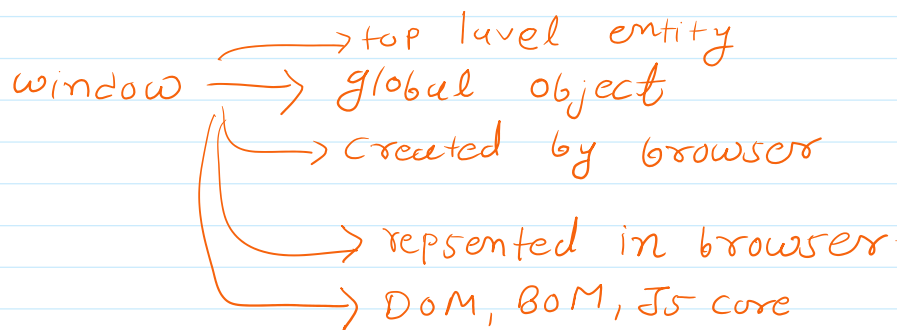


## DOM + JS mod

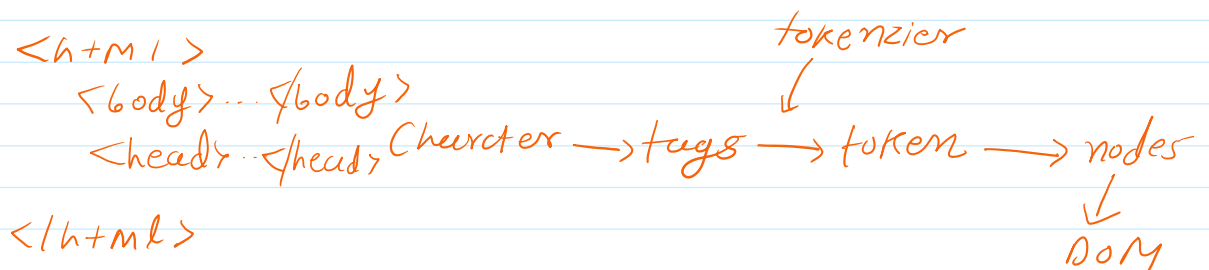


DOM → Document object model

↳ HTML code convert into JS object

BOM → location, communication, other than content

DOM :-



Element fetch

`document.getElementById('id')`

Diagram illustrating the `getElementById` method:

```

graph LR
    ID[id] --> ID_name[ID name]
    ID_name --> Called[it is called on document object]
    Called --> Single[it always a single object]
  
```

`document.getElementsByClassName('class')`

Diagram illustrating the `getElementsByClassName` method:

```

graph LR
    Class[class] --> Class_name[class name]
  
```

`getElementById('')` class name  
`getElementsByClassName('')`  
`getElementsByTagName('')` tag name  
 multiple item return

`querySelector('#header')` id  
`querySelector('.header')` class  
`querySelector('header')`  
 only one item display.

`querySelectorAll('')` ← Multiple item display

Web Page :- update existing context

`innerHTML` → get/set HTML content

`outerHTML`

`textContent`

`innerText`

} → get/set text content

Adding new element

↳ `.createElement('')`

`Content.appendChild(new child)`  
↑ name

any element

Creating Text Node :-

① `let newPara = document.createElement('P');` ← last we add  
`let textPara = document.createTextNode('Meee');`

① `document.createElement('p')`

```
let textPara = document.createTextNode('Meer');  
newPara.appendChild(textPara)
```

② `let myPara = document.createElement('p')`  
`myPara.textContent = "meer"`  
`contat.appendChild(myPara)`

`insertAdjacentHTML()`

↳ has to be called 2 ways

↳ location → where

↳ HTML → what

before begin

after begin

before end

after end

Remove

`parent.removeChild()` <sup>child name</sup>  
name

↳ parent element known

↳ which child is remove that known

`child.parent.removeChild()` <sup>child name</sup>

CSS property change :-

↳ `style`

`cssText`

`setAttribute`

`className`

• ClassList

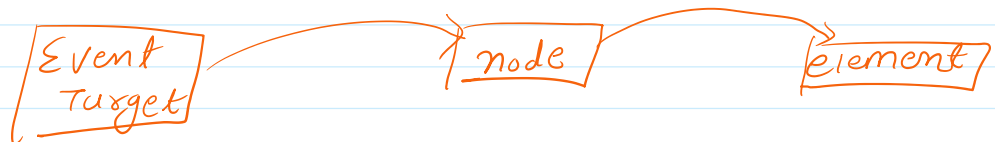
\* browser event (Announcement)

↳ monitorEvents() → all event saw.

