EVENT LISTENERS

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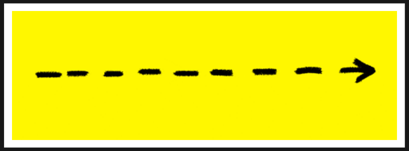
(part of the DOM)

So far our interactions with the DOM have been one way



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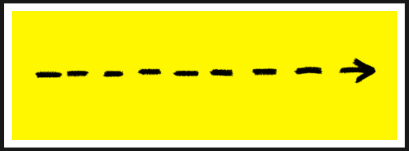

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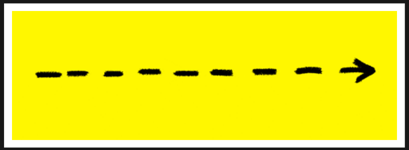

We've been telling the DOM what to do

But until now we didn't know how to listen to the DOM

Introducing *Event Listeners!*

...or "how to listen to the browser"

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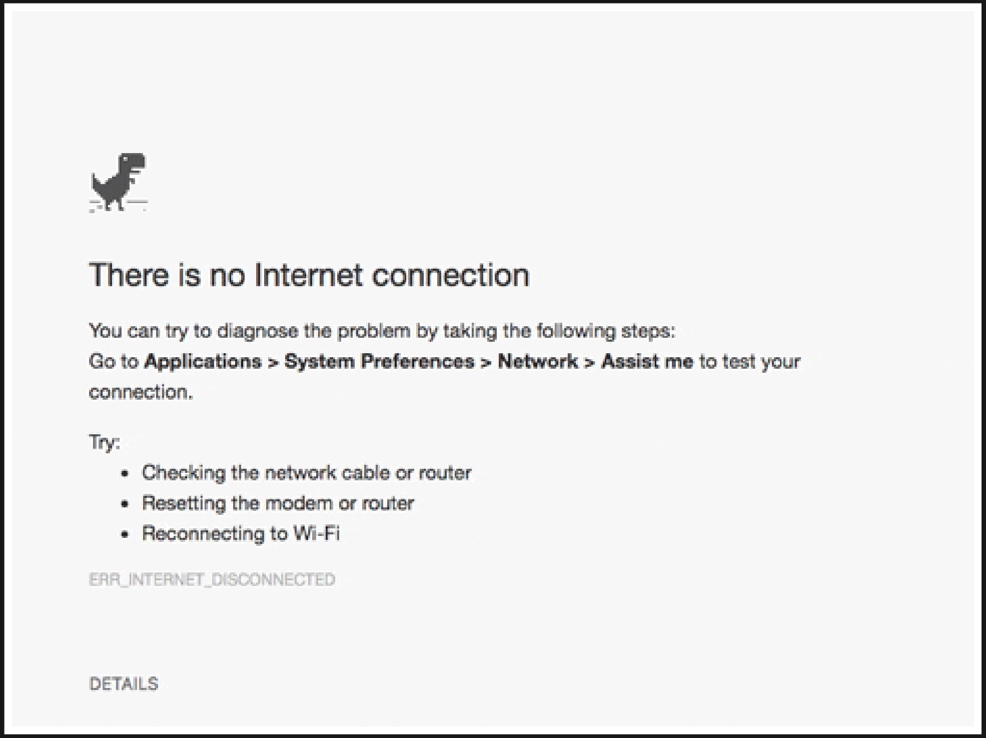
A few examples of where we would do this:

- Listen to the **mouse**
- Listen to the **keyboard**
- Listen for **media playback** (video or audio, for example is it being played or paused)
- Listen for **internet connectivity**

Have you all seen this before?



There is no Internet connection

You can try to diagnose the problem by taking the following steps:
Go to **Applications > System Preferences > Network > Assist me** to test your connection.

Try:

- Checking the network cable or router
- Resetting the modem or router
- Reconnecting to Wi-Fi

ERR_INTERNET_DISCONNECTED

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- dblclick
- mouseover
- contextmenu

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- contextmenu

- **Focus events**
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- **Window events**
- resize

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```
document.addEventListener('click', handleClick);
```

```javascript
document.addEventListener('click', () => {
    // callback code
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1. We attach a "listener" to the document object
2. We listen specifically to the mouse "click" event
3. We run the callback when the "click" event fires

When the event fires, it also returns to us an object, which we can use:

```
document.addEventListener('click',
(event) => { console.log(event); });
```

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We run this method on the `event` object

```
document.addEventListener('dblclick',
(event) => { event.preventDefault();
console.log(event); });
```

Adding event listeners is great, but if we add too many we soak up too much memory / resources from the browser. It's a good idea to remove unused listeners with `removeEventListener()`

Further reading:

MDN Event Reference

Custom events (also known as synthetic events)