

Day 18



Matches(), Closest() and Contains():

What Are matches(), closest(), and contains()?

These three are DOM element methods used to check relationships between elements or find related elements in the document.

They help you:

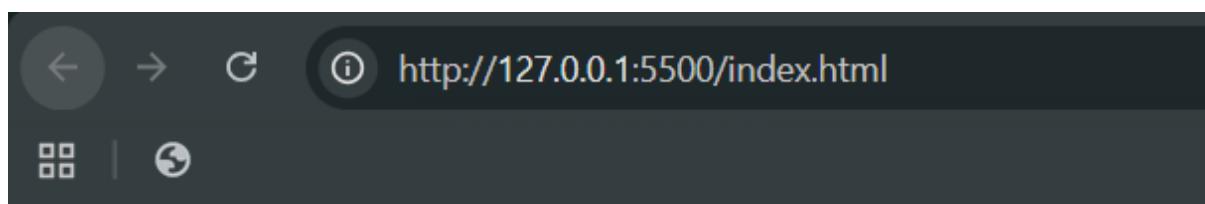
- Check if an element fits a selector (matches)
- Find the nearest matching ancestor (closest)
- Check if one element is inside another (contains)

Now, to understand this, we will create a simple file:

A screenshot of a code editor window titled "index.html". The code editor shows the following HTML structure:

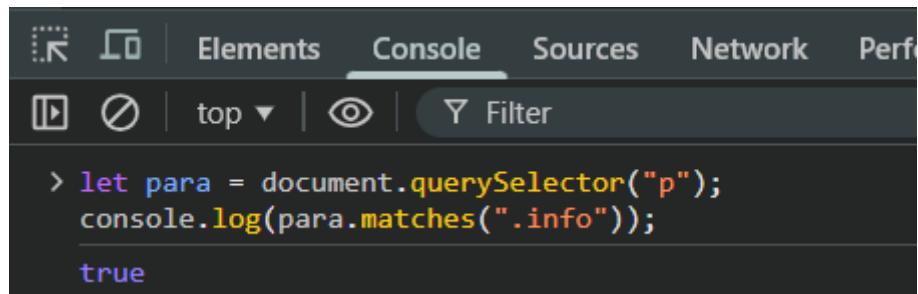
```
index.html > html > body > div.wrapper
1  <!DOCTYPE html>
2  <html>
3  <head>
4  |  <title>matches(), closest(), contains()</title>
5  </head>
6  <body>
7  |  <div class="wrapper">
8  |  |  <div class="card">
9  |  |  |  <p class="info" id="box">Hello World!</p>
10 |  |  </div>
11 |  </div>
12 </body>
13 </html>
```

Output:



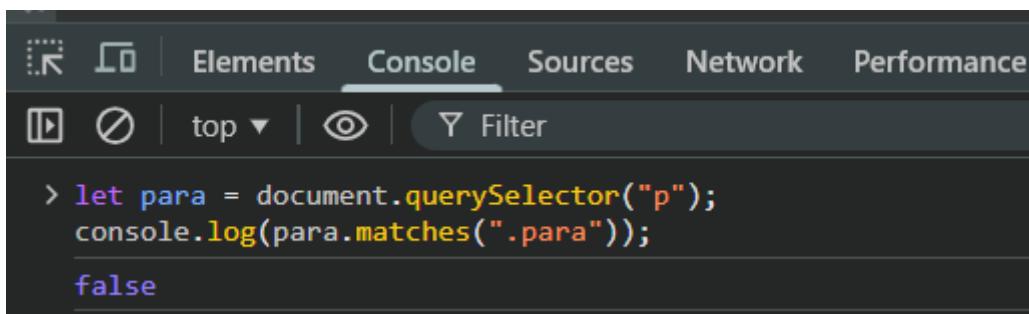
Hello World!

Now, using the matches():



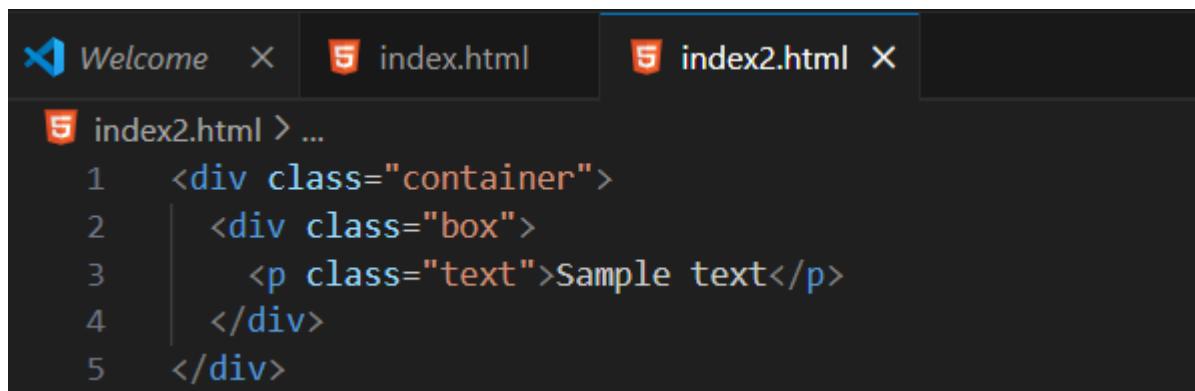
```
Elements Console Sources Network Performance  
top ▾ Filter  
> let para = document.querySelector("p");  
  console.log(para.matches(".info"));  
true
```

Now, if doesn't matches:



