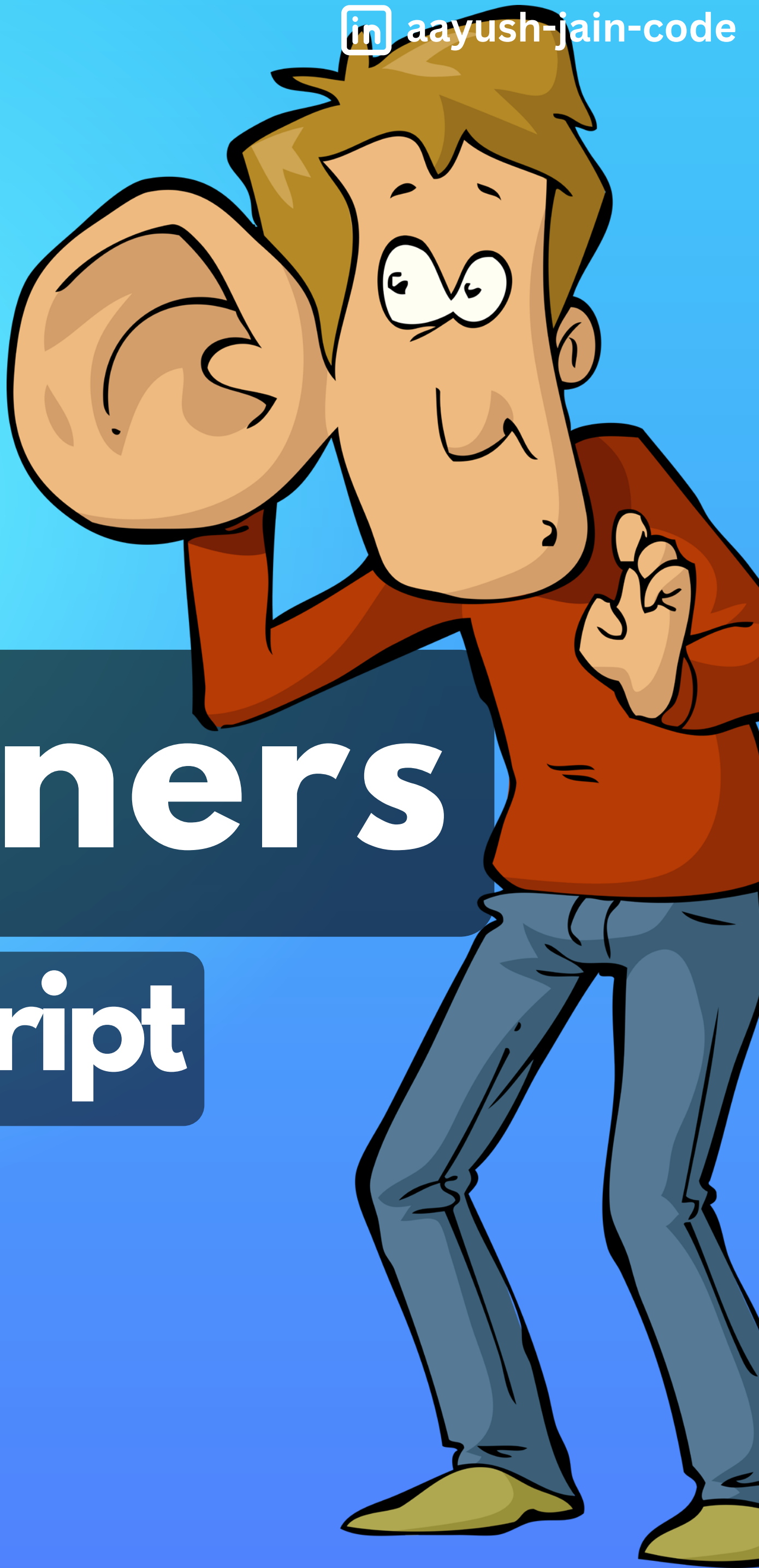


**Event**

**Listeners**

**in Javascript**



# What Is an Event Listener?

**An event listener is a function that initiates a predefined process if a specific event occurs. So, an event listener “listens” for an action, then calls a function that performs a related task.**

