Intro to DOM

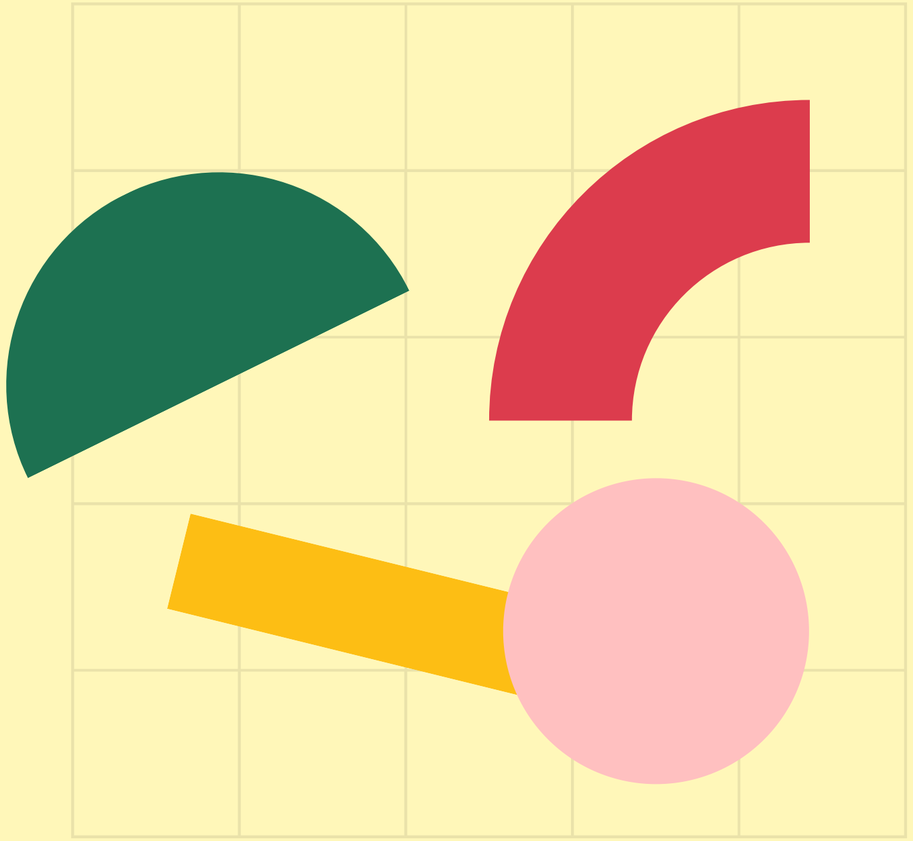
Document Object Model

WEB DEVELOPMENT

Unit Goals

what we'll cover

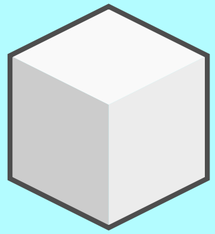
- what DOM is
- selecting
- properties and methods
- events



