



JS4: HTML DOM

FDP 5.0



Nội dung

- ❖ Giới thiệu
- ❖ HTML document
- ❖ DOM HTML
- ❖ DOM CSS
- ❖ DOM Event



GIỚI THIỆU

❖ **DOM: Document object model**

❖ **Với DOM, chúng ta có thể:**

- Thay đổi các phần tử HTML
- Thay đổi thuộc tính HTML
- Thay đổi CSS
-

HTML DOCUMENT

❖ Đối tượng document đại diện cho trang web

❖ Một số phương thức cơ bản:

- `getElementById(id)`
- `getElementsByTagName(name)`
- `getElementsByClassName(name)`
- `createElement(element)`
- `write()`

❖ Thuộc tính:

- `Element.innerHTML = new content`
- `Element.attribute = new value`
- `Element.style.property = new style`
- `Element.setAttribute(attribute, value)`

HTML DOCUMENT

getElementById

```
<body>

<h2>Finding HTML Elements by Id</h2>

<p id="intro">Hello World!</p>
<p>This example demonstrates the <b>getElementsById</b> method.</p>

<p id="demo"></p>

<script>
var myElement = document.getElementById("intro");
document.getElementById("demo").innerHTML =
"The text from the intro paragraph is " + myElement.innerHTML;
</script>

</body>
```

Finding HTML Elements by Id

Hello World!

This example demonstrates the **getElementsById** method.

The text from the intro paragraph is Hello World!

HTML DOCUMENT

getElementsByTagName

```
<body>
<h2>Finding HTML Elements by Tag Name</h2>
<p>Hello World!</p>
<p>This example demonstrates the <b>getElementsByTagName</b> method.</p>
<p id="demo"></p>
<script>
var x = document.getElementsByTagName("p");
document.getElementById("demo").innerHTML =
'The text in first paragraph (index 0) is: ' + x[0].innerHTML;
</script>
</body>
```

Finding HTML Elements by Tag Name

Hello World!

This example demonstrates the **getElementsByTagName** method.

The text in first paragraph (index 0) is: Hello World!

HTML DOCUMENT

getElementByClassName

```
<body>

<h2>Finding HTML Elements by Class Name</h2>

<p>Hello World!</p>

<p class="intro">The DOM is very useful.</p>
<p class="intro">This example demonstrates the <b>getElementsByName</b>
method.</p>

<p id="demo"></p>

<script>
var x = document.getElementsByClassName("intro");
document.getElementById("demo").innerHTML =
'The first paragraph (index 0) with class="intro": ' + x[0].innerHTML;
</script>

</body>
```

Finding HTML Elements by Class Name

Hello World!

The DOM is very useful.

This example demonstrates the **getElementsByName** method.

The first paragraph (index 0) with class="intro": The DOM is very useful.

HTML DOCUMENT

Object collectoin

```
<h2>Finding HTML Elements Using document.forms</h2>
```

```
<form id="frm1" action="/action_page.php">  
  First name: <input type="text" name="fname" value="Donald"><br>  
  Last name: <input type="text" name="lname" value="Duck"><br><br>  
  <input type="submit" value="Submit">  
</form>
```

```
<p>Click "Try it" to display the value of each element in the form.</p>
```

```
<button onclick="myFunction()">Try it</button>
```

```
<p id="demo"></p>
```

```
<script>
```

```
function myFunction() {  
  var x = document.forms["frm1"];  
  var text = "";  
  var i;  
  for (i = 0; i < x.length ;i++) {  
    text += x.elements[i].value + "<br>";  
  }  
  document.getElementById("demo").innerHTML = text;  
}
```

```
</script>
```

Finding HTML Elements Using document.forms

First name:

Last name:

Click "Try it" to display the value of each element in the form.

Donald

Duck

Submit

HTML DOCUMENT

write

```
<!DOCTYPE html>
<html>
<body>

<script>
document.write(Date());
</script>

</body>
</html>
```

Sat May 30 2020 21:30:47 GMT+0700 (Giờ Đông Dương)

HTML DOCUMENT

Thay đổi giá trị thuộc tính

```
<!DOCTYPE html>
<html>
<body>



<script>
document.getElementById("image").src = "landscape.jpg";
</script>

<p>The original image was smiley.gif, but the script changed it to
landscape.jpg</p>

</body>
</html>
```



The original image was smiley.gif, but the script changed it to landscape.jpg

DOM CSS

Thay đổi giá trị CSS

```
<!DOCTYPE html>
<html>
<body>

<p id="p1">Hello World!</p>
<p id="p2">Hello World!</p>

<script>
document.getElementById("p2").style.color = "blue";
document.getElementById("p2").style.fontFamily = "Arial";
document.getElementById("p2").style.fontSize = "larger";
</script>

<p>The paragraph above was changed by a script.</p>

</body>
</html>
```

Hello World!

Hello World!

The paragraph above was changed by a script.

DOM CSS

Thay đổi giá trị CSS – sử dụng Event

```
<!DOCTYPE html>
<html>
<body>

<h1 id="id1">My Heading 1</h1>

<button type="button"
onclick="document.getElementById('id1').style.color = 'red'">
Click Me!</button>

</body>
</html>
```

My Heading 1

Click Me!



DOM EVENT

❖ **onclick**

❖ onload

❖ onunload

❖ onchange

❖ onmouseover – onmouseout

❖ onmousedown – onmouseup

❖ onfocus

DOM EVENT

Ví dụ

```
<div onmouseover="mOver(this)" onmouseout="mOut(this)"  
style="background-color:#D94A38;width:120px;height:20px;padding:40px;">  
Mouse Over Me</div>
```

```
<script>  
function mOver(obj) {  
  obj.innerHTML = "Thank You"  
}  
  
function mOut(obj) {  
  obj.innerHTML = "Mouse Over Me"  
}  
</script>
```



Mouse Over Me



BÀI TẬP

❖ **Làm bài tập 1 Lab JS03**

Thank you and
happy learning !!!