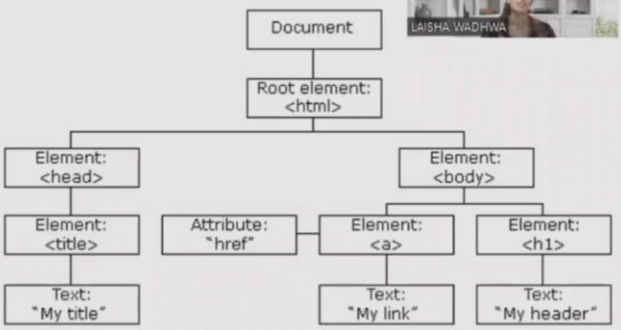
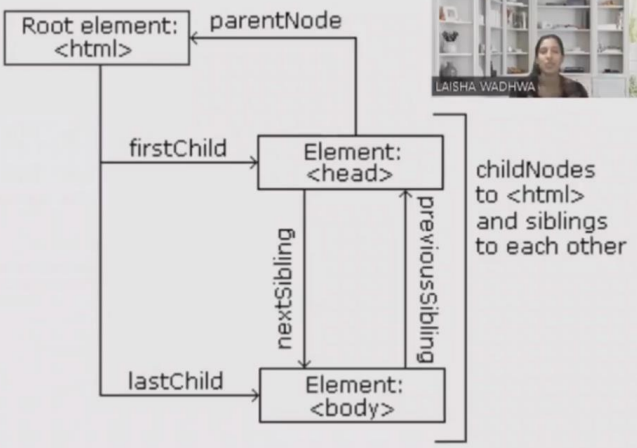
DOM Nodes

- The entire document is a document node
- Every HTML element is an element node
- The text inside HTML elements are text nodes
- Every HTML attribute is an attribute node (deprecated)
- All comments are comment nodes



```
<html>

  <head>
    <title>DOM Tutorial</title>
  </head>

  <body>
    <h1>DOM Lesson one</h1>
    <p>Hello world!</p>
  </body>

</html>
```



The node method

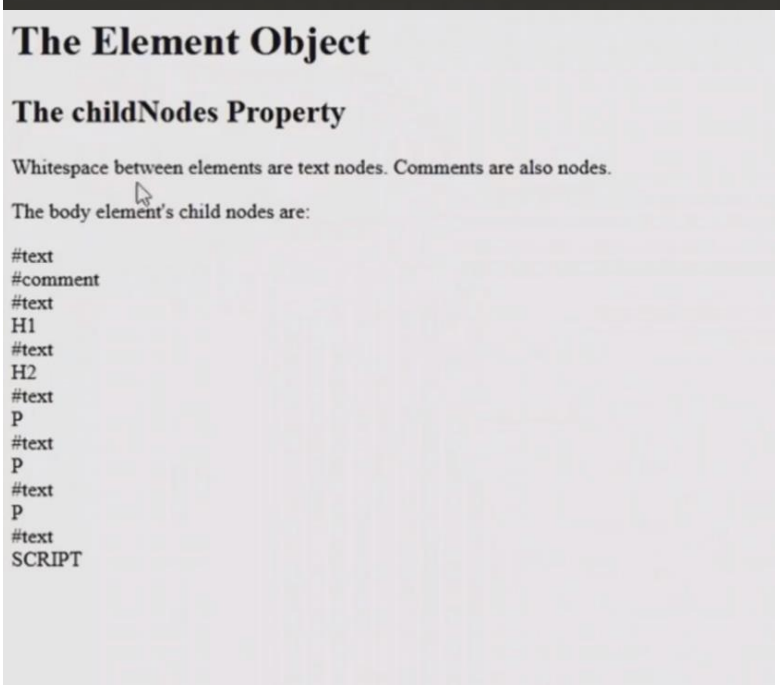
You can access any element by using the following properties with th object:

- node.childNodes – accesses the child nodes of a selected parent
- node.firstChild – accesses the first child of a selected parent
- node.lastChild – accesses the last child of a selected parent.
- node.parentNode – accesses the parent of a selected child node.
- node.nextSibling – accesses the next consecutive element (sibling) of a selected element.
- node.previousSibling – accesses the previous element (sibling) of a selected element

