

The Document Object Model [DOM]

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① Adding Javascript to websites:-

inside HTML.

```
<body onload = "alert('...');" >
```

⋮

```
</body>
```

- * (1) inline Javascript:-

↳ lot of downsides

- * internal Javascript:-

```
<body>
```

```
<script type = "text/javascript">
```

```
  alert("Hello");
```

```
</script>
```

⋮

```
</body>
```

- * External Javascript:-

```
<body>
```

```
<script src = "sample.js" charset = "utf-8">
```

```
</script>
```

⋮

```
</body>
```


① Introduction to DOM:-

- Dominating the DOM to add functionalities to the HTML elements.
- Creates interactive websites.

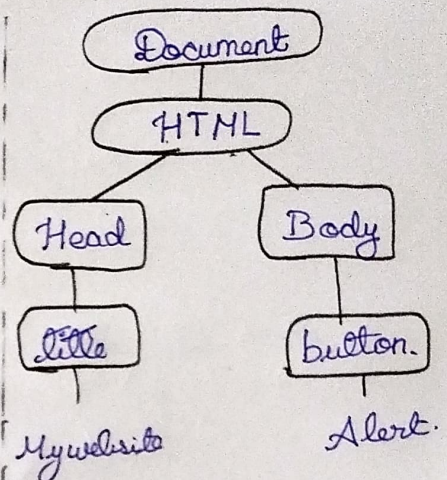
Example:-

index.html :-

```
<html>
  <head>
    <title>
      My Website
    </title>
  </head>
  <body>
    <button>
      Alert
    </button>
  </body>
</html>
```

DOM

→
Turns
into
Tree
structure
with a
whole bunch
of object
that we
can select
and Manipulate



→ use Html tree generator extension.

Objects inside the DOM has properties & Methods.

Properties → Describe something about the object
Method → What the object can do.
→ uses → Drive, Park etc..
→ specifications → Colour, no. of. seats etc.,

Syntax:-

```
car.colour ; // Get property
  ↓         ↓
object method Properties
car.colour = blue ; // set property
car.drive() ;
  ↓
Method
```


Selecting HTML elements with JS:-

- ① `document.getElementsByTagName("li");`
↳ fetch all given element in the html.
- ② `document.getElementsByClassName("...");`
- ③ `document.getElementById("....");`
- ④ `document.querySelector("selector");`
- ⑤ `document.querySelectorAll("selector");`

Separation of concerns:-

→ To Make websites tidy in order to make debugging easier.

→ For example:-

HTML ⇒ Only Content

CSS ⇒ Only Style

JS ⇒ Only behavior.

→ `document.querySelector("...").classList`;

→ `document.querySelector("...").classList` `add()`;
`remove()`;
`toggle()`;

∴ by this:-

→ `document.querySelector("...").innerHTML;`

vs.

→ `document.querySelector("...").textContent;`