

DOM Events

Making things interactive

Events are everywhere

- Clicking on a button
- Hovering over a link
- Dragging and Dropping
- Pressing the Enter key

The Process

We **select** an element and then
add an **event listener**

"Listen for a click on this <button>"

"Listen for a hover event on the <h1>"

"Listen for a keypress event on text input"

The Syntax

To add a listener, we use a method called
addEventListener

```
element.addEventListener(type, functionToCall);
```

```
var button = document.querySelector("button");
button.addEventListener("click", function() {
  console.log("SOMEONE CLICKED THE BUTTON!");
});
```

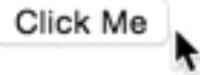
An Example

Let's display a message when a button is clicked

```
<button>Click Me</button>
<p>No One Has Clicked Me Yet</p>
```

```
var button = document.querySelector("button");
var paragraph = document.querySelector("p");

//SETUP CLICK LISTENER
button.addEventListener("click", function() {
    paragraph.textContent = "Someone Clicked the Button!";
});
```



No One Has Clicked Me Yet

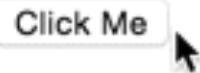
An Example

We could also rewrite it using a named function

```
var button = document.querySelector("button");
var paragraph = document.querySelector("p");

button.addEventListener("click", changeText);

function changeText() {
    paragraph.textContent = "Someone Clicked the Button!";
}
```



No One Has Clicked Me Yet

So Many Events!

MDN lists over 300 different events! Here are some of the more common ones:

- click
- mouseover
- dblclick
- keypress
- drag

Another Example

Let's try a quick example using mouseOver

```
<p>I dare you to mouse over me</p>
```

```
var paragraph = document.querySelector("p");

//SETUP MOUSE OVER LISTENER
paragraph.addEventListener("mouseover", function() {
  paragraph.textContent = "Stop hovering over me!";
});
```

I dare you to mouse over me

Adding mouseout

Let's use *mouseout* so that our message changes back when the user is done hovering

```
var paragraph = document.querySelector("p");

//SETUP MOUSE OVER LISTENER
paragraph.addEventListener("mouseover", function() {
    paragraph.textContent = "Stop hovering over me!";
});

//SETUP MOUSE OUT LISTENER
paragraph.addEventListener("mouseout", function() {
    paragraph.textContent = "Phew, thank you for leaving me alone";
});
```

I dare you to mouse over me



A Minor Change

We can DRY up our code with one small change:

```
var paragraph = document.querySelector("p");

//SETUP MOUSE OVER LISTENER
paragraph.addEventListener("mouseover", function() {
  this.textContent = "Stop hovering over me!";
});

//SETUP MOUSE OUT LISTENER
paragraph.addEventListener("mouseout", function() {
  this.textContent = "Phew, thank you for leaving me alone";
});
```

I dare you to mouse over me

