing, event handling, animating, and Ajax interactions for rapid web development. (jQuery.com)

Example: Show/Hide Button

```
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
<script>
$(document).ready(function(){
  $("#hide").click(function(){
    $("p").hide();
  });
  $("#show").click(function(){
    $("p").show();
  });
});
</script>
</head>
```

`window.onload`

- We cannot use the DOM before the page has been constructed. jQuery gives us a more compatible way to do this.

- The DOM way

```
window.onload = function() { // do stuff with the DOM }
```

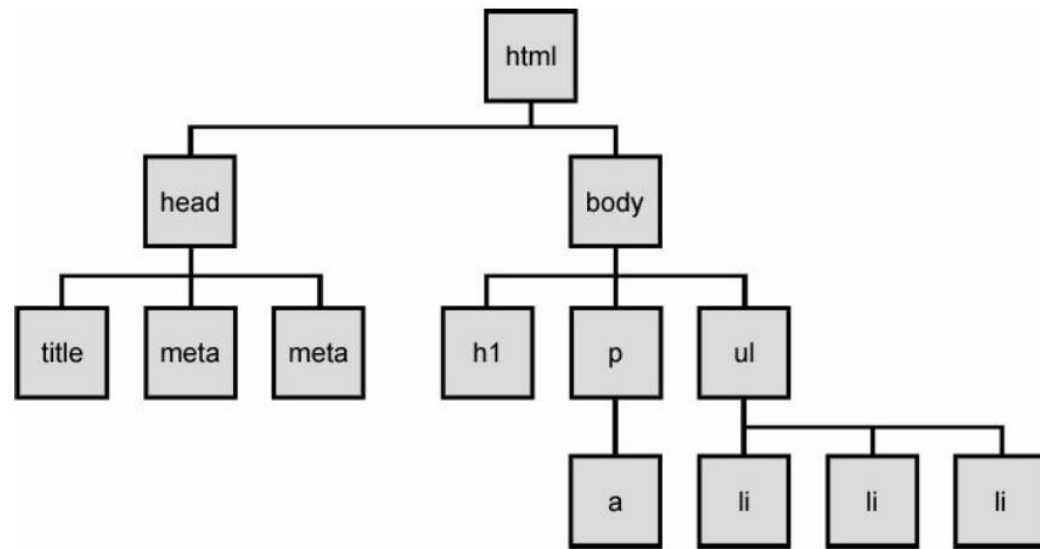
- The direct jQuery translation

```
$(document).ready(function() { // do stuff with the DOM });
```

- The jQuery way

```
$(function() { // do stuff with the DOM });
```

The DOM tree



Aspects of the DOM and jQuery

- **Identification:** how do I obtain a reference to the node that I want.
- **Traversal:** how do I move around the DOM tree.
- **Node Manipulation:** how do I get or set aspects of a DOM node.
- **Tree Manipulation:** how do I change the structure of the page.

Selecting groups of DOM objects

name	description
<u>getElementById</u>	returns array of descendents with the given tag, such as "div"
<u>getElementsByTagName</u>	returns array of descendents with the given tag, such as "div"
<u>getElementsByName</u>	returns array of descendents with the given name attribute (mostly useful for accessing form controls)
<u>querySelector</u> *	returns the first element that would be matched by the given CSS selector string
<u>querySelectorAll</u> *	returns an array of all elements that would be matched by the given CSS selector string

jQuery node identification

```
// id selector
```

```
var elem = $("#myid");
```

```
// group selector
```

```
var elems = $("#myid, p");
```

```
// context selector
```

```
var elems = $("#myid < div p");
```

```
// complex selector
```

```
var elems = $("#myid < h1.special:not(.classy)");
```

jQuery / DOM comparison

DOM method	jQuery equivalent
getElementById("id")	\$("#id")
getElementsByTagName("tag")	\$("tag")
getElementsByName("somename")	\$("[name='somename']")
querySelector("selector")	\$("selector")
querySelectorAll("selector")	\$("selector")

Demos on jQuery

Reference

