

LOCATING NODES

PROF. DAVID ROSSITER

AFTER THIS PRESENTATION

- You'll appreciate how to find a node in the DOM
- You'll appreciate how to set the attribute of a node

WE WILL LOOK AT

`getElementsByName()`

`getElementById()`

`setAttribute()`

THE DOM

Everything is in the DOM

We can add/delete/copy/change anything

To do this, we need to understand how to access things

USING THE EXACT PATH

- Method 1: Use the exact DOM path
 - Sometimes hard to work out the exact path
 - Easy to make mistakes
 - In another browser the DOM may be slightly different
 - code fails!

USING THE TYPE

- Method 2: Use `getElementsByTagName()`
 - This requires you to know the exact tag name
e.g. is it `h2` or `h3`?
 - There might be several nodes of that type,
so you have to know exactly which one it is

USING THE NAME

- Method 3: Use `getElementById()`
 - If you give a node a unique name e.g.

`<element_name id="thing"> . . . </element_name>`

then this method is the easiest way

```
<body>
<h2 style="color:black" id="cute_text">
Click on a button to change the colour
</h2>

<form>
<input onclick="change_color1()" type="button"
    value="Change using method 1">
<input onclick="change_color2()" type="button"
    value="Change using method 2">
<input onclick="change_color3()" type="button"
    value="Change using method 3">
</form>
</body>

</html>
```


EXAMPLE - CODE

```
<!DOCTYPE html>
<html> <head>
<script>
function change_color1() {
    document.childNodes[0].childNodes[2].childNodes[1]
        .style.color="red";
}
function change_color2() {
    document.getElementsByTagName("h2")[0].style.color
        ="yellow";
}
function change_color3() {
    document.getElementById("cute_text").style.color="blue";
}
</script>
</head>
```

Click on a button to change the colour of this text

Change using method 1

Change using method 2

Change using method 3

Click [here](#) to open the example

SETATTRIBUTE()

This is a common way to change something

For example:

```
the_node=getElementById("thisNode");  
the_node.setAttribute("style", "color:red");
```

```
<!DOCTYPE html>
<html> <head>
<script>
function change_color1(){
    document.childNodes[0].childNodes[2].childNodes[1]
        .setAttribute("style", "color:red");
}
function change_color2(){
    document.getElementsByTagName("h2")[0]
        .setAttribute("style", "color:yellow");
}
function change_color3(){
    document.getElementById("cute_text")
        .setAttribute("style", "color:blue");
}
</script>
</head>
```