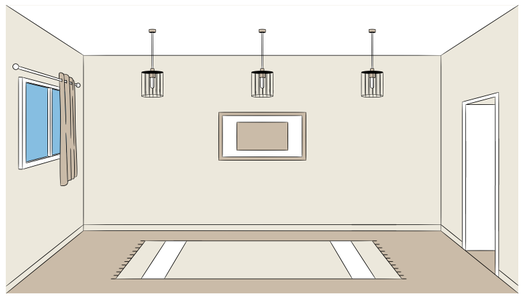
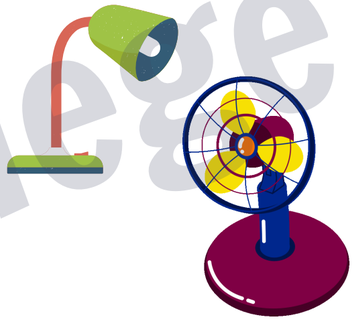
The 3 Musketeers of Web Dev

HTML
(structure)



CSS
(style)

JS
(logic)



Starter Code

<style> tag connects HTML with CSS

<script> tag connects HTML with JS

```
<html>
    <head>
        <title> Website Name </title>
    </head>
    <body>
        <!-- Content Tags -->
    </body>
</html>
```

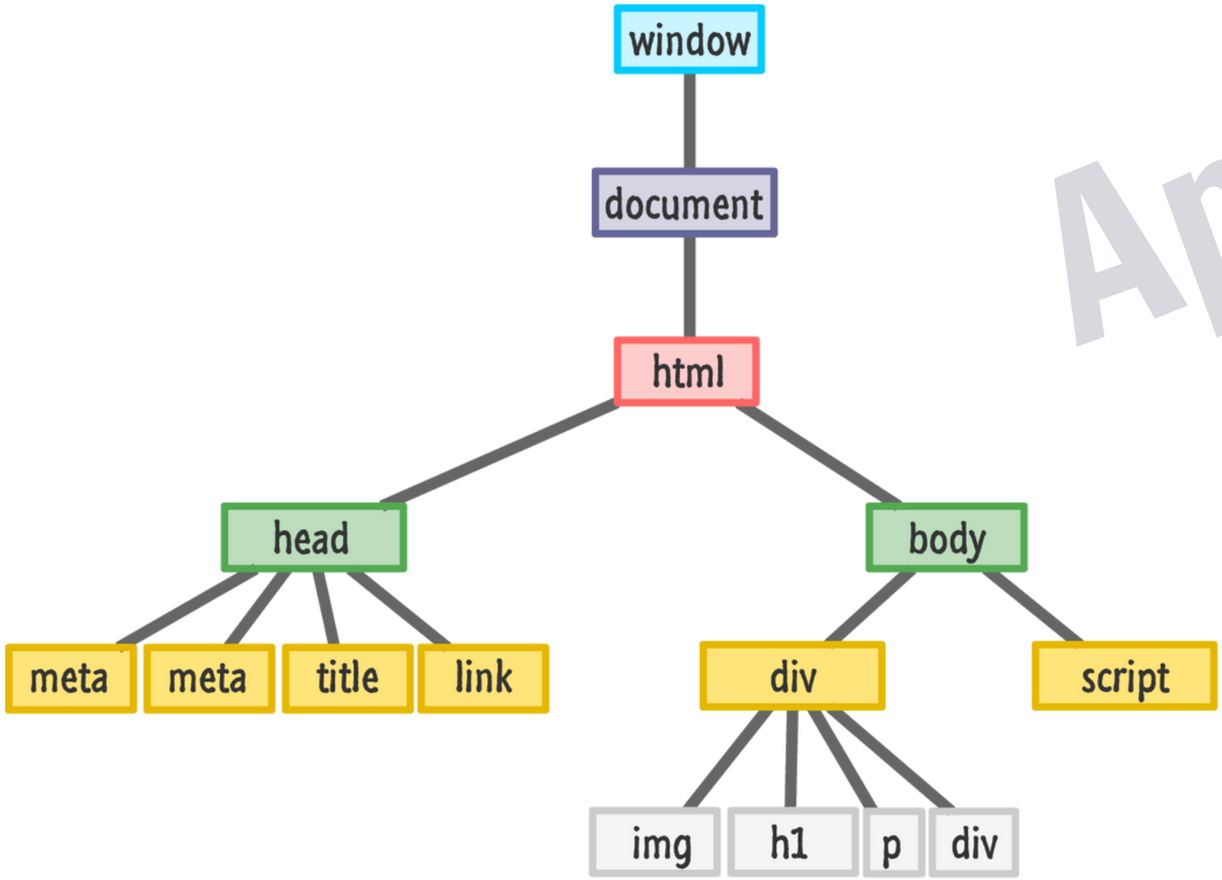
Window Object

The window object represents an open window in a browser. It is browser's object (not JavaScript's) & is automatically created by browser.

It is a global object with lots of properties & methods.

What is DOM?

