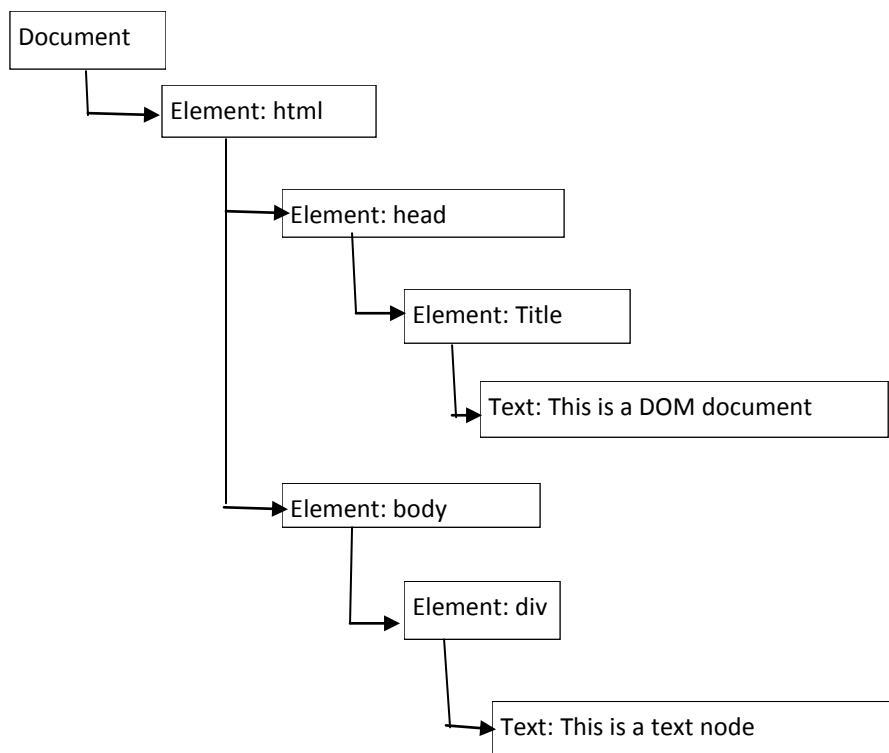Document Object Model : DOM

The DOM is a an application programming interface for HTML and XML documents

Consider the following HTML Document

```
<html>
<head>
<title>This is a DOM document</title>
</head>
<body>
<div id="MyBody">This is a text node</div>
</body>
</html>
```

In the Document Object Model it is represented by the following Node heirachy

```
Document
   └──▶ Element: html
            └──▶ Element: head
                     └──▶ Element: Title
                              └──▶ Text: This is a DOM document
            └──▶ Element: body
                     └──▶ Element: div
                              └──▶ Text: This is a text node
```

Some terminology

Document is the **root node** as it is the collection of the entire document.

Element: html is the **child node** of the document and the **parent node** of Element head and Element body

Element head and Element body are **sibling nodes**. (another name for brother/sister nodes).

Text : This is a text node and Text: This is aDOM document are of type **text node**

All the Element :???? Are of type **element node**

Please note there are 12 different node types they describe any html documents. I can forward you a list but it is not important at this stage.

So how do I reference a node;

1.   You can make repeated calls to navigate through the DOM

Ie.

htmlNode = document.childNodes[0];

bodyNode = htmlNode.childnodes[0].nextSibling;

headNode = bodyNode.previousSibling;

bodyNode= htmlNode.lastChild;

headNode= htmlNode.firstChild;

2. Or you can reference by id

divNode = document.findElementById("MyBody");

3. Or you can get a collection by referring to a tag Name

var images = document.getElementByTagName("img");

        You can then repeat through that list var image = images[0]

4. Or if you node has a name

        <div name="myname" />

You can find it by

var div = document.getElementsByTagName("div").namedItem("myname");

5. Of if your elements have a class

var anynodes = document.getElementsByClassName("myclass");

 How do I add a node;

 Var div = document.createElement("div");

 document.body.appendChild(div):

 Or

 bodyNode .insertBefore(div, referenceNode);

 parentNode.replaceChild(div, replacedcChildNode);

 How Do I remove a node

 someNode.removeChild(childNodeToRemove);