DOM

Getting Element Methods

- getElementById(). It returns a **reference** to the element. **A unique id attribute** is given **as an argument**.
- getElementsByTagName(). It returns a **node list** of all the elements with **the tag name** that is provided **as an argument.**
- getElementsByClassName(). It returns a **node list** of all elements that have **the class name** that is supplied **as an argument**.

Query Selectors

- document.querySelector(). It returns **the first element** in the document that matches a **CSS selector** provided **as an argument**.
- document.querySelectorAll(). It returns **a list of all the elements** in the document that matches a **CSS selector** provided **as an argument**.

Query selectors powerfully let you specify very precise items on a page. For example: CSS pseudo-selectors are used to pinpoint a particular element:
document.querySelector('li:last-child');
1. You can call any element, rather than just using document like a reference to a <ul> element, by:
   const ul =document.querySelector('ul#roster')
2. Then, you can use querySelector() on **ul**, to find the id of an <li> element:
   const batman = ul.querySelector('li#bats')

Node object properties

The following properties work as you'd expect. Some properties below return **#text nodes that can contain whitespace** as well as element nodes. You'll want to use the properties that access element nodes to grab a tag/element and then the properties that access all nodes when working inside a tag/element.

Element nodes	All Nodes (includes #text nodes)
.children	.childNodes
.firstElementChild	.firstChild
.lastElementChild	.lastChild
.nextElementSibling	.nextSibling
.previousElementSibling	.previousSibling

 To return the text inside an element/node use:
- .textContent
- .innerText - for Internet Explorer v.8

- .firstChild/.lastChild
- .innerHTML
- .nodeValue

Element Attributes

- getAttribute(). Use to **get src, href, class, id** attributes inside element.
- setAttribute('class', 'villian). Use to **set src, href, class, id** attributes inside element.

Create
- document.createElement()
- document.createTextNode()

Connect
- appendChild()
- .textContent
- insertBefore(newNode, node wanted before)

Remove, Replace
- removeChild()
- replaceChild(newNode, node being replaced)

Create, Connect, Remove, Replace:

- .innerHTML. Replace all HTML inside a parent: heroes.innerHTML ='
Harley Quinn
Deadshot
Killer Croc
Enchantress
Captain Boomerang
Katana
Slipknot
'

Events

EventListeners

Allows multiple functions to be attached to different events

- <u>addEventListener(event, function).</u> called on node object or the whole page: document.body.addEventListener('click',doSomething) & addEventListener('click', () => alert('You Clicked!'));

Properties

- .type
- .target
- .screenX & .screenY
- .clientX & .clientY
- .pageX & .pageY

Mouse events

- mousedown
- mouseup
- dblclick
- mouseover
- mouseout
- mousemove

Keyboard events

- keydown. Action of pressing key
- keypress. Action of character being typed on screen
- keyup

Touch events

- touchstart
- touchend
- touchmove
- touchleave
- touchenter
- touchcancel

Touch properties

touches are a list of touch objects:

- touches.length
- touch.screenX & touch .screenY
- touch.radiusX & touch.radiusY

- touch.force
- touch.identifier