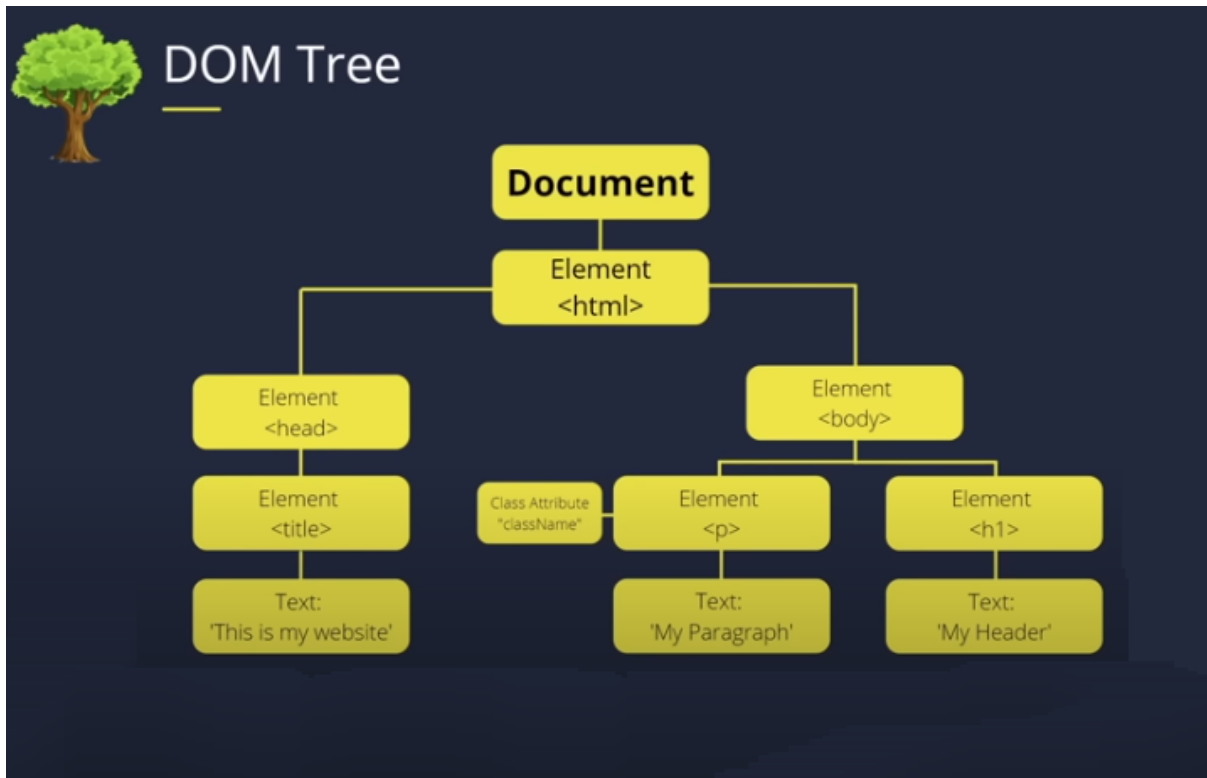


DOM MANIPULATION



```
<!DOCTYPE html>
<html>
<head>
  <meta http-equiv="X-UA-compatible" content="IE-EDGE">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Master Dom Manipulation</title>
  <style>
.container {
  border: 2px solid white;
  border-radius: 5px;
  background-color: black;
  color: white;
  text-align: center;
  padding-bottom: 3rem;
  margin: 5rem;
}
ul {
  list-style: none;
  border-radius: 5px;
}
```

```

li{
  font-family: Helvetica;
  padding: 1rem;
  border: 1px solid white;
  margin-left: 4rem;
  margin-right: 4rem;
  background: rgb(2,0,36);
  background: linear-gradient(90deg, rgba(2,0,36,1) 0%,
rgba(28,28,92,1) 43%, rgba(0,212,255,1) 100%);
}
body{
  background: rgb(2,0,36);
  background: linear-gradient(90deg, rgba(2,0,36,1) 0%,
rgba(28,28,92,1) 43%, rgba(0,212,255,1) 100%);
}
.top {
  border-top-left-radius: 10px;
  border-top-right-radius: 10px;
}
.bottom {
  border-bottom-left-radius: 10px;
  border-bottom-right-radius: 10px;
}
#main-heading {
  font-size: 45px;
}
.list-items {
  font-weight: bold;
  font-size: 22px;
}
.list-items:hover {
  font-weight: bold;
  font-size: 26px;
  color:aqua
}

</style>
</head>
<body>
<div class="container">
  <h1 id="main-heading">Favorite Movies</h1>
  <ul>

    <li class="list-items top">The Matrix</li>