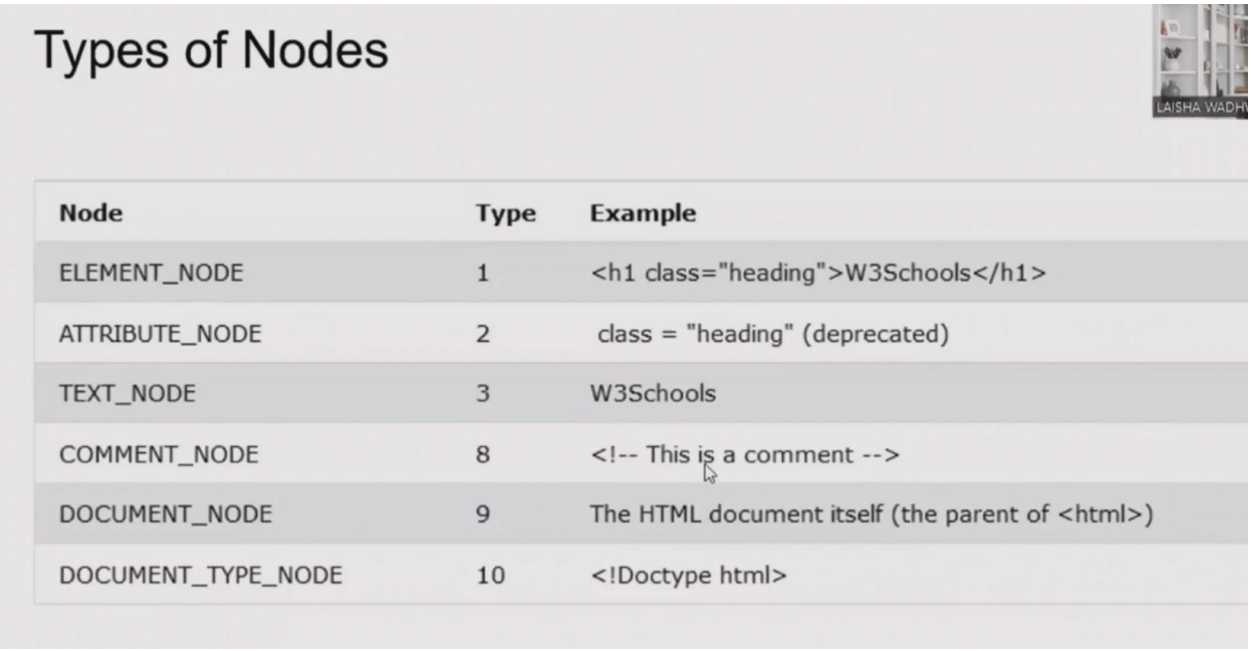
Ways to access inner text /text node

```
<title id="demo">DOM Tutorial</title>

myTitle = document.getElementById("demo").innerHTML;

myTitle = document.getElementById("demo").firstChild.nodeValue;

myTitle = document.getElementById("demo").childNodes[0].nodeValue;
```

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

<!-- This is a comment node! -->

<h1>The Element Object</h1>
<h2>The childNodes Property</h2>
<p>Whitespace between elements are text nodes. Comments are also nodes.</p>

<p>The body element's child nodes are:</p>
<p id="demo"></p>

<script>
const nodeList = document.body.childNodes;

let text = "";
for (let i = 0; i < nodeList.length; i++) {
  text += nodeList[i].nodeName + "<br>";
}
document.getElementById("demo").innerHTML = text;
</script>

</body>
</html>
```



So we seen these nodes when we acces usng childnodes !



While when using children to access childs

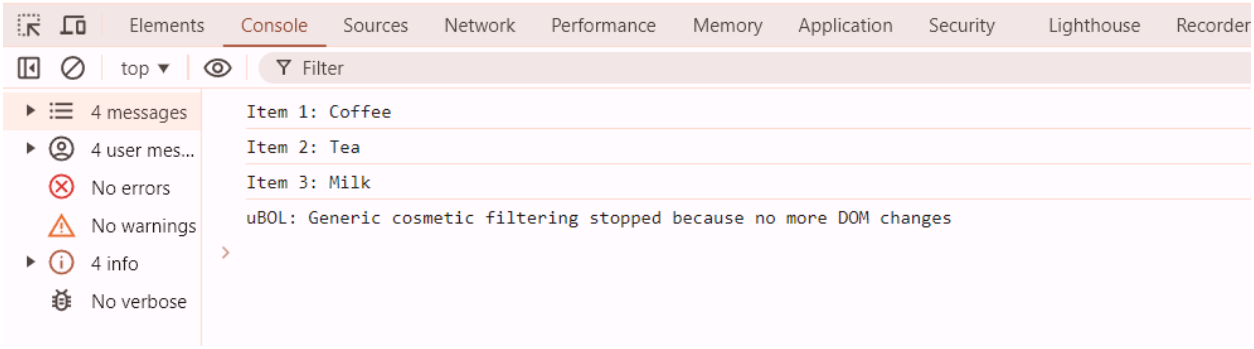
When using the `children` property in JavaScript, text nodes are not included in the collection. The `children` property specifically returns an **HTMLCollection** of the element's child **element nodes** (i.e., elements like `<div>`, `<p>`, `<li>`, etc.), excluding text nodes and comment nodes.

