

# CREATING AND ADDING NODES

## IN THIS LESSON

`createElement()`

`createTextNode()`

`insertBefore()`

`appendChild()`

## createElement()

Create a new HTML element node in JavaScript

You can make any HTML element, we will use **<hr>** as our example

**<hr>** creates a simple horizontal rule (line) across the page

```
document.createElement('hr')
```

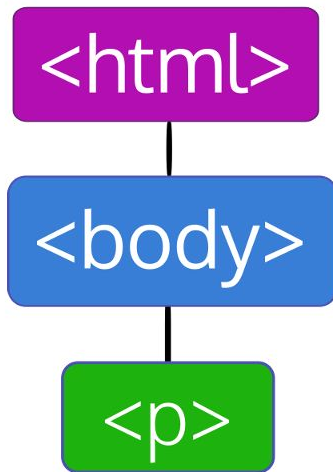
## createTextNode()

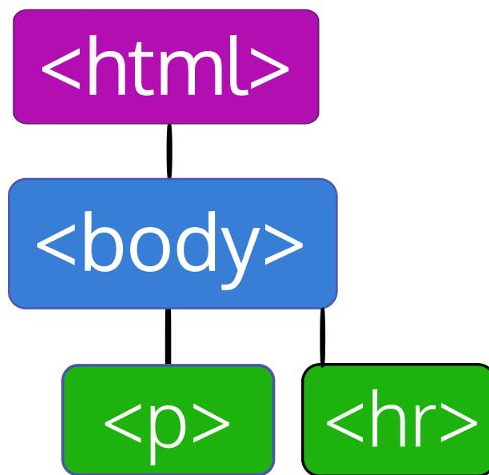
Create a new text node in JavaScript

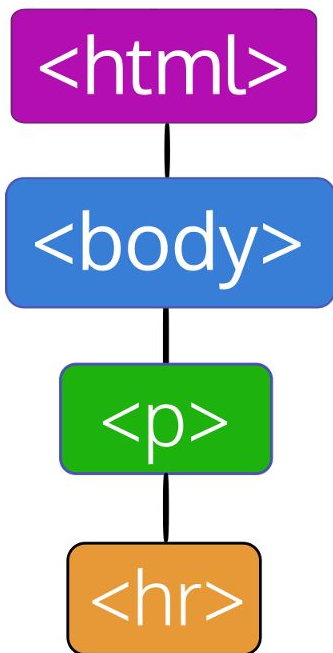
There are more methods to create other kinds of nodes, such as `createComment` to create a comment node, and so on

```
const newText = document.createTextNode('your text goes here');
```

```
<hr>
```







When you create a DOM node, it is not automatically added to the DOM tree structure and will not show up on the webpage

It doesn't know where it belongs in the DOM  
until you explicitly tell it



## insertBefore()

**insertBefore()** is a node method, you must use it on an existing node

First figure out an existing node in the DOM to act as the parent node for the node to insert

```
parentNode.insertBefore(newEl, parentNode.firstChild)
```

## insertBefore()

**insertBefore()** is a node method, you must use it on an existing node

First figure out an existing node in the DOM to act as the parent node for the node to insert

```
parentNode.insertBefore(newEl, parentNode.lastChild)
```

## appendChild()

**appendChild()** is another node method to add a node to an existing DOM

Again, you need to locate a node to act as the parent

```
parentNode.appendChild(newText);
```

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="utf-8" />
5   <title>Create and Add Nodes Demo</title>
6   <style>
7     p {
8       font-size: 24px;
9     }
10  </style>
11 </head>
12 <body>
13
14   <p id="firstP" onclick="insertNewElement()">Click this text to insert a new hr element to the page</p>
15
16   <p id="secondP" onclick="insertNewText()">Click this text to append a new text child node to the page</p>
17
18   <script>
19     function insertNewElement() {
20       const newEl = document.createElement('hr');
21       const parentNode = document.querySelector('#firstP');
22       parentNode.insertBefore(newEl, parentNode.firstChild);
23     }
24
25     function insertNewText() {
26       const newText = document.createTextNode('This is dynamically added text!');
27       const parentNode = document.querySelector('#secondP');
28       parentNode.appendChild(newText);
29     }
30   </script>
31 </body>
32 </html>
```

```

....<p id="firstP" onclick="insertNewElement()">Click this text to insert a new hr element
....<p id="secondP" onclick="insertNewText()">Click this text to append a new text child

....<script>
....    function insertNewElement() {
....        const newEl = document.createElement('hr');
....        const parentNode = document.querySelector('#firstP');
....        parentNode.insertBefore(newEl, parentNode.firstChild);
....    }

....    function insertNewText() {
....        const newText = document.createTextNode('This is dynamically added text!');
....        const parentNode = document.getElementById('secondP');
....        parentNode.appendChild(newText);
....    }
....</script>
</body>
</html>

```

Click this text to insert a new hr element to the page

Click this text to append a new text child node to the page



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Click this text to insert a new hr element to the page

Click this text to append a new text child node to the page This is dynamically added text! This is dynamically added text! This is dynamically added text!



Elements

Console

Sources

Network

```
<!doctype html>
...<html lang="en"> == $0
  ><head>...</head>
  ><body>
    ><p id="firstP" onclick="insertNewElement()">
      <hr>
      <hr>
      <hr>
      <hr>
      <hr>
      <hr>
      "Click this text to insert a new hr element
    </p>
    ><p id="secondP" onclick="insertNewText()">...</p>
    ><script>...</script>
    <!-- Code injected by live-server -->
    ><script type="text/javascript">...</script>
  </body>
</html>
```

html

Click this text to insert a new hr element to the page

Click this text to append a new text child node to the page This is dynamically added text! This is dynamically added text! This is dynamically added text! This is dynamically added text!





Elements

Console

Sources

Network

&lt;!doctype html&gt;

...&lt;html lang="en"&gt; == \$0

&gt;&lt;head&gt;...&lt;/head&gt;

▼&lt;body&gt;

&gt;&lt;p id="firstP" onclick="insertNewElement()"&gt;...&lt;

▼&lt;p id="secondP" onclick="insertNewText()"&gt;

"Click this text to append a new text child

" This is dynamically added text!"

" This is dynamically added text!"

" This is dynamically added text!"

" This is dynamically added text!"

" This is dynamically added text!"

&lt;/p&gt;

&gt;&lt;script&gt;...&lt;/script&gt;

&lt;!-- Code injected by live-server --&gt;

&gt;&lt;script type="text/javascript"&gt;...&lt;/script&gt;

&lt;/body&gt;

&lt;/html&gt;

html

Click this text to insert a new hr element to the page

Click this text to append a new text child node to the page This is dynamically added text! This is dynamically added text! This is dynamically added text! This is dynamically added text! This is dynamically added text!