

15. Introduction to DOM



Agenda :

- DOM
 - L manipulate
 - L traverse
 - L methods
- Events
- NodeList & ClassList
- Examples & Problems.

DOM :

DOM → Document Object Model

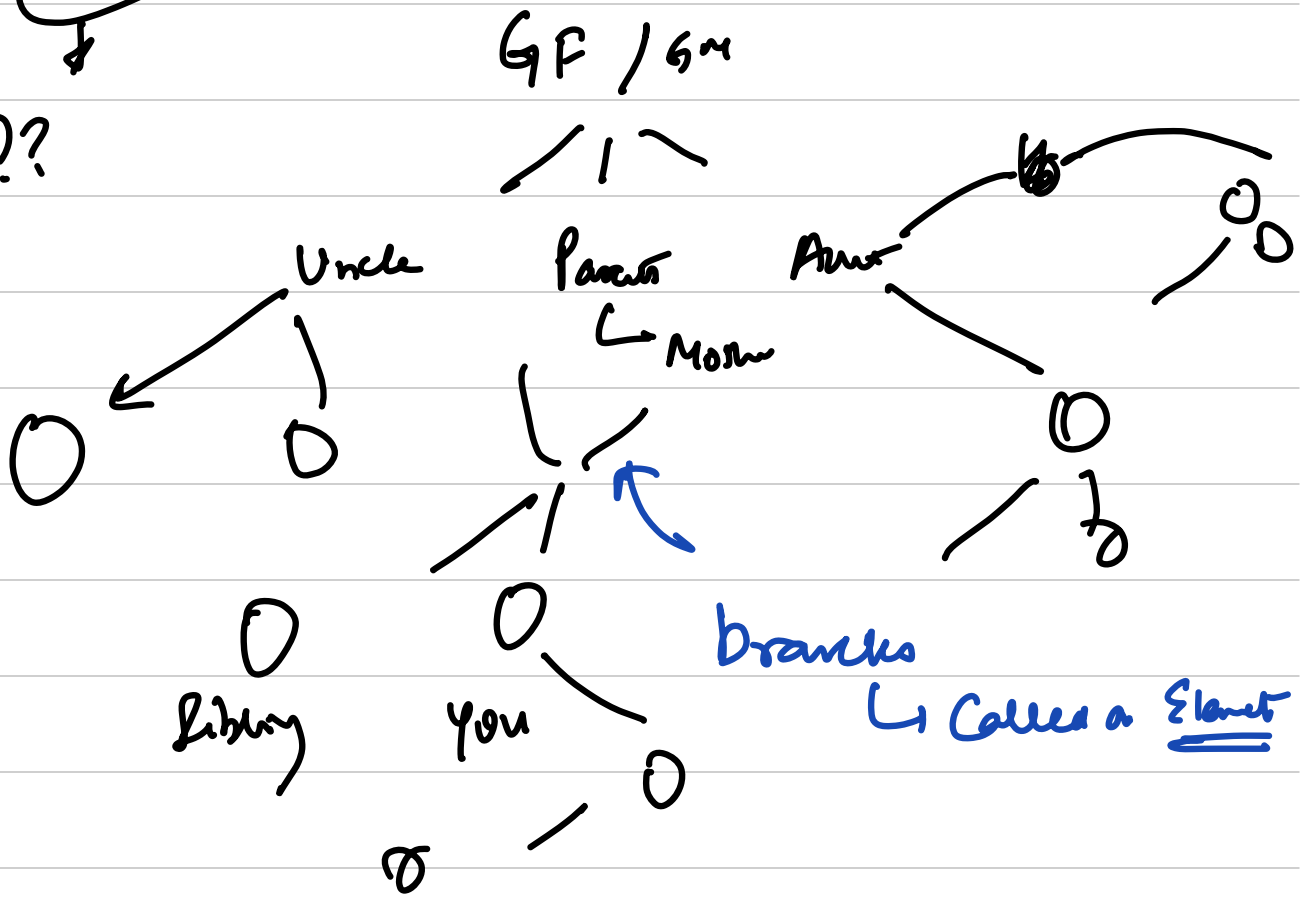
Programming Interface for web documents.

- D → web document
- O → Memory representation of web document
- M → Model/Data layer

Doesn't → Whole Webpage.

Dom tree

??



Family tree → Website tree.

<html>

<head>

<meta> . . . </meta>

</head>

<body>

<div style = {padding: 20} >

<p> ... </p>

</div>

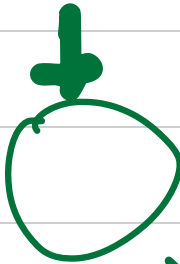
DOCUMENT

branch = element

</body>

</html>

root

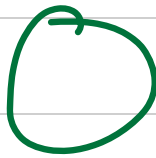


html

DOM tree



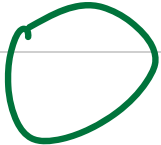
head



body

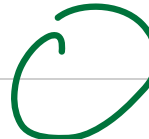


meta



:

div



p



Importance

- ↳ Provides a structure to your code
- ↳ Allows JS to change things dynamically

HTML

Skeleton

CSS

Skin
color

~~JS~~

Dynamic
layout
movement

Manipulate the DOM

JS → to add / modify / remove
element

- Change styles [CSS]
- Events handling.

of Click button, appears 'hello'

Step 1:

① Selecting the HTML (button) element

Id

↳ • getElementById → Select an element based on ID.

• querySelector
↳ Select element based on Class, id, tag Name, combination.

② When clicked, we should come to know

↳ EVENTS → Refers to any action that triggers a response.

Click Me

'hello'

document.querySelector

Used to select element based on class, id, tag, combinators.

id \Rightarrow #

Class \Rightarrow .

`<button id = 'btn-1' class = 'my-btn' >`

Click me

`</button>`

`document.querySelector('#btn-1')`

OK

`document.querySelector('.my-btn')`

OK

`document.querySelector('button')`

*
If there are more than 1 elements that matches, it selects the first match.

document.querySelector('button')

↗
Select all buttons & returns a **nodeList**.

↑
(like an array)
(but not exactly an array).

*
parentNode.insertBefore(newNode, referenceNode)

classList :

↳ property on DOM used to add, remove, check, modify CSS classes

→ `add (classname)` → Add a specified class name to element
→ `remove (-)` removes

`contains (..)` checks whether that class name is present

`toggle (--)`
↳ Toggles/switches that class name

* `getAttribute` & `setAttribute`

`<div data-color = 'red' >`

</div>

```
Const Val = divElem.getAttribute('data-01r')  
// res.
```