```

```

        <li class="list-items">StarWars</li>
        <li class="list-items">HarryPotter</li>
        <li class="list-items" id="li4">Lord of the Rings</li>
        <li class="list-items bottom">Marvel</li>

    </ul>
</div>
<!-- <div class="container2">
    <h1 id="main-heading">FavoriteSports</h1>
    <ul>

        <li class="list-items top">The Matrix</li>
        <li class="list-items">StarWars</li>
        <li class="list-items">HarryPotter</li>
        <li class="list-items" id="li4">Lord of the Rings</li>
        <li class="list-items bottom">Marvel</li>

    </ul>
</div> -->
<script src="app.js"></script>
</body>
</html>

```

How to select the nodes to manipulate the DOM

getElementById()

```
// const title = document.getElementById('main-heading')
```

getElementByClassName()

```
// const listItems = document.getElementsByClassName("list-items")
```

getElementsByTagName()

```
// const heading1 = document.getElementsByTagName("h1")
```

querySelector()

```
//match the first element with the argument class, id, tagname
```

```
// const container2 = document.querySelector('.container2')
```

```
// const title = document.querySelector('#main-heading')
```

```
// const div = document.querySelector('div')
```

querySelectorAll()

```
// //select all elements with that name, tag, class
```

```
// const container = document.querySelectorAll('div')
```

```
// const container3 = document.querySelectorAll('.container2')
```

```
// const title2 = document.querySelector('#main-heading')
```

DOM MANIPULATION

CHANGING THE STYLES OF A PROPERTY

```
const title = document.querySelector('#main-heading');
title.style.color = "red"

const listItems = document.querySelectorAll(".list-items")

for(i = 0; i < listItems.length; i++) {
  listItems[i].style.fontSize = "15px";
}
```

CREATING ELEMENTS

```
const ul = document.querySelector('ul');
const li = document.createElement('li');
```

ADDING ELEMENTS

```
ul.append(li);
```

MODIFY THE TEXT

```
li.innerText = "Whats up Bro"

const firstListItem = document.querySelector('.list-items');
firstListItem.innerHTML = "Alanbrwon de Pu@s";
```

MODIFYING ATTRIBUTES AND CLASSES

```
//adding id="main-heading"
firstListItem.setAttribute('id', 'main-heading')

//removing class="list-items"
li.classList.remove("list-items")

console.log(li.classList.contains('list-items'))
```

REMOVE ELEMENTS

```
li.remove()
```

NAVIGATE THE DOM

traverse the DOM

Parent Node Traversal

```
let ul = document.querySelector('ul');
```

```
console.log(ul)
console.log(ul.parentNode)
console.log(ul.parentNode.parentNode)
console.log(ul.parentElement)
console.log(ul.parentElement.parentElement)
```

```
const html = document.documentElement;
console.log(html)
console.log(html.parentNode)
console.log(html.parentElement)
```

Child Node Traversal

```
let ul = document.querySelector('ul');
console.log(ul.childNodes)
console.log(ul.firstChild)
console.log(ul.lastChild)
ul.childNodes[3].style.fontSize = '40px'
console.log(ul.children)
ul.children[3].style.fontSize = '40px'
console.log(ul.firstElementChild)
console.log(ul.lastElementChild)
```

