DOM in JavaScript (8:33:00)

- Windows vs Document
- DOM vs BOM
- DOM Navigation
- Searching and getting Element Refrence

1) Difference between Windows Vs Document.

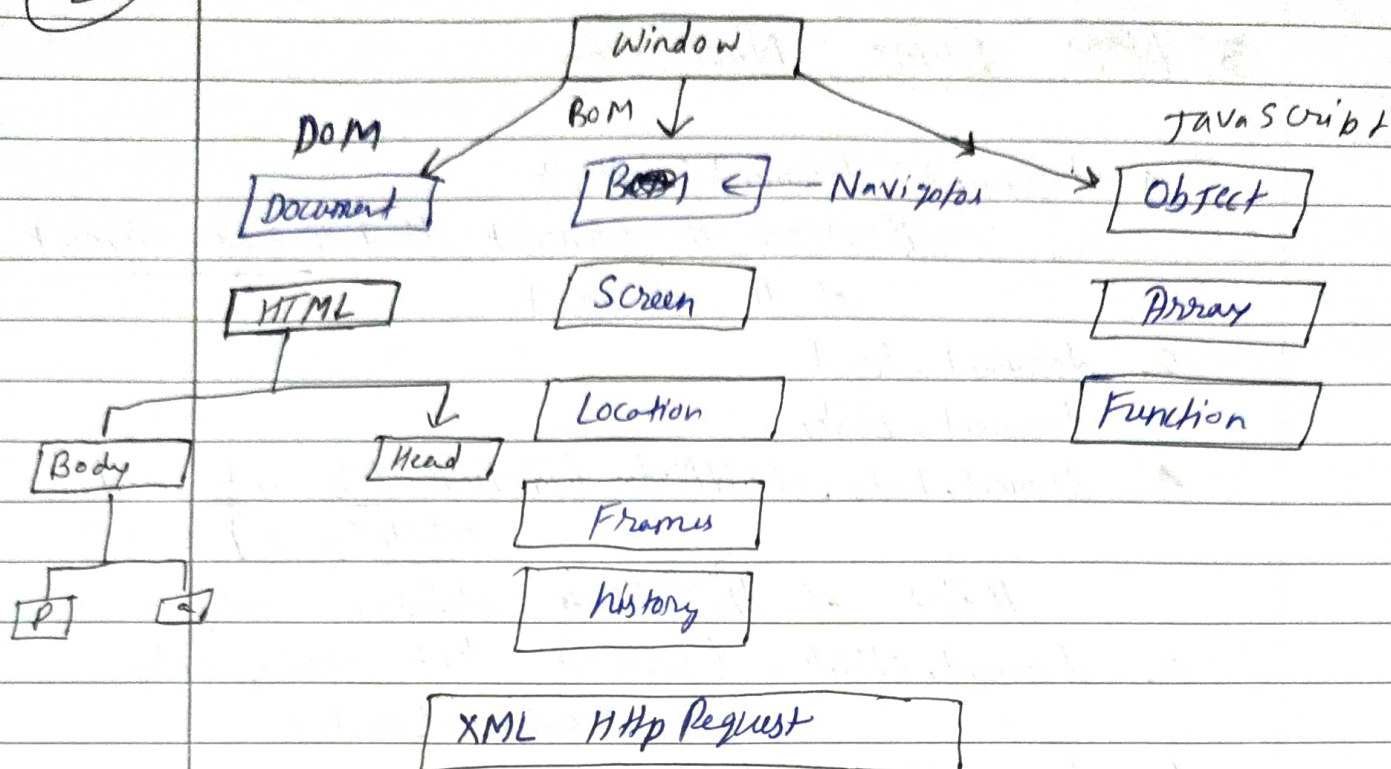| Window	Document
1. Windows is main container as Global object of any operation related to entire browser Window Part object.	Whereas DOM is the child of Window object.
2. Like objects, method or properties part of window object the we do not refer the Window object	DOM we need refer the document, if we want document object, method as properties.
3. Windows has methods, properties & object. ex SetTimeout() or SetInterval() are the method where as Document is object Window Screen object with properties describing physical display.	Document is the just the object of the global object that is window, which deal document, the HTML element themselves

BOM - Browser object Model

```
                        ┌─────────┐
                        │ Window  │
                        └─────────┘
        DOM              BOM ↓              JavaScript
    ┌──────────┐    ┌─────────┐             ┌─────────┐
    │ Document │    │ BOM │ ←── Navigator ──→│ Object  │
    └──────────┘    └─────────┘             └─────────┘

    ┌──────┐         ┌─────────┐             ┌─────────┐
    │ HTML │         │ Screen  │             │ Array   │
    └──────┘         └─────────┘             └─────────┘

                     ┌──────────┐            ┌──────────┐
              ┌──────│ Location │            │ Function │
    ┌──────┐  │  ┌───────┐      └──────────┘ └──────────┘
    │ Body │  │  │ Head  │
    └──────┘  ▼  └───────┘      ┌─────────┐
       │                        │ Frames  │
   ┌───┴───┐                    └─────────┘
  ┌─┐     ┌─┐
  │P│     │a│                   ┌─────────┐
  └─┘     └─┘                   │ history │
                                └─────────┘

            ┌────────────────────────┐
            │  XML  Http Request      │
            └────────────────────────┘
```

DOM Vs BOM

<u>DOM</u> → <u>Document Object Model,</u> which deal with document HTML element themselves.

    <u>example</u> -: Document and all traversal you would do in it, event etc.

    <u>example</u> change the background colos to red document.body.style.background = "red";

<u>BOM</u> Browser Object Model, which deal browser component aside from document, — history, location, navigator and screen.

○ In single meaning all the windows operation which come under BOM are performed using BOM.

3. ~~NOM~~ DOMS Navigation

1 document. documentElement
// returns the Element that is <u>root element</u> of the document.
2. document. head
3. document. body
4. document. body. ChildNodes (include tab, enter and white Space) ⇒ text
// list of the direct children only
5. document. children (without text nodes, only regular Elements)
6. document. childNodes. length

⊛

Previous history (BOM)

```
<button class="button-su" onclick="goBack()">
    Go Back  </button>
<script>
function goBack(){
    window.history.back();
}
```

(BOM)

Alert

```
alert(location.href);
    if (confirm(" want to Visit Thapa Technical"))
    { location.href = "https://www.youtube.com/——
    };
```

→ ask confirmation then go location go

DOM ue (using javascript color)

document

⇒ What is root elemat of dacumet

[document. documentElement]

⇒ Head tag

document. head

⇒ Body

document. body

⇒ nodes

document. body. child Nodes

⊖

*** Practise

⇒

(DOM)

4> How to search the Elements and the refrency

⇒ document.getElementById ('heading').inner HTML

= "Welcome to Ami";

⇒ Difference between getElement ID and query Selector→
getElementByID ()

~~element = document.getElement By Id (id);~~

- Return a refrence to the element by Its ID.
- If the element with specified ID is not in the document, it will return null.

Syntax

element = document.getElementById (id);

query Selector () ?

Return the first element within the document that matches the specified group of selectors, or null if no matches as found.