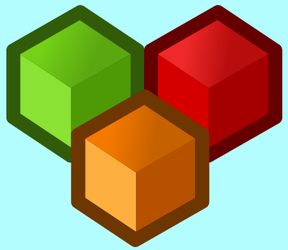
DOM

DOCUMENT

OBJECT



MODEL



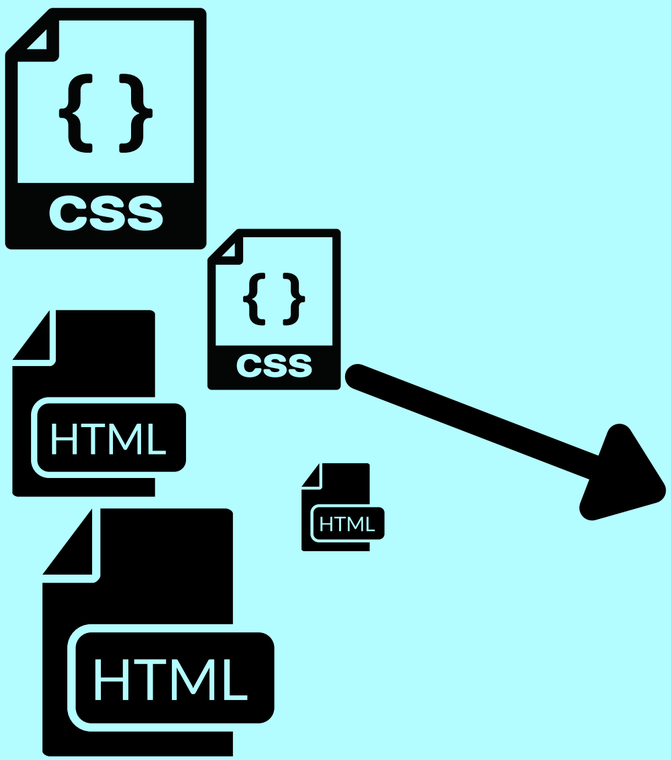
DOM

WHAT IS IT?

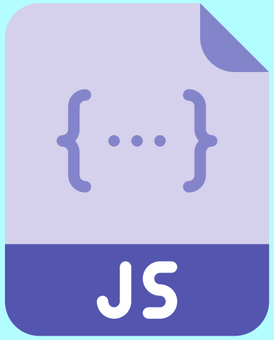
- The DOM is a JavaScript representation of a webpage.
- It's your JS "window" into the contents of a webpage.
- It's just a bunch of objects that you can interact with via JS.

