

# The DOM

{ Document Object Model

# What is the DOM ?

{

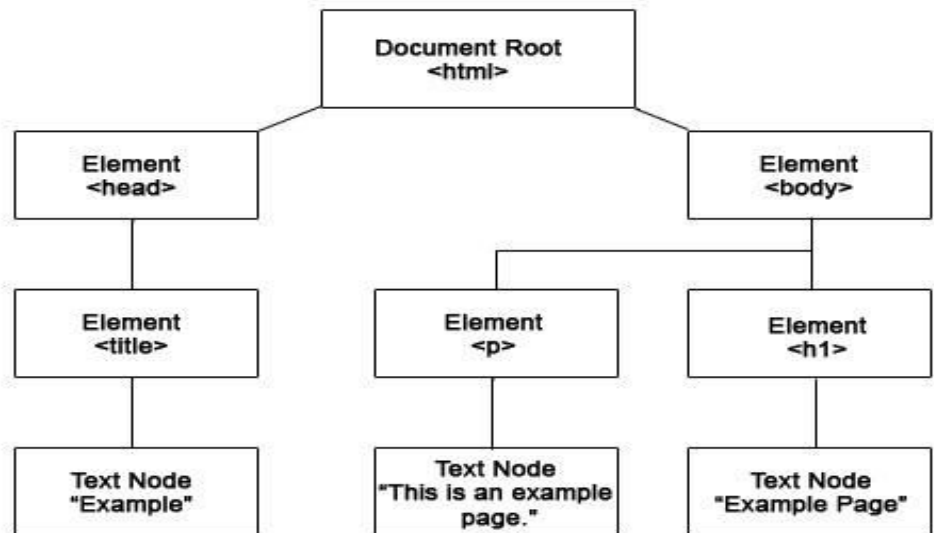
*The Document Object Model is the interface  
between your java Script and HTML+CSS*

};

The browser turns every HTML tag into a JavaScript object that  
We can manipulate.

Everything is stored  
inside of  
the document object

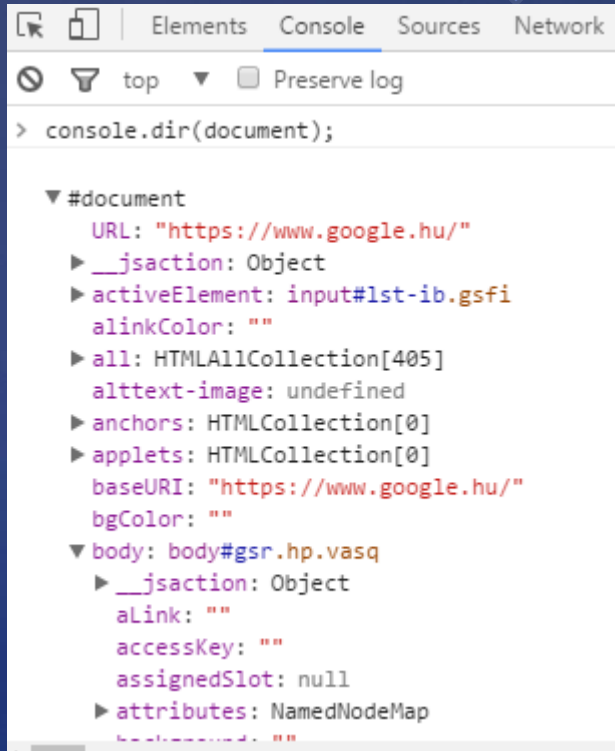
```
<!DOCTYPE HTML>
<html>
<head>
  <title>
    This is a simple HTML document
  </title>
</head>
<body>
  <h1>
    Explains what the document is about
  </h1>
  <p>
    Includes the content of the document
  </p>
</body>
</html>
```



