DOM Manipulation

The DOM

Document Object Model

Interactive representation of HTML document

Explore in Elements panel of Dev Tools

Adding, removing, updating elements is key to building interactive websites

CODERSINHOODS

Finding Elements

getElement*

    Older, less flexible

querySelector

    Newer (slightly), loads of flexibility

Where do these functions come from?

The DOM: document is a global object provided by the browser

document.getElement*

document.querySelector

document.createElement

CODERSINHOODS

getElement*

getElementById

Single element

getElementsByTagName

Multiple elements

getElementsByClassName

Multiple elements

getElement

const userForm = document.getElementById("user-form")

userForm === one element

const buttons = document.getElementsByTagName("button")

buttons === HTMLCollection of all the buttons

const bigThings = document.getElementsByClassName("big")

bigThings === HTMLCollection of all the elements with the class "big"

getElement

To the code editor + browser

querySelector

querySelector

    Takes CSS query, returns first matching element

querySelectorAll

    Takes CSS query, returns ALL matching elements

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querySelector

```
const button = document.querySelector("button");

const cancelButton = document.querySelector("button.cancel");

const cancelButtonInForm = document.querySelector("form > button.cancel");



const allButtons = document.querySelectorAll("button");

const allElements = document.querySelectorAll("*");
```

querySelector

To the code editor + browser

Finding elements

Any questions on finding elements?

Creating elements

document.createElement

Takes a tag name

Returns a new element of that tag

Creating elements

3 steps:

1. Create the element
2. Update how and what it should display
3. Add it to the page

Creating elements

3 steps:

1. Create the element

   ```
   const div = document.createElement("div")
   ```
2. Update how and what it should display

   ```
   div.innerText = "Hello, I'm a div!"
   div.className = "big"
   ```
3. Add it to the page

   ```
   document.body.append(div)
   ```

Creating elements

To the code editor and browser

Creating elements

Any questions on creating elements?

Removing elements

element.remove()

Find the element, then call the function remove()

Removing elements

```
const itemToDelete = document.querySelector("li:last-child")
```

```
itemToDelete.remove()
```

Removing elements

To the code editor + browser

The DOM

Any questions on the DOM?

Or anything else?

Exercises

Project