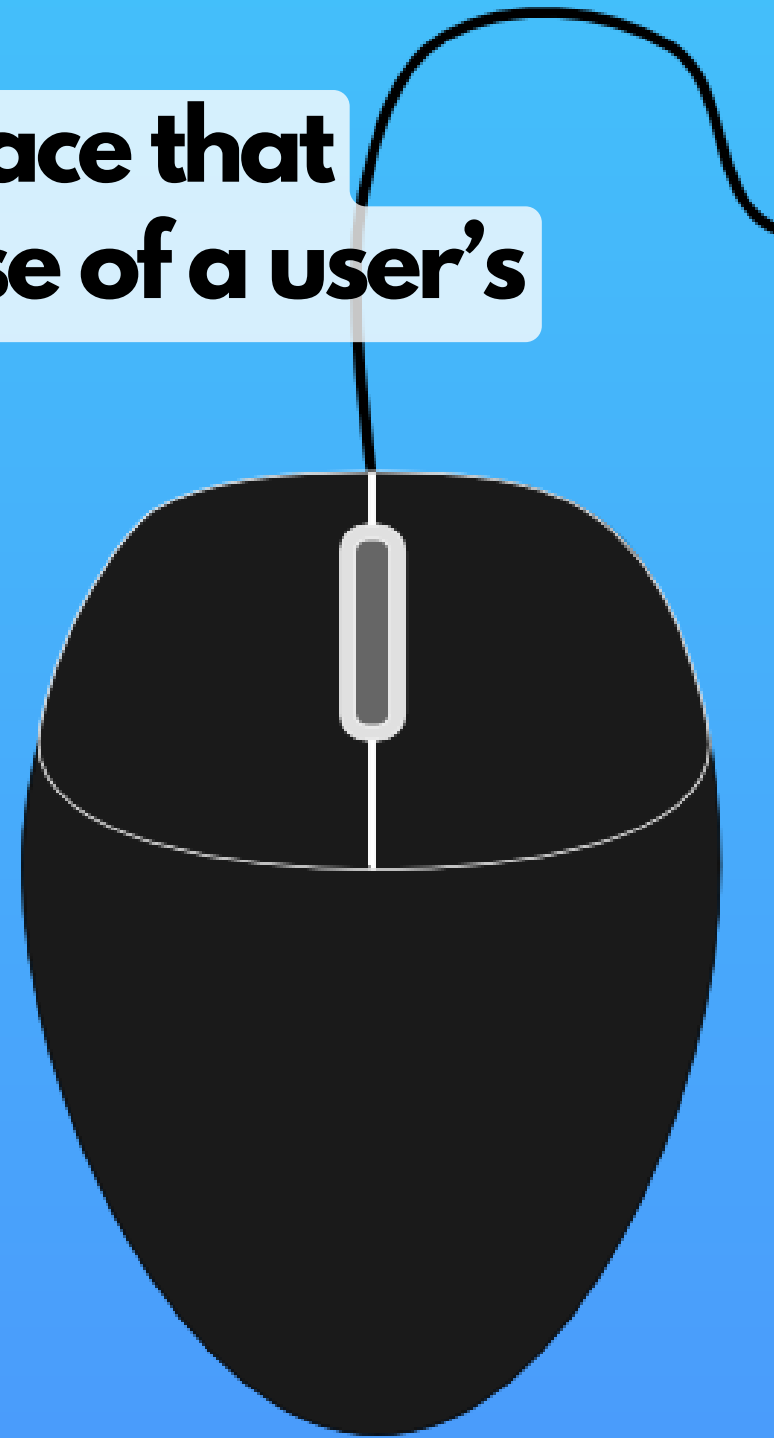


**The `addEventListener()` method of the `EventTarget` interface sets up a function that will be called whenever the specified event is delivered to the target.**

# Mouse Events

JavaScript has a **MouseEvent** interface that represents events that occur because of a user's interaction with their mouse. Ex:

- **click & dblclick**
- **mousemove**
- **mouseover & mouseout**
- **mouseup & mousedown**



## Example: Click



```
<script>
  const btn=document.getElementById("btn");

  btn.addEventListener("click", function()
  { //some action
    });
</script>
```

# Example:Resize



```
<script>
window.addEventListener("resize", function(){
document.write("Window has been resized " +
Math.random());
});
</script>
```

# Example:Hover



```
<script>
var btnHover = document.getElementById("btn");

function setHoverColor() {
    btnHover.style.background = "orange";
}

function setNormalColor() {
    btnHover.style.background = "";
}

btnHover.addEventListener("mouseover",
setHoverColor);
btnHover.addEventListener("mouseout",
setNormalColor);
</script>
```

# Keyboard Events

JavaScript has a **KeyboardEvent** interface. This listens for interactions between a user and their keyboard.



**The keyup and keydown events:**  
The keydown event occurs when a user presses down on a key, and the keyup event occurs when a user releases it.

```
<script>
let greetings = document.querySelector('p');
document.querySelector('input').addEventListener("keyup", captureInput)

function captureInput(e){
  greetings.innerText = (`Hello ${e.target.value}, welcome to my website.`)
}
</script>
```