Sibling Node Traversal

```
let ul = document.querySelector('ul');
const div = document.querySelector('div')
console.log(div.childNodes)
console.log(ul.previousSibling)
console.log(ul.nextSibling)
console.log(ul.previousElementSibling)
console.log(ul.nextElementSibling)
```

EVENT LISTENERS

```

<!DOCTYPE html>
<html>
<head>
  <meta http-equiv="X-UA-compatible" content="IE-EDGE">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <style>...
</style>
  <title>Event Listeners</title>
</head>
<body>
  <div class="title">
    <h1 class="title-h1">Event Listeners</h1>
  </div>
  <div class="main">
    <div class="boxes box-1">
      <h2 class="heading">Example</h2>
      <button onclick="alert('I Love JavaScript')" class="btn-1">Enter</button>
    </div>
    <div class="boxes box-2">
      <h2 class="heading">Example2</h2>
      <button class="btn-2">Enter</button>
    </div>
    <div class="boxes box-3">
      <h2 class="heading">Example3</h2>
      <button class="btn-3 reveal-btn">Enter
    </button>
    </div>
  </div>
  <div class="hidden-content boxes">
    <h1>HOLA MI BROTHER</h1>
    <p>leeeeeeeeeeeeeeeeeeeeelelelelelaaaaaaaaaaaaaaaaaaaaaa estaaaaaaaaaaaaa
    nocueeeeeeeeeeeeeee</p>Whats Up bro ???
  </div>
</div>
  <script src="app.js"></script>
</body>
</html>

```

//element.addEventListener("click", function)

const buttonTwo = document.querySelector('.btn-2');

```

function alertBtn() {
  alert('I also love Javascript')
}

```

buttonTwo.addEventListener("click", alertBtn)

//mouseover

const newBackgroundColor = document.querySelector('.box-3');

```
function changeBgColor() {  
  newBackgroundColor.style.backgroundColor = 'blue'  
}
```

```
newBackgroundColor.addEventListener("mouseover", changeBgColor)
```

//Reveal Event

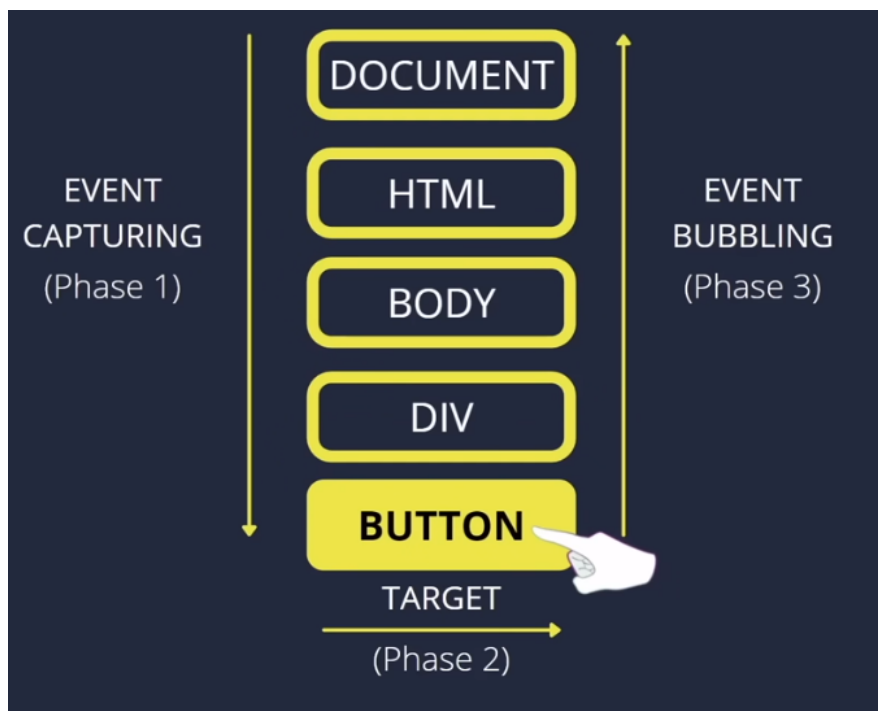
```
const revealBtn = document.querySelector('.reveal-btn');
```

```
const hiddenContent = document.querySelector('.hidden-content');
```

```
function revealContent() {  
  if(hiddenContent.classList.contains('reveal-btn')){  
    hiddenContent.classList.remove('reveal-btn')  
  } else {  
    hiddenContent.classList.add('reveal-btn')  
  }  
}
```

```
revealBtn.addEventListener('click', revealContent)
```