# The DOM

On the console of a web browser , if you write

`console.dir(document);`

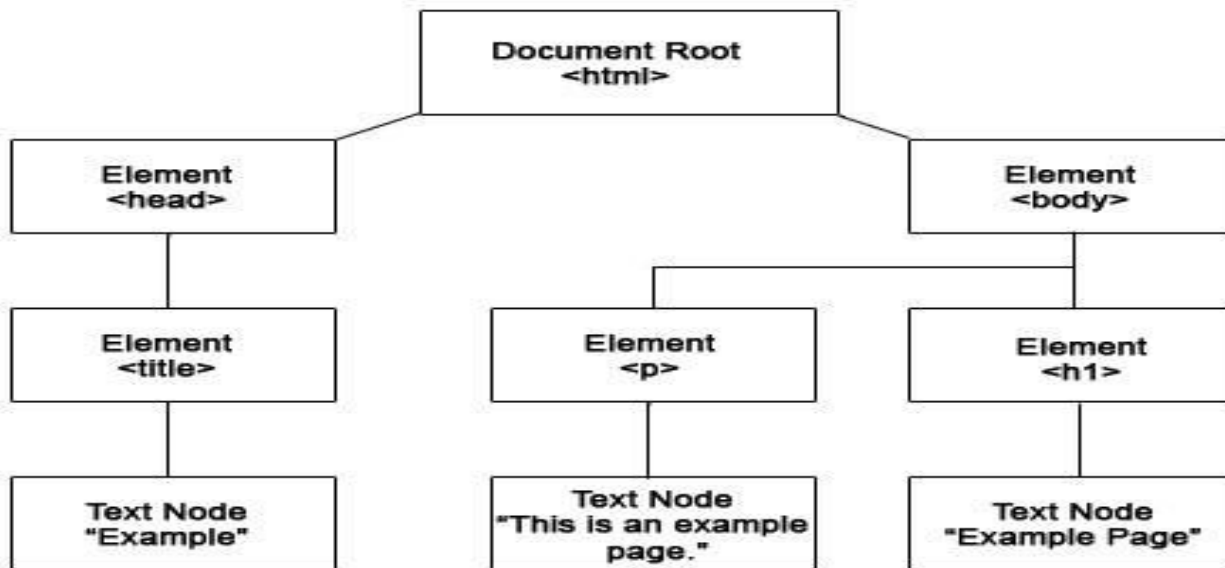


Everything is an object

# The Process

*Select an element and then MANIPULATE*

```
var h1 = document.querySelector("h1");  
h1.style.color = "pink";
```



# An Animation

```
var body = document.querySelector("body");  
var isBlue = false;
```



First select it

```
setInterval( function () { //Manipulate  
    if (isBlue ) {  
        body.style.background = "white";  
    } else {  
        body.style.background = "#3498db";  
    }  
    isBlue = !isBlue ;  
}, 1000 );
```



Then  
Manipulate it

# 5 Main Methods

```
document.getElementById();
```

```
document.getElementsByClassName();
```

```
document.getElementsByTagName();
```

```
document.querySelector();
```

```
document.querySelectorAll();
```

# DOM Manipulation

We're going to cover different ways of :

- Changing an element's style
- Adding/removing classes
- Changing the content of a tag
- Changing the attributes (src, href, etc.



# Style

The style property is one to manipulate an element's style :

```
//Select
```

```
var tag = document.getElementById("highlight");
```

```
//Manipulate
```

```
tag.style.color = "blue" ;
```

```
tag.style.border = "10px solid red" ;
```

```
tag.style.fontSize = "70px" ;
```

```
tag.style.background = "yellow" ;
```

```
tag.style.marginTop = "200px" ;
```

# textContent

Returns a string of all text contained in a given element

```
// select the <p> tag  
var tag = document.querySelector( " p ");
```

```
//Retrieve the text content  
tag.textContent
```

```
//alter the textContent  
tag.textContent = "blah blah blah";
```

# Attributes

User `getAttribute()` and `setAttribute()` to read and write  
Attributes like `src` or `href`

```
var link = document.querySelector("a");  
link.getAttribute("href");  
link.setAttribute("href", "www.blahblah.com ");
```