DOM

HTML + CSS go in



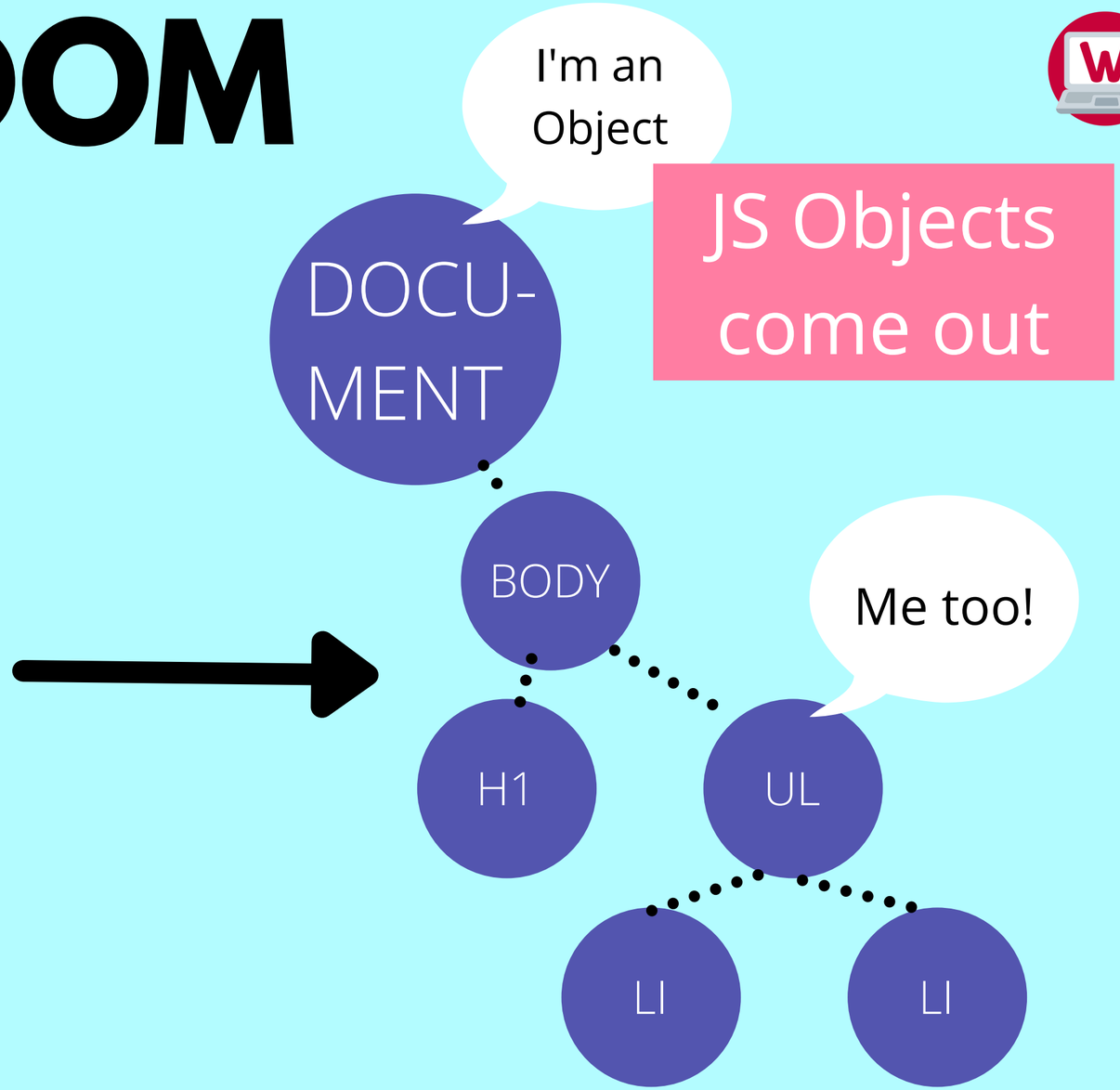
JS Objects come out



DOM

HTML + CSS go in

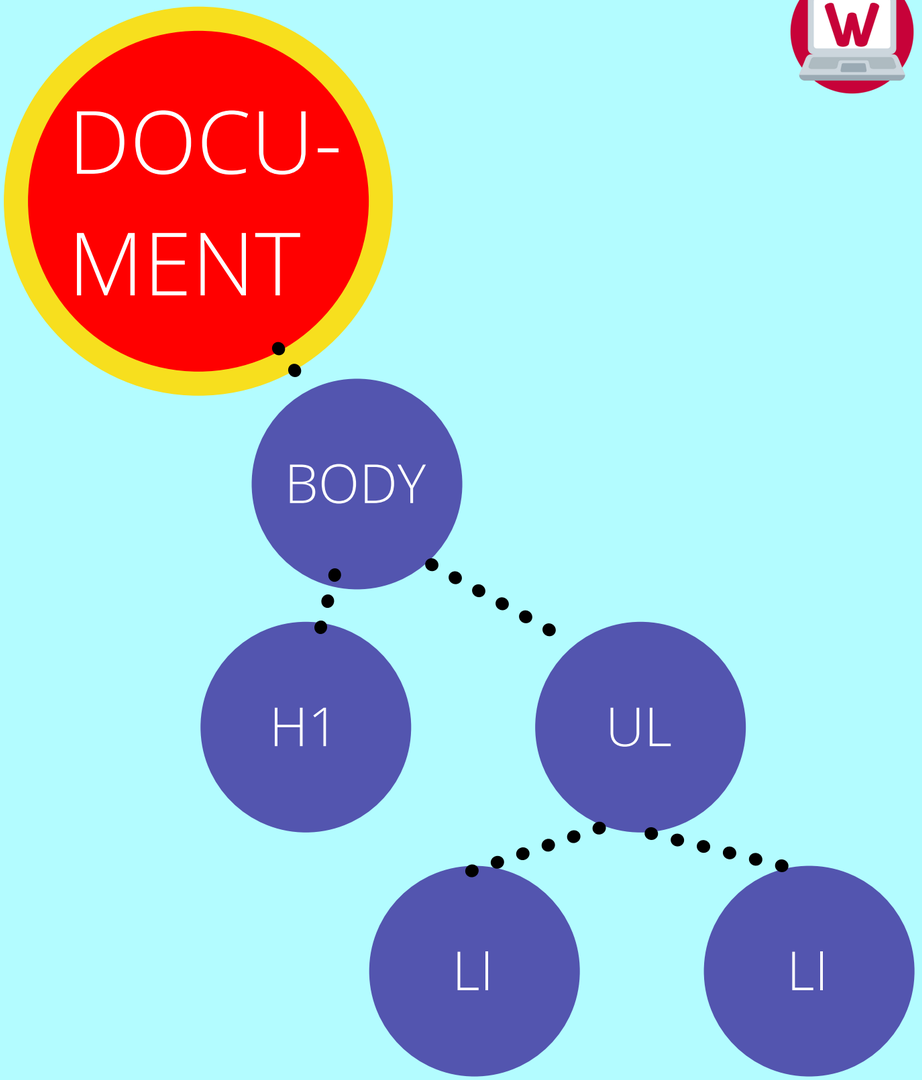
```
<body>
  <h1>Hello!</h1>
  <ul>
    <li>Water Plants</li>
    <li>Get Some Sleep</li>
  </ul>
</body>
```