EventListener :-

↳ blueprint  
EventTarget :- interface implemented by object  
that can receive events & may  
have listener for them.

↳ addEventListener();  
removeEventListener();  
dispatchEvent();



addEventListener() → listen to event

pseudocode

<event-target>.addEventListener(<event-type>, function)

↑  
document  
p  
h1  
h2, a, video

click  
double-click

↑  
define  
what to  
do when  
event  
happen

Remove Event Listener → same target  
↳ same type  
↳ same function  
function print() {  
console.log("hi");  
}

```
document.addEventListener('click', print);
```

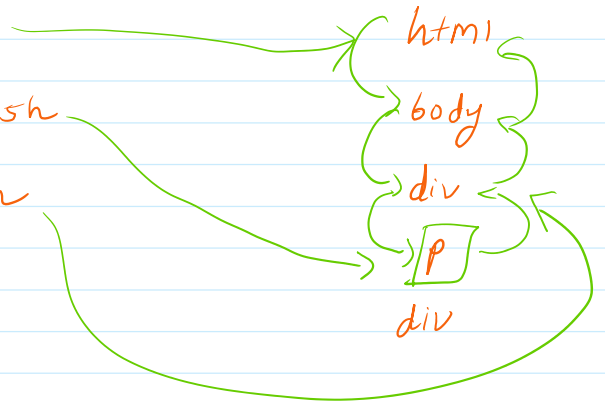
```
document.removeEventListener('click', print);
```

phases of an event

↳ capturing phase

↳ At target phase

↳ Bubbling phase



By default run in  
Bubbling phase

```
• addEvent ('click', print, true)
```

↑ capturing  
phase

The Event Object :-

↳ when event occurs, .addEventListener()

↳ function  
more  
information

The default action :-

anchor tag :- link open

```
• preventDefault()
```

↑ close kar shukate hui  
default action

Avoid too many events

Performance

Synchronance :- occuring at a same time

function a() {

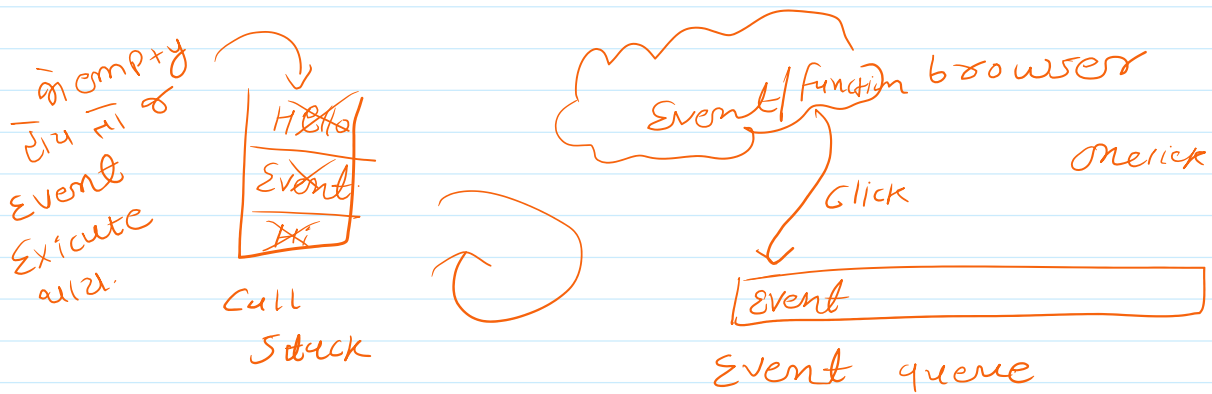
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

} all line one by one executed.

}

not - synch = EventListener

\* Event Loop



(1)

console.log('Hi');

EventListener

console.log('Hello');

setTimeout()

setTimeout(function() {

console.log('Hi');

}, 4000);

↑ minimum time.

but call stack is empty then run.

→ API :- application programming Interface.

features of Async code

↳ better error handling  
→ Easy debugging.

Promise

↳ parallel executed (background)

let a = new Promise(<sup>call back function</sup>function(resolve, reject) {

}

promise → fulfill  
          ↳ Reject  
          ↳ then()  
          ↳ catch() ← error.

Async-await → special syntax used to  
                  work with promises  
                  ↓  
                  run async

fetch API → fetch(<sup>url</sup>);  
              ↳ send