When a web page is loaded, the browser creates a Document Object Model (DOM) of the page



DOM Manipulation

Selecting with id

```
document.getElementById(“myId”)
```

Selecting with class

```
document.getElementsByClassName(“myClass”)
```

Selecting with tag

```
document.getElementsByTagName(“p”)
```

DOM Manipulation

Query Selector

```
let element=document.querySelector("p");
console.dir(element);
```

```
document.querySelector(“#myId / .myClass / tag”)
//returns first element
```

```
document.querySelectorAll(“#myId / .myClass / tag”)
//returns a NodeList
```

DOM Manipulation

Properties

- **tagName : returns tag for element nodes**

  only text val mango,apple,banaaa

  innerhtml content also change
  let h=

- **innerText : returns the text content of the element and all its children**

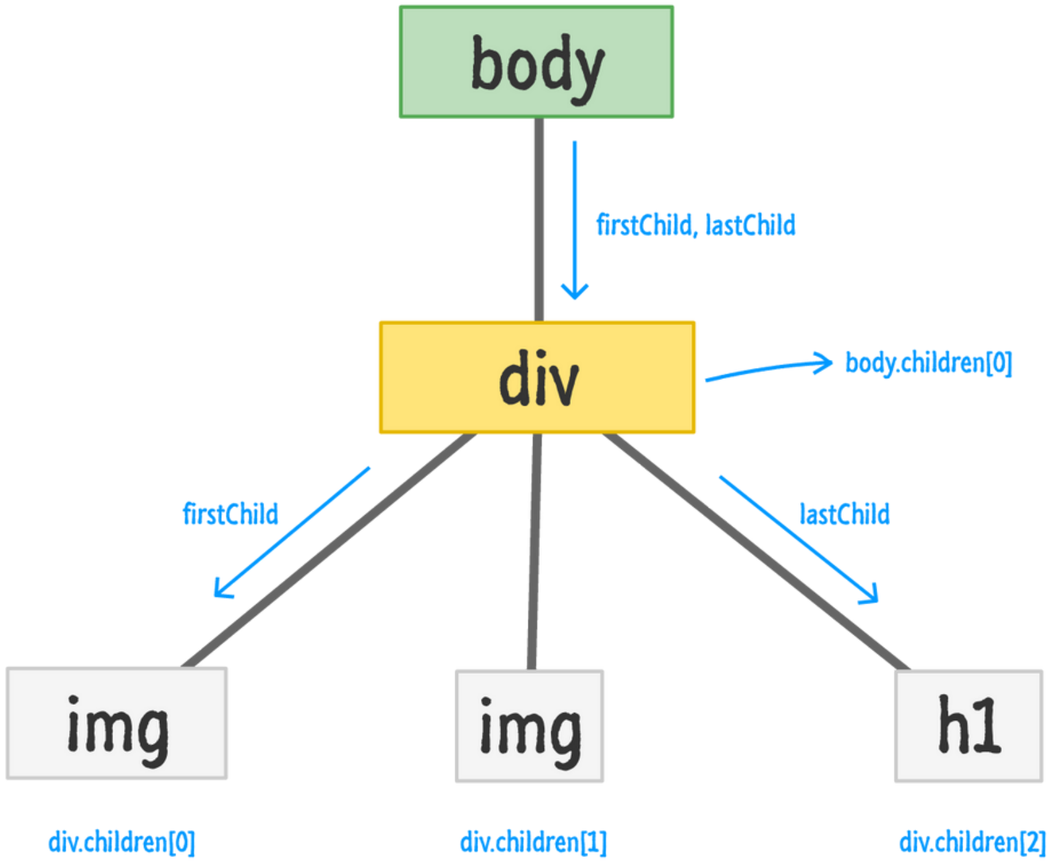
  tags
mango
all tags

- **innerHTML : returns the plain text or HTML contents in the element**

- **textContent : returns textual content even for hidden elements**

  hidden elements display

Homework


body
firstChild, lastChild
div
body.children[0]
firstChild
lastChild
img
img
h1
div.children[0]
div.children[1]
div.children[2]

Let's Practice

Qs. Create a H2 heading element with text - "Hello JavaScript". Append "from Apna College students" to this text using JS.

```
let header=document.querySelector("h2");
console.log(h2.innerText);
h2.innerText=h2.innerText+"from apna college";
```

Qs. Create 3 divs with common class name - "box". Access them & add some unique text to each of them.

```
<div class="my">
 my content
 </div>
 <div class="my">
 my content
 </div>
 <div class="my">
 my content
 </div>
```

```
let divs=document.querySelectorAll(".my");
let ind=1;
for(div of divs)
{
console.dir(div.innerText);
div.innerText=`welcome coders ${ind} `;
ind++;
}
```

DOM Manipulation

Attributes

```
div.getAttribute("id");
```

- **getAttribute(attr) *//*to get the attribute value**

- **setAttribute(attr, value) *//*to set the attribute value**

Style

- **node.style**

DOM Manipulation

Insert Elements

let el = document.createElement(“div“)

- node.append(el) //adds at the end of node (inside)
- node.prepend(el) //adds at the start of node (inside)
- node.before(el) //adds before the node (outside)
- node.after(el) //adds after the node (outside)

Delete Element

- node.remove( ) //removes the node

Let‘s Practice

Qs. Create a new button element. Give it a text “click me”, background color of red & text color of white.

```
let newbtn=document.createElement("button");
newbtn.innerText="ok";
```

Insert the button as the first element inside the body tag.

```
let body=document.querySelector("body");
newbtn.style.backgroundColor='red';
newbtn.style.color='white';
body.before(newbtn);
```

Qs. Create a <p> tag in html, give it a class & some styling.

```
p.getAttribute("class");
p.classList.add("newcon");
```

Now create a new class in CSS and try to append this class to the <p> element.

```
.newcon{
background-color:green;
}
```

Did you notice, how you overwrite the class name when you add a new one?

Solve this problem using classList.

In JavaScript, the classList property is used to interact with the classes of an HTML element. It provides methods to add, remove, toggle, and check for the presence of CSS classes.