

DOM

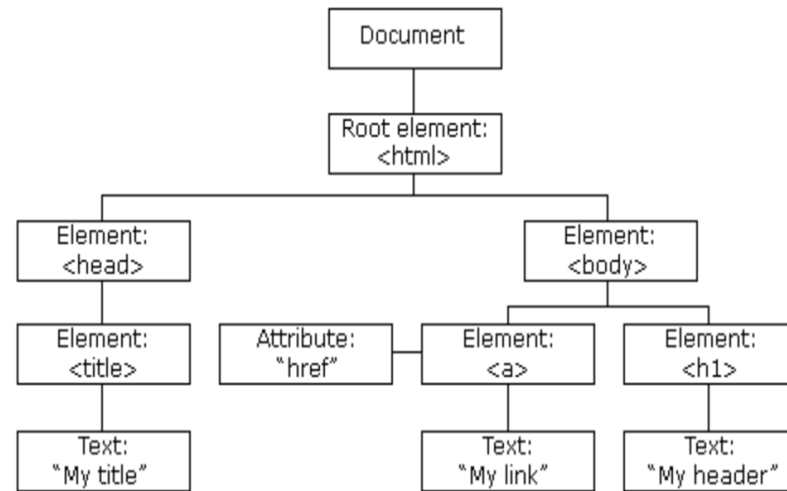
document.

DOM

- javascript - Netscape (1995)
- Browser console
- window
- document

DOM

```
<!doctype html>
<html>
<head>
  <title>My title</title>
</head>
<body>
  <a href="xyz.html">My link</a>
  <h1>My header</h1>
</body>
</html>
```

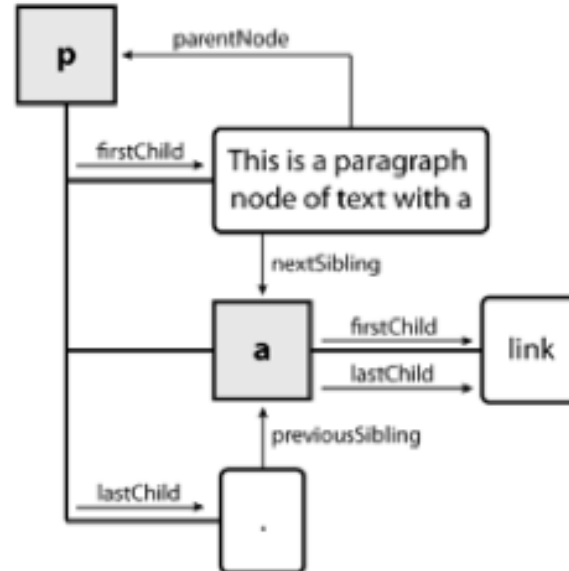


- JS objects represent elements on a page
- Use JS to traverse, inspect, add, remove elements
- Aside from “tag”, use “id” or “class” to find elements

DOM Traversal

```
<p id="foo">This is a paragraph of text with a  
<a href="/path/to/another/page.html">link</a>.</p>
```

HTML



document.

- ❖ *getElementById()*
- ❖ *getElementsByTagName()*
- ❖ *createElement()*

element.

- ❖ *innerHTML*
- ❖ *getAttribute()*
- ❖ *addEventListener()*

Event Driven

- ❖ *mouse*
 - *onclick, ondblclick, onmousedown/up/over/move/out*
- ❖ *keyboard*
 - *onkeypress/down/up*
- ❖ *form*
 - *onblur/focus/select/change/reset/submit*
- ❖ *frame*
 - *onload/abort/resize/scroll/unload*

Where ?

- ❖ *inline*

```
<div id="example1" onclick="alert('hello')">Click for pop-up</div>
```

- ❖ *embedded*

```
<script type="text/javascript">  
    console.log("Hello World")  
</script>
```

- ❖ *external*

```
<script type="text/javascript" src="code.js"></script>
```


jQuery

- Cross-browser compatibility
- Easier DOM manipulation
- Powerful event binding
- Chaining
- AJAX

AJAX

- An architecture style ?
- XMLHttpRequest
- DOM manipulation

```
var xhr = new XMLHttpRequest();
xhr.open('GET', 'http://www.example2.com/hello.json');
xhr.onload = function(e) {
    var data = JSON.parse(this.response);
    ...
}
xhr.send();
```

and REST!

```
$.getJSON("http://api.flickr.com/services/feeds/photos_public.gne?jsoncallback=?",  
{  
  tags: "mount rainier",  
  tagmode: "any",  
  format: "json"  
},  
function (data) {  
  $.each(data.items, function (i, item) {  
    $("<img/>").attr("src", item.media.m).appendTo("#images");  
    if (i == 3) return false;  
  });  
});
```