```
<html>
<head>
</head>
<body>
    <h2>Favorite Beverages</h2>
    <ul id="beverageList">
        <li>Coffee</li>
        <li>Tea</li>
        <li>Milk</li>
    </ul>

    <button id="changeSecondItem">Change Second Item to Juice</button>
      You, 10 hours ago • first commit
    <script>
        // Get the unordered list element
        const list = document.getElementById("beverageList");

        // Access all child <li> elements
        const items = list.children;

        // Log the text content of each child element
        for (let i = 0; i < items.length; i++) {
            console.log("Item " + (i + 1) + ": " + items[i].textContent);
        }

        // Change the text of the second item using the 'children' property
        const changeSecondItemButton = document.getElementById("changeSecondItem");
        changeSecondItemButton.addEventListener("click", function() {
            // Access the second child (index 1, since children is zero-indexed)
            if (items.length > 1) { // Check if there is a second item
                items[1].textContent = "Juice";
            }
        });
    </script>
</body>
</html>
```

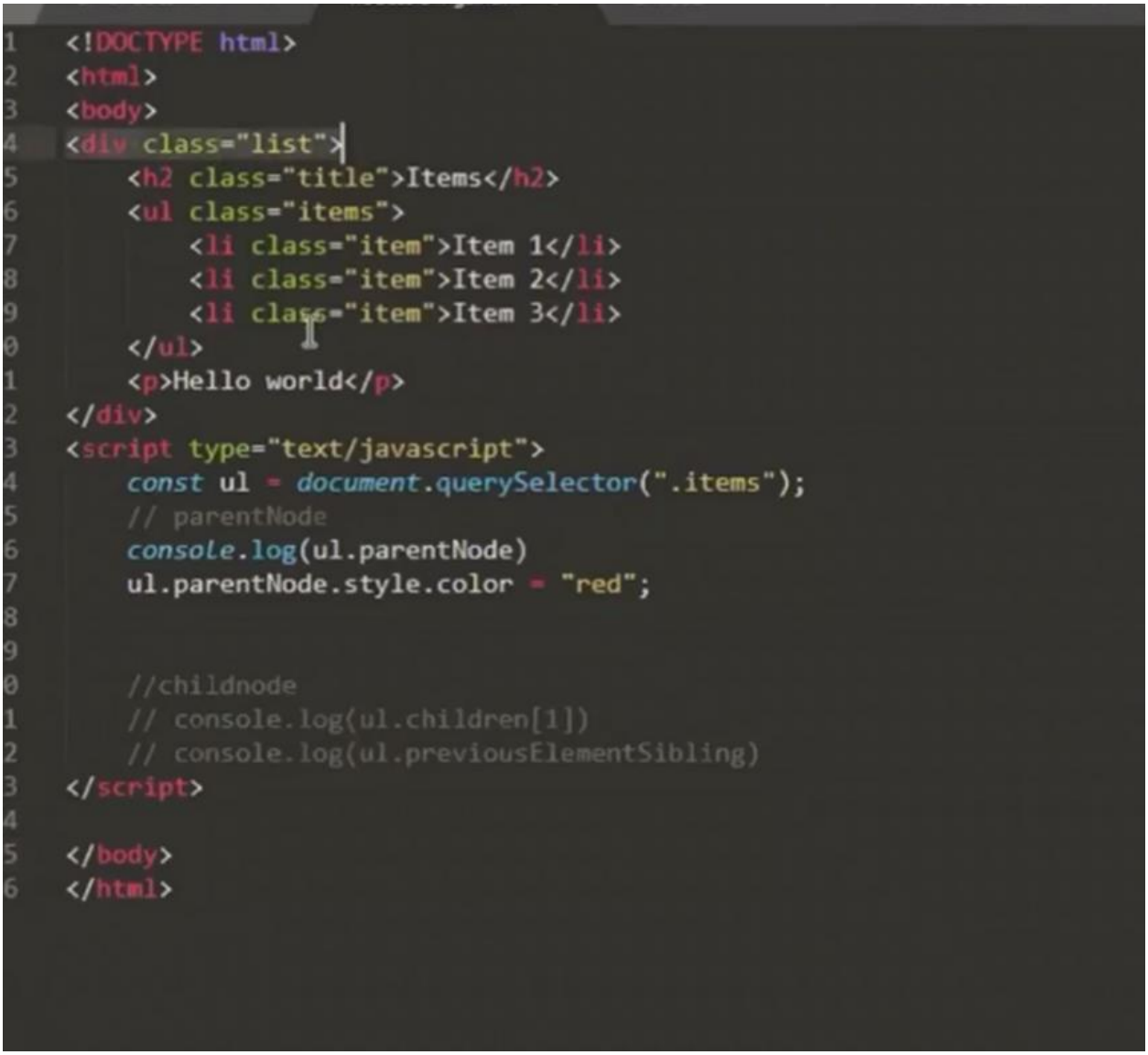
Favorite Beverages

- Coffee
- Tea
- Milk

Change Second Item to Juice



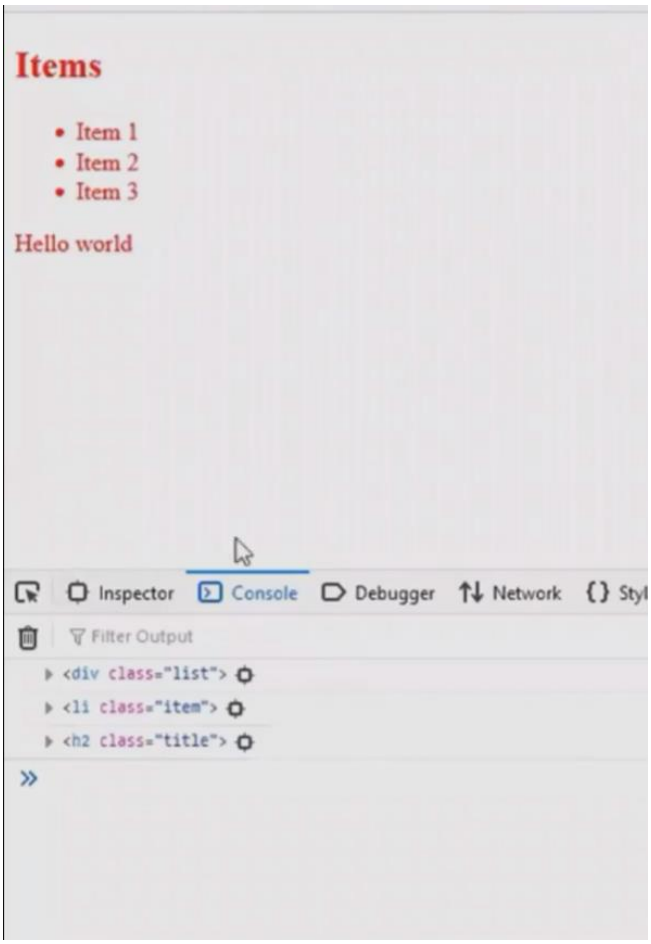
Use of nodesiblings



