

Document object model(DOM)

```
// DOM Manipulation

// GetElementsById()
const title = document.getElementById('main_heading')
console.log(title)

// GetElementsByClassName()
const listitems = document.getElementsByClassName('list-items')
console.log(listitems)

// getElementsByTagName()

const listItems = document.getElementsByTagName('li')
console.log(listItems)

//querySelector()

//querySelectorAll()

//Creating Elements

const ul = document.querySelector('ul');
const newLi = document.createElement('li');
const newSport = document.createElement('li');
newSport.innerText = 'rugby';
newSport.setAttribute('class', 'rugby');
sports.appendChild(newSport);

//Adding the elements
ul.appendChild(newLi);
```

```
//modifying the text

const firstlistitem = document.querySelector('.list-items');

console.log(firstlistitem.innerText); // used in most cases
console.log(firstlistitem.textContent);
console.log(firstlistitem.innerHTML);

// example
newLi.innerText = 'X-men'

//modifying Attributes and Classes
newLi.setAttribute('id','main_heading')

//removing
newLi.removeAttribute('id')

//proper remove

newLi.remove()

// EventListeners

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

const button = document.querySelector('.btn');

function alrtBtn(){
    alert('I also love JavaScript');
}
button.addEventListener('click',alrtBtn);

//mouseover hover

function changeClr(){
    button.style.backgroundColor = 'yellow';
```

```
}

    if (button.style.backgroundColor == 'yellow'){
    button.style.backgroundColor = blue;
}

    else{
    button.addEventListener('mouseover',changeClr);
}

console.log();
```

EVENT DELEGATION

```
//Event Delegation

// 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.

//without event delegation
//
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';

//     }
// })

//with event delegation
```

```
document.querySelector('#sports').addEventListener('click',function(e){
    console.log(e.target.getAttribute('class')+ ' is clicked');

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

Transitions on click

```
// variable
let cont = document.getElementsByClassName('main-content');
console.log(cont);

for(i=0; i<cont.length; i++){

    cont[i].addEventListener('click',function(){
        this.classList.toggle('active');
    });
}
/* js styling link*/

.container .main-content.active .answer{
    height: 100px;
    transition: 0.5s;
}

.container .main-content.active .questions{
    font-size: 18px;
    transition: 0.5s;
}

.container .main-content.active .questions::after{
    content: '-';
    font-size: 30px;
    transition: 0.5s;
}
```