

Nation

Code

Master



JS and DOM



Function recap

Function: Recap



```
function say(something) {  
    console.log(something);  
}
```

```
say ('hello');
```

This is a declaration that will return 'hello' in console.

Function: Function calling function



```
function say(something) {  
    console.log(something);    }
```

```
function exec(func, arg){  
    func(arg);    }
```

```
exec(say, 'Hi, there');
```

Passing function directly into another function { CN }™

Let's simplify the functions

```
function exec(func,arg){  
    func(arg);  
}  
exec(function say(something) {  
    console.log(something);  
}, 'Hi,there');
```



Anonymous function

```
function exec(func,arg){  
    func(arg);  
}  
exec((something) =>{  
    console.log(something);  
}, 'Hi,there');
```



10 setTimeout()

WindowOrWorkerGlobalScope.setTimeout()

Syntax

```
var timeoutID = scope.setTimeout(function[, delay, param1, param2, ...]);  
var timeoutID = scope.setTimeout(function[, delay]);  
var timeoutID = scope.setTimeout(code[, delay]);
```

Parameters

function

A `function` to be executed after the timer expires.

code

An alternative syntax that allows you to include a string instead of a function, which is compiled and executed when the timer expires. This syntax is **not recommended** for the same reasons that make using `eval()` a security risk.

Activity: setTimeout()



```
window.setTimeout((something)=> {  
    console.log(something);  
}, 5000, 'Greetings Everyone');
```




Event

What is an Event?



There are more we can explore apart from click events.

Computer:

click, dblclick, mousedown, mouseup, mousemove, mouseover, mouseout

Smartphone/tablets:

Touchstart, touchmove, touchend

Keyboard:

keydown, keyup, keypress

(more on MDN Event reference)



11 addEventListener
mouseover,mouseout

Activity: add listItem



new const:

```
const listItem = document.getElementsByTagName('li');
```

```
for(let i = 0; i<listItem.length; i++){  
    listItem[i].addEventListener('mouseover', ()=>{  
        listItem[i].textContent =listItem[i].textContent.toUpperCase();  
    });  
    listItem[i].addEventListener('mouseout', ()=>{  
        listItem[i].textContent =listItem[i].textContent.toLowerCase();  
    });  
}
```

Activity: changing the structure

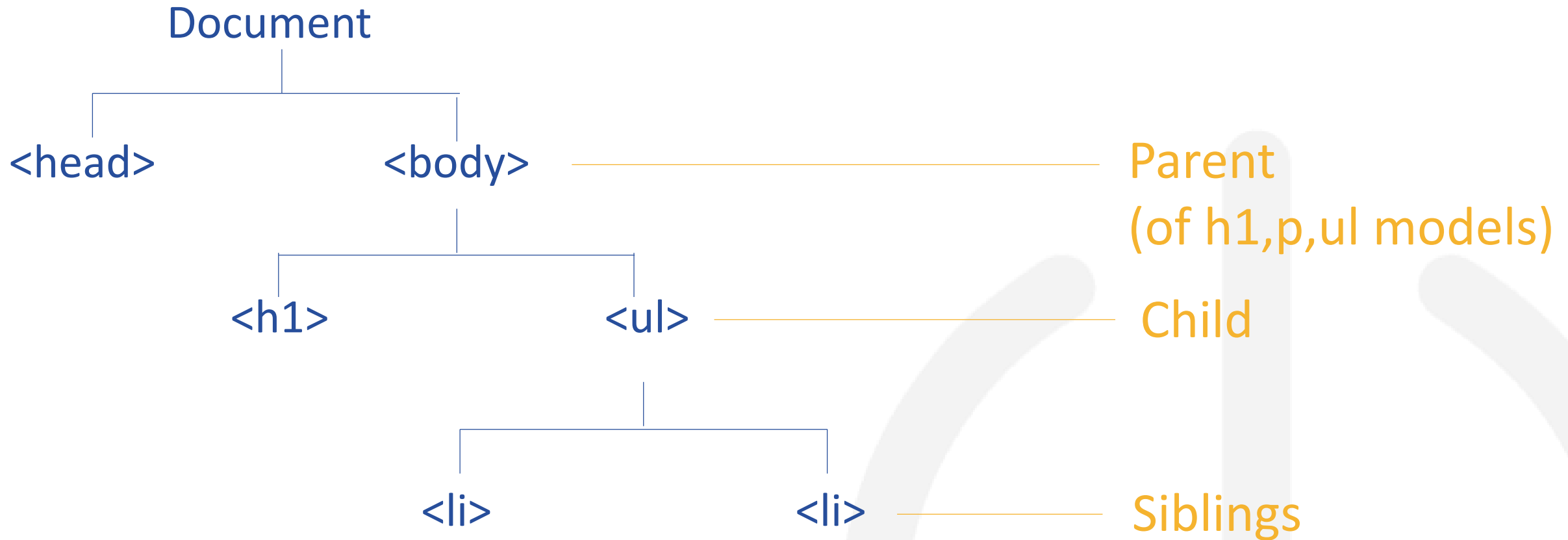


Instead of having a for loop, we can remove it and have the code below instead:

```
const list = document.getElementById('list');
```

```
list.addEventListener('mouseover',()=>{  
    listItem[i].textContent = listItem[i].textContent.toUpperCase();}  
list.addEventListener('mouseout',()=>{  
    listItem[i].textContent = listItem[i].textContent.toLowerCase();}
```

