# Class No: 07







# **JavaScript Events & ES6 Features**

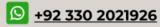
#### **JavaScript Events**

JavaScript events allow interaction with users when they perform actions such as clicking, hovering, or pressing keys. Events make web pages dynamic and interactive.

#### **Common JavaScript Events:**

- onclick Triggers when an element is clicked.
- onmouseover Triggers when the mouse hovers over an element.
- onkeydown Triggers when a key is pressed.





# **Handling Events in JavaScript**

#### 1. Using HTML Attribute (Not Recommended):

<button onclick="alert('Button Clicked!')">Click Me</button>

This method is not recommended because it makes the HTML code less readable and harder to manage.

## 2. Using JavaScript Event Listener (Recommended):

<button id="myButton">Click Me</button><script>

Js:

```
let btn = document.getElementById("myButton");
btn.addEventListener("click", function() {
  alert("Button Clicked!"); });</script>
```

This method is preferred as it keeps the JavaScript code separate from HTML, making it easier to manage and maintain.

in linkedin.com/in/m-munim1

github.com/M-Munim

<u> +92 330 2021926</u>

# **ES6 Features (Modern JavaScript)**

# 1. Let & Const (Block-scoped variables):

- let allows reassignment.
- const does not allow reassignment.

```
let x = 10;
x = 15; // Allowed
```

```
const y = 20;
y = 25; // Error! Cannot reassign a constant variable.
```



#### 2. Template Literals (String Interpolation):

Allows embedding variables directly into strings using backticks (`).

```
let name = "John";
console.log(`Hello, ${name}!`); // Output: Hello, John!
```

# 3. Spread & Rest Operators:

- Spread (...): Expands arrays or objects.
- Rest (...): Collects multiple values into an array.

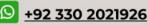
```
let arr = [1, 2, 3];
let newArr = [...arr, 4, 5];
console.log(newArr); // Output: [1, 2, 3, 4, 5]
```

# Web Development

```
Rest Operator Example:
```

```
function showNames(...names) {
  console.log(names);
}
showNames("Alice", "Bob", "Charlie");
```

// Output: ["Alice", "Bob", "Charlie"]



## Web Development

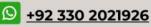
## 4. Destructuring Assignment:

Extract values from arrays or objects easily.

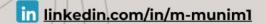
let person = { name: "Alice", age: 25 };

let { name, age } = person;

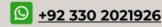
console.log(name, age); // Output: Alice 25



```
<button id="myButton">Click Me</button>
 <script>
   let btn = document.getElementById("myButton");
   let message = document.getElementById("message");
   btn.addEventListener("click", function() {
     message.textContent = "Button was clicked!";
   });
 </script>
</body>
```







#### Web Development

# 2: Display List of Names

```
<body>
 <button id="showNames">Show Names
 <script>
   function displayNames(...names) {
     let list = document.getElementById("nameList");
     list.innerHTML = "";
     names.forEach(name => {
       let li = document.createElement("li");
       li.textContent = name;
       list.appendChild(li);
     });
   document.getElementById("showNames").addEventListener("click", function() {
     displayNames("Alice", "Bob", "Charlie");
  </script>
</body>
```

