

# DOM

It is a object model used to manipulate the document and there are two ways to create document object

- 1) Field Names – document level object creation
- 2) Methods – element level object creation

Field Names	Property	Description
1. document.body		Return all <body> element
2. document.head		Return the <head> element
Ex:- console.log(document.head);		
3. document.title		Return <del>text</del> text which is in title tag we can modify also
Ex:- document.title = "JS";		
4. document.scripts		Return <script> elements. it will be in Collection.
5. document.anchors		Returns all <a> element that have a name attribute.
Ex:- <a href="#" name="hello"> link </a>		
console.log(document.anchors);		
6. document.forms		Return all <form> elements.
<form action=""> <input type="text" name="name" placeholder="Get name"/> </form>		
console.log(document.forms);		
	[0]	[0] [0] [0]

  

document.images	:- Return all <img> elements
<img src="" alt="some text">	
console.log(document.images[0]);	
document.links	:- Returns all <a> and <area> elements that have a href.

## Practice:-

1. select element by ID: write a script that selects an element with a specific id and changes its bg color.
2. select elements by class name: use `getElementsByClassName()` to select all element with a class and log them to the console.
3. Change text content: select an element and change its text content using `textContent` or `innerHTML`.
4. Create and append an element: write a script that creates a new element and appends it to a div.
5. Remove an element: select an element by its id and remove it from the DOM.
6. Style an element: use JS to modify the CSS style of an element. (eg:- change the font size, color or margin).

//1. Changing bg color

```
var a=document.getElementById("p1");  
a.style.backgroundColor="navy";  
a.style.color="White";  
console.log(a);
```

//2. select elements by class name

```
var b=document.getElementsByClassName("p2");  
console.log(b);
```

//3. changing Text

```
var c=document.querySelector("h3");  
c.innerHTML="Changed text";  
console.log(c);
```

//4. create and append

```
var d1=document.querySelector(".app");  
var d=document.createElement("h2");  
d.innerText="h2 is created";  
d1.appendChild(d);
```

//5. Remove an Element

```
var e=document.getElementById("id1");  
id1.remove();
```

```
// 6. Style an element
var f=document.getElementsByTagName("h2");
f[0].style.backgroundColor="navy";
f[0].style.color="white";
```

## EXAMPLE: Br Architecture Houses

Example:-

```
let Text = ["black house", "grey house", "Summer house", "white house",
            "gray house", "pink house", "Renovated", "Roof top"];
let img = ["url", "url", "url", "url", "url", "url", "url", "url"];
var mn = document.createElement("div");
mn.style.display = "grid";
mn.style.gridTemplateColumns = "auto auto auto auto";
mn.style.gap = "20px";
```

```
for (i=0; i<8; i++){
```

```
var e1 = document.createElement("div");
var e2 = document.createElement("div");
```

Element 2

```
e2.innerHTML = Text[i];
e2.style.color = "white";
e2.style.background = "black";
e2.style.padding = "30px";
e2.style.fontSize = "30px";
```

`url(${img[i]})`

Element 1

```
e1.style.background = "url('url(' + url(${img[i]}) + '))'";
e1.style.height = 400px;
e1.style.width = 400px;
e1.style.backgroundRepeat = "no-repeat";
e1.style.backgroundSize = "cover";
```

↳ Template literals

## Task:

```
var nav=document.createElement("div");
    nav.style.display="flex";
    nav.style.justifyContent="space-between";
    nav.style.padding="5px";
    nav.style.height="8vh";
    nav.style.width="98vw";
    nav.style.position="relative";

    var nav1=document.createElement("div");
    nav1.style.paddingTop="10px";
    var br=document.createElement("a");
    br.innerText="BR Architecture";
    br.style.fontSize="32px";
    br.style.color="black";
    br.setAttribute("href","#");
    br.style.textDecoration="none";
    nav1.appendChild(br);
    nav.appendChild(nav1);

    var nav2=document.createElement("div");
    nav2.style.paddingRight="20px";
    nav2.style.paddingTop="15px";

    var about1=document.createElement("a");
    about1.innerText="About us";
    about1.style.padding="15px";
    about1.setAttribute("href","#");
    about1.style.color="black";
    about1.style.textDecoration="none";
    about1.style.fontSize="20px";
    nav2.appendChild(about1);

    var menu1=document.createElement("a");
    menu1.innerText="Menu";
    menu1.style.padding="15px";
    menu1.setAttribute("href","#");
    menu1.style.textDecoration="none";
    menu1.style.color="black";
    menu1.style.fontSize="20px";
    nav2.appendChild(menu1);

    var contact1=document.createElement("a");
    contact1.innerText="Contact Us";
    contact1.style.padding="15px";
    contact1.setAttribute("href","#");
    contact1.style.textDecoration="none";
    contact1.style.color="black";
    contact1.style.fontSize="20px";
    nav2.appendChild(contact1);

    nav.appendChild(nav2);
    document.body.appendChild(nav);
    console.log(nav);

    //home section
    var homee=document.createElement("div");
```

```

var home=document.createElement("div");
home.style.background=`url("architect.jpg")`;
home.style.backgroundRepeat="no-repeat";
home.style.backgroundSize="cover";
home.style.height="95vh";
home.style.width="98.8vw";
homee.appendChild(home);
document.body.appendChild(homee);

// Houses
let text=["Summer House", "Brick House", "Renovated House", "Barn House", "Brick House", "Summer House", "Barn
House", "Renovated House"];
let
img=["https://www.w3schools.com/w3images/house5.jpg", "https://www.w3schools.com/w3images/house2.jpg", "https://www.w3s
chools.com/w3images/house3.jpg", "https://www.w3schools.com/w3images/house4.jpg", "https://www.w3schools.com/w3images/h
ouse2.jpg", "https://www.w3schools.com/w3images/house5.jpg", "https://www.w3schools.com/w3images/house4.jpg", "https://www
.w3schools.com/w3images/house3.jpg"];

var hs=document.createElement("div");
hs.style.height="100vh";
hs.style.width="98px";

var h1=document.createElement("h1");
h1.innerText="Projects";
h1.style.color="black";
h1.style.fontSize="38px";
h1.style.padding="50px 10px 60px 20px";

hs.appendChild(h1);

var houses=document.createElement("div");
houses.style.display="grid";
houses.style.gridTemplateColumns="auto auto auto auto";
houses.style.justifyContent="space-around";
houses.style.paddingLeft="45px";
houses.style.gap="35px";

for(var i=0;i<8; i++){
  var hs1=document.createElement("div");
  var hs2=document.createElement("div");

  // element-2
  hs1.innerHTML=text[i];
  hs1.style.color="white";
  hs1.style.background="black";
  hs1.style.width="45%";

  hs1.style.padding="10px";
  hs1.style.fontSize="16px";

  //element-1
  hs2.style.background=`url(${img[i]})`;
  hs2.style.height="220px";
  hs2.style.width="325px";
  hs2.style.backgroundRepeat="no-repeat";
  hs2.style.backgroundSize="cover";

  hs2.appendChild(hs1);
  houses.appendChild(hs2);
  hs.appendChild(houses);
  document.body.appendChild(hs);
}

```



## OUTPUT:

