

Javascript

Idiomatic Javascript :

<https://github.com/rwaldron/idiomatic.js/>

//notice put your script at the end of body, it will loads faster!

```
dex.html > ...
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My website</title>
    <link rel="stylesheet" href="/Users/apple/Documents/Online class 2019/Web
  </head>
  <body>
    <h1>Hello</h1>
    <script src="index.js"></script>
  </body>
</html>
```

button

Properties

- `innerHTML`
- `style`
- `firstChild`

Methods

- `click()`
- `appendChild()`
- `setAttribute()`

DOM :

Get list: `document.getElementsByTagName("li")`

(Elements, so it get all the elements, it's 負數(elements)) so it is always an array

If we want single: you use it like a array with "[index]"

`document.getElementsByTagName("li")[1].style.color = "purple"`

There is also "get element by classname, id..."

Use `getelementBY ID` => you get only one element!

Ex:

`document.getElementById("title").innerHTML = "Goodbye"`

Another allow you to select single element is query select element:
document.querySelector(), you could put element, id or class inside the ()

Ex;
document.querySelector("#title")
<h1 id="title">Goodbye</h1>

You can also combined selector:
document.querySelector("li.item")
document.querySelector("li a")

Give you an array:
document.querySelectorAll("li.item")

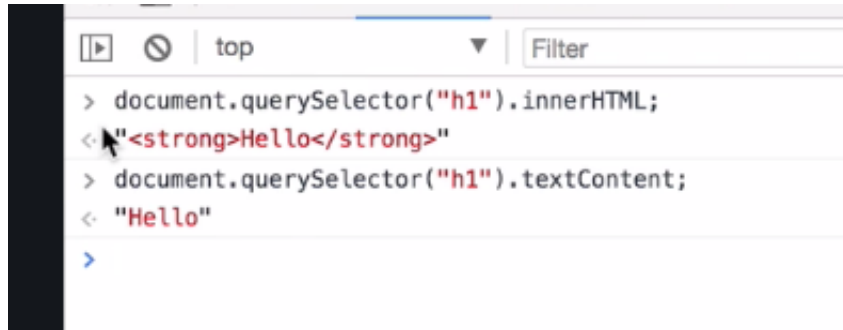
Query selector allow you to target more specifically, you will see it more often than get element!

Object style property:
https://www.w3schools.com/jsref/dom_obj_style.asp

Notice:
HTML => content
CSS => style
JAVAScript => behavior

Another DOM example : change the behavior through javascript with CSS style
document.querySelector("#title").classList.toggle("huge")

TextContent:



```
> document.querySelector("h1").innerHTML;  
< "<strong>Hello</strong>"  
> document.querySelector("h1").textContent;  
< "Hello"  
>
```

If you select h1 with innerHTML, it will gives you the all inner html (any html element):
So you could also change html tag with em sign,

```
< "Hello"  
> document.querySelector("h1").innerHTML = "<em>Good Bye</em>";  
< "<em>Good Bye</em>"  
>
```

However the "textContent option" could only change html

Changing the attributes !

```
document.querySelector("a").getAttribute("href")
document.querySelector("a").setAttribute("href", "www.mcgill.com")
```

Event listener example:

```
document.querySelector("button").addEventListener("click", handleClick);
function handleClick(){
  alert("I get clicked");
}
```

We could also use anonymous function:

```
document.querySelector("button").addEventListener("click",
function (){
  alert("I get clicked");})
```

Javascript: object

```
var bellBoy1 = {
  name: "Timmy",
  age: 19,
  hasWorkPermit: true,
  languages: ["French", "English"]
}
```



Constructor Function

```
function BellBoy (name, age, hasWorkPermit, languages) {  
  this.name = name;  
  this.age = age;  
  this.hasWorkPermit = hasWorkPermit;  
  this.languages = languages;  
}
```

In constructor, the name has to be capitalized

```
var bellBoy1 = new BellBoy("Timmy", 19, true, ["French", "English"]);
```

This is creating object with constructors

```
var bellBoy1 = {  
  name: "Timmy",  
  age: 19,  
  hasWorkPermit: true,  
  languages: ["French", "English"],  
  moveSuitcase: function() {  
    alert("May I take your suitcase?");  
    pickUpSuitcase();  
    move();  
  }  
}
```

Create a anonymouse function

Event reference :

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