

Objectives ■

How do HTML and Java Script interact on a webpage?

What is the advantage of manipulating HTML dynamically?

Investigate getElementById + innerHTML

Work Time:

Follow along the teacher demo and complete a webpage that incorporates a script

```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <title></title>
5      <style></style>
6      <script>
7        function initialize() {
8          outputDiv = document.getElementById("divout");
9        }
10     </script>
11   </head>
12
13   <body onload = "initialize();">
14     <div id = "divout">
15       You have not clicked the button.
16     </div>
17
18     <button>Click me!</button>
19   </body>
20 </html>
```

You have not clicked the button.

Click me!

Access HTML element

`getElementById`

JS variable

HTML Document,
object, from
<html> to </html>

METHOD, called to **accesses** element in HTML
Document,
returns the whole HTML element

```
outputDiv = document.getElementById("divout");
```

METHOD is being called on HTML document

```
<div id = "divout">
```

You have not clicked the button.

```
</div>
```

```
outputDiv = document.getElementById("divout");
```

Id allows to access a
specific element in
the HTML document

```
<div id = "divout">
```

You have not clicked the button.

```
</div>
```

```
outputDiv = document.getElementById("divout");
```

```
<div id = "divout">
```

You have not clicked the button.

```
</div>
```

innerHTML, between <div> and </div>

```
outputDiv = "You have not clicked the button."
```

```
outputDiv = document.getElementById("divout");
```

```
<div id = "divout">
```

```
You have not clicked the button.
```

```
</div>
```

innerHTML, between <div> and </div>

```
outputDiv = document.getElementById("divout");
```

```
<div id = "divout">
```

You have not clicked the button.

```
</div>
```

You have not clicked the button.

Click me!



Change the element

innerHTML

```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <title></title>
5      <style></style>
6      <script>
7        function initialize() {
8          outputDiv = document.getElementById("divout");
9        }
10       function clickResponse(){
11         outputDiv.innerHTML = "Now you've clicked the button";
12       }
13     </script>
14   </head>
15
16   <body onload = "initialize();">
17     <div id = "divout">
18       You have not clicked the button.
19     </div>
20
21     <button onclick = "clickResponse();">Click me!</button>
22   </body>
23 </html>
```

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```

Property, referring
to what is inside
between two tags

Assigning the new value to inner HTML (what is between two tags)

```
outputDiv.innerHTML = "Now you've clicked the button";
```

```
<button onclick = "clickResponse();" >Click me!</button>
```

Property, referring
to what is inside
between two tags

Assigning the new value to inner HTML (what is between two tags)

`outputDiv.innerHTML = "Now you've clicked the button";`

`<div id = "divout">`

You have not clicked the button.

`</div>`



`<button onclick = "clickResponse();" >Click me!</button>`

You have not clicked the button.

Click me!



Now you've clicked the button

Click me!

```
1  <!DOCTYPE html>
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4      <title></title>
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7        function initialize() {
8          | outputDiv = document.getElementById("divout");
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16    <body onload = "initialize();">
17      <div id = "divout">
18        | You have not clicked the button.
19      </div>
20
21      <button onclick = "clickResponse();">Click me!</button>
22    </body>
23  </html>
```

```
outputDiv = document.getElementById("divout");  
outputDiv.innerHTML = "Now you've clicked the button";
```



```
document.getElementById("divout").innerHTML = "Now you've clicked the button";
```


Example HTML-JS

Task: Code the following page to add a script to your HTML

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title></title>
5     <style></style>
6     <script>
7       function initialize() {
8         outputDiv = document.getElementById("divout");
9         clicks = 0;
10      }
11      function clickResponse(){
12        outputDiv.innerHTML = "Now you've clicked the button " + clicks + " time(s)";
13        countClicks();
14        //document.getElementById("divout").innerHTML = "Now you've clicked the button " + clicks + " time(s)";
15      }
16      function countClicks(){
17        clicks++;
18      }
19    </script>
20  </head>
21
22  <body onload = "initialize();">
23    <div id = "divout">
24      You have not clicked the button.
25    </div>
26
27    <button onclick = "clickResponse();">Click me!</button>
28  </body>
29 </html>
```

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14         //document.getElementById("divout").innerHTML = "Now you've clicked the button " + clicks + " time(s)";
15       }
16       function countClicks(){
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19     </script>
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23     <div id = "divout">
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27     <button onclick = "clickResponse();">Click me!</button>
28   </body>
29 </html>
```

OR

```
1 <!DOCTYPE html>
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6     <script>
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12        outputDiv.innerHTML = "Now you've clicked the button " + clicks + " time(s)";
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19    </script>
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25    </div>
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28  </body>
29 </html>
```

OR

You have not clicked the button.

Click me!

Now you've clicked the button 1 time(s)

Click me!