DOM:

DOCUMENT

The document object is our entry point into the world of the DOM. It contains representations of all the content on a page, plus tons of useful methods and properties



SELECTING

1) SELECT

2) MANIPULATE

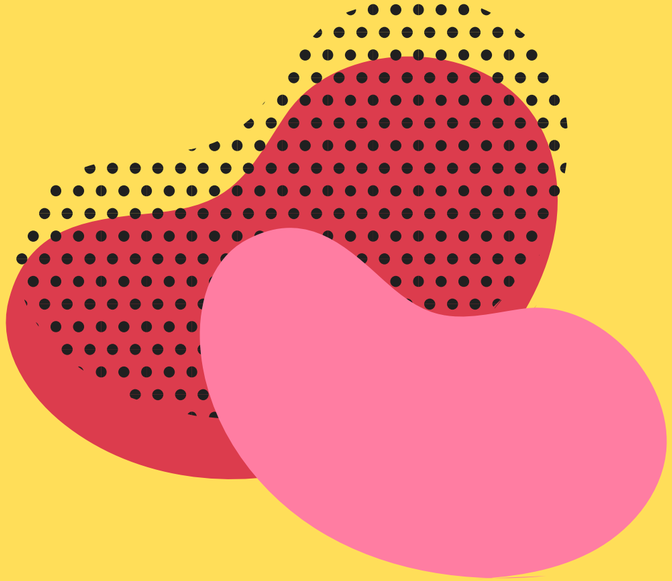
SELECTING

1) SELECT

2) MANIPULATE

SELECTING

- getElementById
- getElementsByTagName
- getElementsByClassName



SELECTING

- **querySelector**

A newer, all-in-one method to select a single element.

```
//Finds first h1 element:
document.querySelector('h1');

//Finds first element with ID of red:
document.querySelector('#red');

//Finds first element with class of big:
document.querySelector('.big');
```

SELECTING

- **querySelectorAll**

Same idea , but
returns a **collection**
of matching elements.

SELECTING

1) SELECT

2) MANIPULATE

SELECTING

1) SELECT

2) MANIPULATE

PROPERTIES & METHODS

(THE IMPORTANT ONES)

- classList
- getAttribute()
- setAttribute()
- appendChild()
- append()
- prepend()
- removeChild()
- remove()
- createElement
- innerText
- textContent
- innerHTML
- value
- parentElement
- children
- nextSibling
- previousSibling
- style

A SMALL TASTE
(THE IMPORTANT ONES)

- clicks
- drags
- drops
- hovers
- scrolls
- form submission
- key presses
- focus/blur
- mouse wheel
- double click
- copying
- pasting
- audio start
- screen resize
- printing

addEventListener

Specify the event type and a callback to run

```
const button = document.querySelector('h1');

button.addEventListener('click', () => {
  alert("You clicked me!!")
})
```