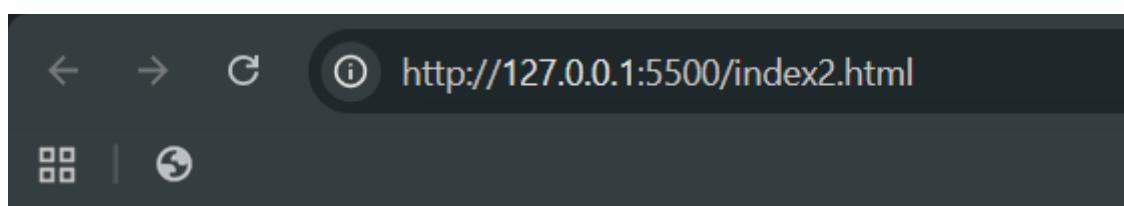
```
Elements Console Sources Network Performance  
top ▾ Filter  
> let para = document.querySelector("p");  
  console.log(para.matches(".para"));  
false
```

Now, to understand the closest(), let's create another file: index2.html



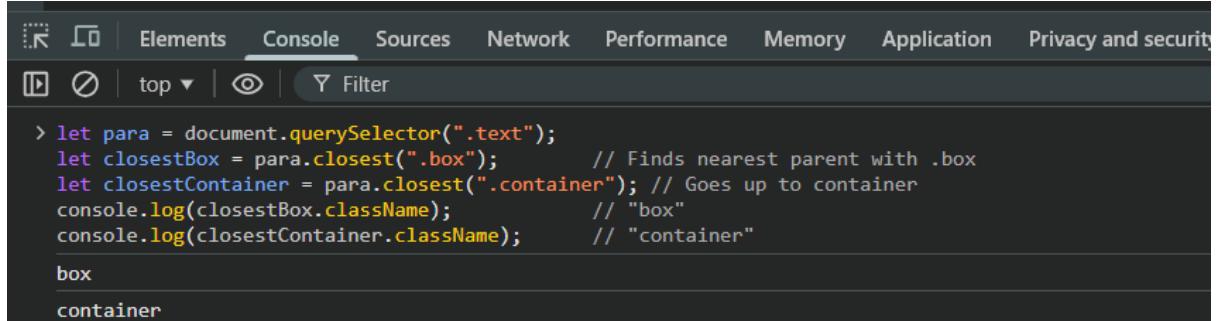
```
Welcome index.html index2.html  
index2.html > ...  
1 <div class="container">  
2   <div class="box">  
3     <p class="text">Sample text</p>  
4   </div>  
5 </div>
```

Output:



```
← → ⌂ ⓘ http://127.0.0.1:5500/index2.html  
Sample text
```

Now,



```
> let para = document.querySelector(".text");
let closestBox = para.closest(".box");           // Finds nearest parent with .box
let closestContainer = para.closest(".container"); // Goes up to container
console.log(closestBox.className);               // "box"
console.log(closestContainer.className);          // "container"

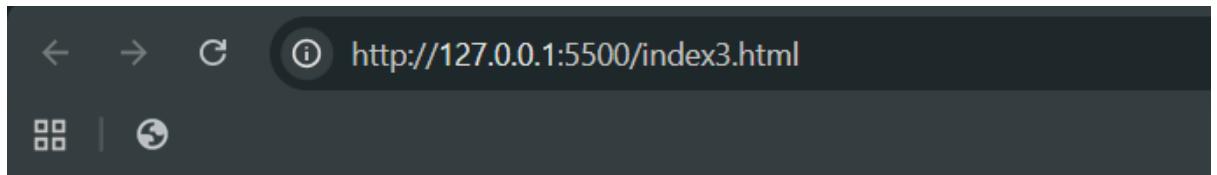
box
container
```

Now, to understand the contains(), we will create another file: index3.html



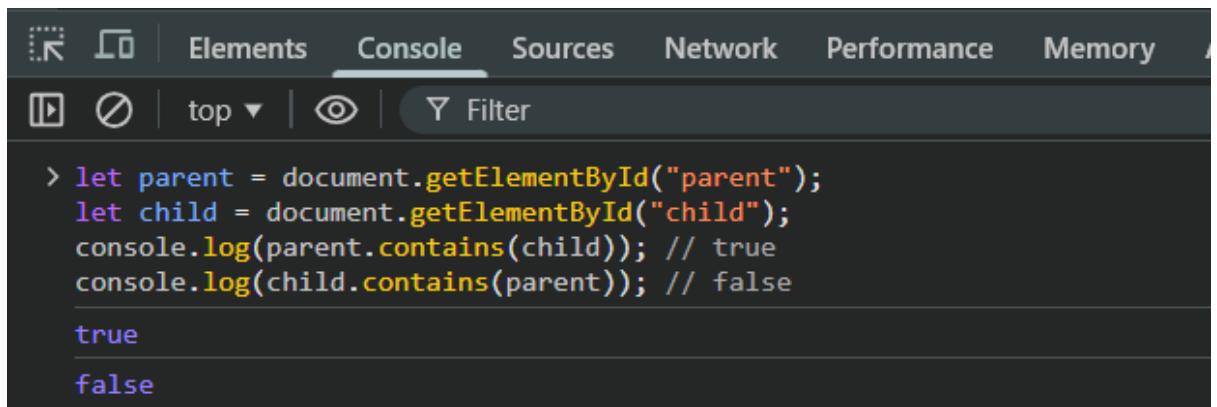
```
Welcome index.html index2.html index3.html X
index3.html > ...
1 <div id="parent">
2   | <p id="child">Child Element</p>
3   </div>
```

Output:



Child Element

Now,



```
> let parent = document.getElementById("parent");
let child = document.getElementById("child");
console.log(parent.contains(child)); // true
console.log(child.contains(parent)); // false

true
false
```

--The End--