# Event Handling in



#### addEventListener:

The preferred method for attaching event handlers. It allows multiple event listeners and avoids overwriting existing ones.

```
button.addEventListener('click', () => {
   console.log('Button clicked!');
});
```

## onclick:

Assigns a function directly to the onclick property of an element. Be cautious, as it can overwrite existing click handlers.

```
button.onclick = () => {
    console.log('Button clicked!');
};
```

# onmouseover / onmouseout

Handles mouseover and mouseout events, respectively

```
element.onmouseover = () => {
    element.style.background = 'orange';
};

element.onmouseout = () => {
    element.style.background = 'black';
};
```

# onkeydown / onkeyup:

Manages keydown and keyup events, respectively.

```
// Detect Enter key press
input.onkeydown = (event) => {
    if (event.key === 'Enter') {
        console.log('Enter key pressed!');
};
// Detect key release
input.onkeyup = (event) => {
    if (event.key === 'Enter') {
        console.log('Enter key released!');
```

#### onsubmit:

Deals with the submit event of a form element.

```
form.onsubmit = (event) => {
    event.preventDefault(); // Prevent form submission
    console.log('Form submitted!');
};
```

## onchange:

Responds to changes in the value of an input element.

```
input.onchange = () => {
   console.log('Input value changed!');
};
```

### onload:

Handles the load event of a window or an image element.

```
// Execute code when window finishes loading
window.onload = () => {
   console.log('Window loaded!');
};
```