EVENT PROPAGATION



//DOM MANIPULATION

//EVENT PROPAGATION

```
window.addEventListener("click", function() {  
    console.log('Window');  
    // e.stopPropagation()  
},true);
```

```
document.addEventListener("click", function() {  
    console.log('Document');  
},true);
```

```
document.querySelector(".div2").addEventListener("click", function() { //e for event  
    console.log('DIV 2');  
},true);
```

```
document.querySelector(".div1").addEventListener("click", function() {  
    console.log('DIV 1');  
},true);
```

```
document.querySelector("button").addEventListener("click", function(e) {  
    //TODO  
    //console.log(e.target)  
    // console.log(e);  
    console.log(e.target.innerText = 'clicked');  
},true);
```

EVENT DELEGATION


```

<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="X-UA-compatible" content="IE-EDGE">
    <meta name="viewport" content="width=device-width,
      initial-scale=1.0">
    <style>...
    </style>
    <title>Event Delegation</title>

  </head>
  <body>

    <ul id="sports">
      <li id="football">Football
    </li>
      <li id="basketball">basketball
    </li>
      <li id="boxing">boxing
    </li>
      <li id="tennis">tennis
    </li>
      <li id="golf">golf
    </li>
    </ul>

    <script src="app.js"></script>
  </body>
</html>

```

//It allows users to append a SINGLE event listener to a parent element that adds it to all of its present AND future descendants that match a selector

```

// document.querySelector("#football").addEventListener('click', function(e) {
//   console.log("football is clicked")

//   const target = e.target;

//   if(target.matches('li')) {
//     target.style.backgroundColor = 'lightgrey'
//   };
// })

// document.querySelector("#basketball").addEventListener('click', function(e) {
//   console.log("basketball is clicked")

//   const target = e.target;

```

```

// if(target.matches('li')) {
//     target.style.backgroundColor = 'lightgrey'
// };
// })

// document.querySelector("#boxing").addEventListener('click', function(e) {
//     console.log('boxing is clicked')

//     const target = e.target;

//     if(target.matches('li')) {
//         target.style.backgroundColor = 'lightgrey'
//     };
// })

// document.querySelector("#tennis").addEventListener('click', function(e) {
//     console.log('tennis is clicked')

//     const target = e.target;

//     if(target.matches('li')) {
//         target.style.backgroundColor = 'lightgrey'
//     };
// })

// document.querySelector("#golf").addEventListener('click', function(e) {
//     console.log('golf is clicked')

//     const target = e.target;

//     if(target.matches('li')) {
//         target.style.backgroundColor = 'lightgrey'
//     };
// })

document.querySelector('#sports').addEventListener('click', e => {
    console.log(e.target.getAttribute('id')+ ' is clicked');

    const target = e.target;

    if(target.matches('li')) {
        target.style.backgroundColor = 'lightgrey'
    }
})

document.querySelector('#sports').addEventListener('click', e => {
    console.log(e.target.getAttribute('id')+ ' is clicked');

```

```
const target = e.target;


if(target.matches('li')) {
  target.style.backgroundColor = 'lightgrey'
}
})

const sports = document.querySelector('#sports');
const newSport = document.createElement('li');

newSport.innerText = 'rugby';
newSport.setAttribute('id', 'rugby');

sports.appendChild(newSport);
```

[freeCodeCamp.org](https://www.freecodecamp.org)

 [JavaScript DOM Manipulation – Full Course for Beginners](#)