```
<!DOCTYPE html>
<html>
<body>
<div class="list">
    <h2 class="title">Items</h2>
    <ul class="items">
        <li class="item">Item 1</li>
        <li class="item">Item 2</li>
        <li class="item">Item 3</li>
    </ul>
    <p>Hello world</p>
</div>
<script type="text/javascript">
    const ul = document.querySelector(".items");
    // parentNode
    console.log(ul.parentNode)
    ul.parentNode.style.color = "red";


    //childnode
    // console.log(ul.children[1])
    // console.log(ul.previousElementSibling)
</script>

</body>
</html>
```

Ul children access and ul sibling

```html
<!DOCTYPE html>
<html>
<body>
<div class="list">
    <h2 class="title">Items</h2>
    <ul class="items">
        <li class="item">Item 1</li>
        <li class="item">Item 2</li>
        <li class="item">Item 3</li>
    </ul>
    <p>Hello world</p>
</div>
<script type="text/javascript">
    const ul = document.querySelector(".items");
    // parentNode
    console.log(ul.parentNode)
    ul.parentNode.style.color = "red";


    //childnode
    console.log(ul.children[1])
    console.log(ul.previousElementSibling)
</script>

</body>
</html>
```


Items
Item 1
Item 2
Item 3
Hello world
Inspector
Console
Debugger
Network
Filter Output

<li class="item">
<h2 class="title">