Event Bubbling





12 Event Object

Activity: checking event in console



Inside app.js we want to check which object we are clicking

```
document.addEventListener('click',(event)=> {  
    console.log(event);  
    console.log(event.target);  
})
```


Activity: Implement into addEventListener



Can you fix this code?

```
list.addEventListener('mouseover',()=>{  
    listItem[i].textContent = listItem[i].textContent.toUpperCase();}  
list.addEventListener('mouseout',()=>{  
    listItem[i].textContent = listItem[i].textContent.toLowerCase();}
```

Solution



```
list.addEventListener('mouseover',()=>{  
    listItem[i].textContent = listItem[i].textContent.toUpperCase();}  
list.addEventListener('mouseout',()=>{
```

```
    listItem[i].textContent = listItem[i].textContent.toLowerCase();}  
now becomes:
```

```
list.addEventListener('mouseover',(event)=>{  
    event.target.textContent = event.target.textContent.toUpperCase();}  
list.addEventListener('mouseout',(event)=>{  
    event.target.textContent = event.target.textContent.toLowerCase();}
```

Problem



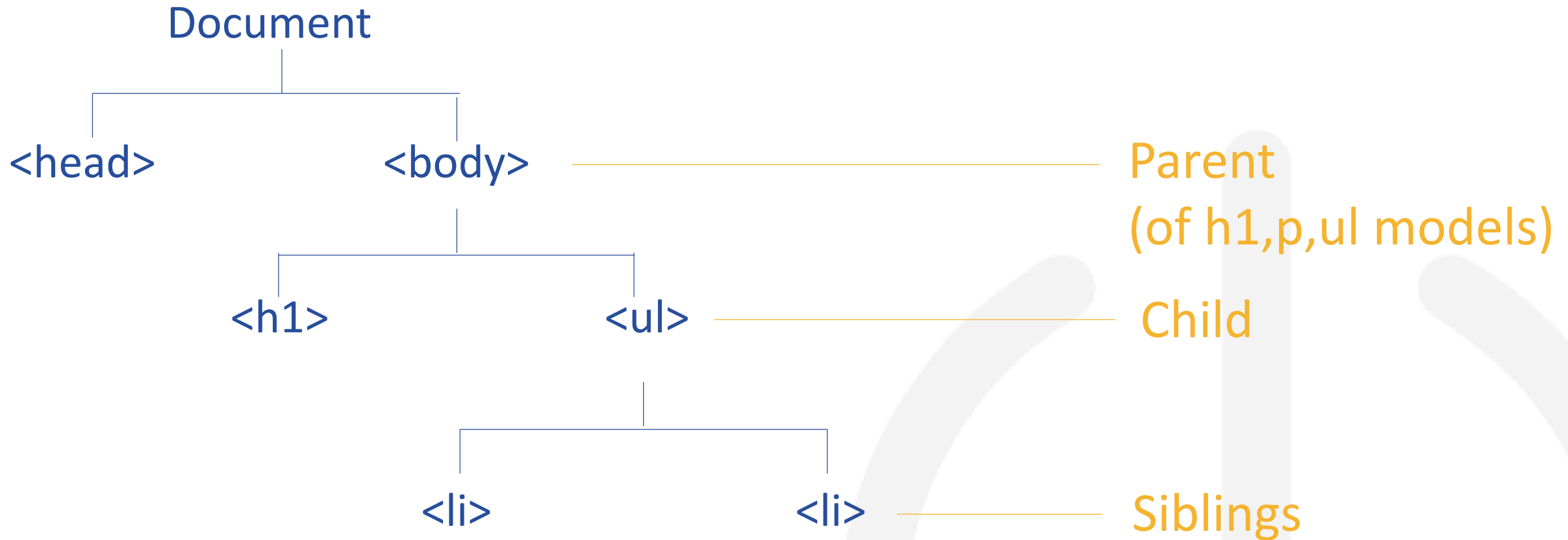
When we mouse over the bullet point it then breaks the page because it changes all event.target including , so we need to add if statement to make sure we check before changing it to uppercase.

```
list.addEventListener('mouseover',(event)=>{  
    if(event.target.tagName == "LI"){  
        event.target.textContent = event.target.textContent.toUpperCase();  
    }  
list.addEventListener('mouseout',(event)=>{  
    if(event.target.tagName == "LI"){  
        event.target.textContent = event.target.textContent.toLowerCase();  
    }  
})
```



13 Using parentNode

DOM Traversal



Example



```
let paragraph = document.getElementById('myParagraph');  
let parent = paragraph.parentNode;  
parent.removeChild(paragraph);
```

Activity: using parent node



```
list.addEventListener('click',(event)=>{  
    if(event.target.tagName == 'LI'){  
        let li = event.target;  
        let ul = li.parentNode;  
        ul.removeChild(li);  
    }  
})
```



<https://developer.mozilla.org/en-US/docs/Web/API/Document>

<https://caniuse.com/>