DOM Traversal

AGENDA

1. Overview
2. All nodes traversal
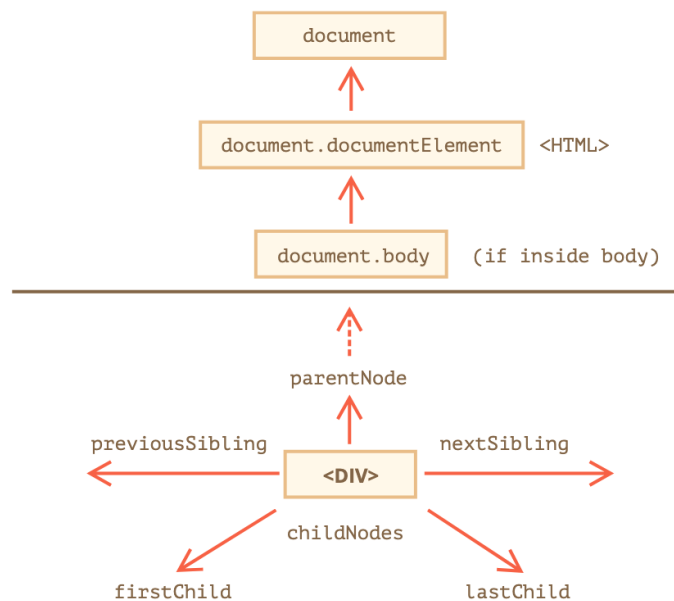3. Only elements traversal
4. parentNode and parentElement

1. Overview

- **Node** can be: Text, Element, Comment, ...
- **Element**: html and svg elements like: div, p, section, h1, ...
- **Chilren**: direct child
- **Descendants**: including children, their children and so on.

```
document; // root node

document.documentElement; // html
document.body; // body
document.head; // head
```

#	Node	Element ONLY
1	Node.parentNode	Node.parentElement
2	Node.childNodes	Element.children
3	Node.firstChild	Element.firstElementChild
4	Node.lastChild	Element.lastElementChild
5	Node.previousSibling	Element.previousElementSibling
6	Node.nextSibling	Element.nextElementSibling

2. All nodes traversal

Source: DOM Navigation | javascript.info

```html
<!DOCTYPE html>
<html>
  <head>
    <title>Parcel Sandbox</title>
    <meta charset="UTF-8" />
  </head>
  <body>
    <!-- Page Title -->
    <h1>Easy Frontend</h1>

    <p>Learning DOM is so easy! :P</p>

    <script src="src/index.js"></script>
  </body>
</html>
```
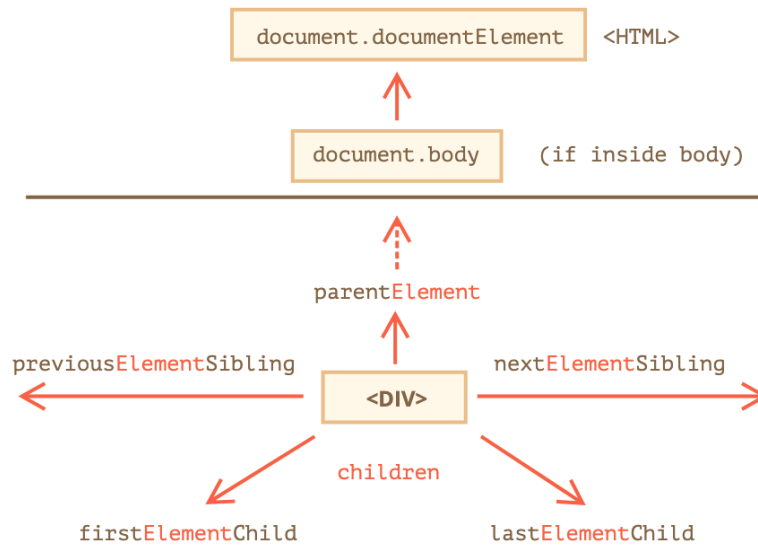
```javascript
console.log(document.body.parentNode); // html

console.log(document.body.childNodes);
// [text, comment, text, h1, text, p, text, script, text] (9 items 🤣)

console.log(document.body.firstChild);  // text
console.log(document.body.lastChild);   // text

console.log(document.body.previousSibling); // text
console.log(document.body.nextSibling); // null
```

3. Only elements traversal

Source: DOM Navigation | javascript.info

```html
<!DOCTYPE html>
<html>
  <head>
    <title>Parcel Sandbox</title>
    <meta charset="UTF-8" />
  </head>
  <body>
    <!-- Page Title -->
    <h1>Easy Frontend</h1>

    <p>Learning DOM is so easy! :P</p>

    <script src="src/index.js"></script>
  </body>
</html>
```

```javascript
console.log(document.body.parentElement); // html
console.log(document.body.children);
// [h1, p, script] (only 3 items 😎)

console.log(document.body.firstElementChild); // h1
console.log(document.body.lastElementChild); // script

console.log(document.body.previousElementSibling); // head
console.log(document.body.nextElementSibling); // null
```

4. parentNode and parentElement

- **parentNode** return the parent no matter what kind of node.
- **parentElement** return the parent if it's an Element, otherwise return null.

```
document.documentElement.parentNode;    // document
document.documentElement.parentElement; // null
```

Source: https://javascript.info/dom-navigation#element-only-navigation

Tham khảo

- Read more Nagivation on table: https://javascript.info/dom-navigation#dom-navigation-tables
- https://qualitestgroup.com/insights/technical-hub/how-to-traverse-the-dom/
- https://javascript.info/dom-navigation

Khoá học Javascript cho người mới bắt đầu 2021🎉

- Tác giả: **Hậu Nguyễn** - Founder Easy Frontend
- Khoá học chỉ được published trên Udemy, không thông qua trung gian.
- Khoá học không bán dạng videos upload trên Google Drive hay bất cứ hình thức nào tương tự.
- Khoá học có nhóm discord để hỗ trợ trong quá trình học tập.

☎️ Liên hệ tác giả để được hỗ trợ:

- ✅ Facebook: https://www.facebook.com/nvhauesmn/
- ✅ Fanpage: https://www.facebook.com/learn.easyfrontend
- ✅ Youtube Channel: https://www.youtube.com/easyfrontend