JavaScript Event Driven Function

Topics Covered:

- JavaScript Events
- Mouse Events
- Keyboard Events
- Document Events
- Form Events
- Example

Topics in Detail:

JavaScript Events

- When the **user manipulates a page**, there will be a **change in the state of the object** known as **Event**.
- JavaScript **interacts** with the HTML. This interaction is **handled by Events**.
- The process of **handling the interaction** of **JavaScript** with the **HTML** is called **Event Handling**.
- The Events are **handled** via **Event Handlers**.
- **Event handler** is a **block of code** which will be **executed** when an **event** occurs.
- Event handlers are also known as **Event Listeners**.
- These events help JavaScript in providing a **dynamic interface** to a **webpage**.

Syntax

```
<element event='some JavaScript'>
```

Example

```
<button onclick="document.getElementById('demo').innerHTML=Date()">The time is?</button>
```

Mouse Events

Event	Event Handler	Description

click	onclick	When mouse click on an element
		HTML
		`<element onclick="myScript">`
		JavaScript
		`object.onclick = function(){myScript};`

mouseover	onmouseover	When the cursor of the mouse comes over the element
		HTML
		`<element onmouseover="myScript">`
		JavaScript
		`object.onmouseover = function(){myScript};`

mouseout	onmouseout	When the cursor of the mouse leaves an element
		HTML
		`<element onmouseout="myScript">`
		JavaScript
		`object.onmouseout = function(){myScript};`

mousedown	onmousedown	When the mouse button is pressed over the element
		HTML
		`<element onmousedown="myScript">`
		JavaScript
		`object.onmousedown = function(){myScript};`

mouseup	onmouseup	When the mouse button is released over the element
		HTML
		`<element onmouseup="myScript">`
		JavaScript
		`object.onmouseup = function(){myScript};`

mousemove	onmousemove	When the mouse movement takes place
		HTML
		`<element onmousemove="myScript">`
		JavaScript
		`object.onmousemove = function(){myScript};`

Keyboard Events

Event	Event Handler	Description

Keyup	onkeyup	When the user press up key and then releases it
		HTML
		`<element onkeyup="myScript">`
		JavaScript
		`object.onkeyup = function(){myScript};`

Keydown	onkeydown	When the user press down key and then releases it
		HTML
		`<element onkeydown="myScript">`
		JavaScript
		`object.onkeydown = function(){myScript};`

Window/ Document Events

Event	Event Handler	Description

load	onload	When the browser finishes the loading of the page
		HTML
		`<element onload="myScript">`
		JavaScript
		`object.onload = function(){myScript};`

unload	onunload	When the visitor leaves the current page, the browser unloads it
		HTML
		`<element onunload="myScript">`
		JavaScript
		`object.onunload = function(){myScript};`

resize	onresize	When the visitor resizes the window of the browser
		HTML
		`<element onresize="myScript">`
		JavaScript
		`object.onresize = function(){myScript};`

Form Events

Event	Event Handler	Description

focus	onfocus	When the user focuses on an element
		HTML
		`<element onfocus="myScript">`
		JavaScript
		`object.onfocus = function(){myScript};`

submit	onsubmit	When the user submits the form
		HTML
		`<element onsubmit="myScript">`
		JavaScript
		`object.onsubmit = function(){myScript};`

blur	onblur	When the focus is away from a form element
		HTML
		`<element onblur="myScript">`
		JavaScript
		`object.onblur = function(){myScript};`

change	onchange	When the user modifies or changes the value of a form element
		HTML
		`<element onchange="myScript">`
		JavaScript
		`object.onchange = function(){myScript};`

Example

- **Onload Event**
    - The onload event occurs when an object has been loaded.
    - The onload event can be used in HTML and in JavaScript.
    - **HTML:**

    ```
    <element onload="myScript">
    ```

    - **JavaScript:**

    ```
    object.onload = function(){myScript};
    ```

- ○ **Example:**

```
window.onload = function () {
  //script to be executed
}
```

- ● **Onclick event:**
  - ○ The on-click event occurs when the user clicks on an element.
  - ○ The onclick event can be used in HTML and JavaScript.
  - ○ **HTML:**

```
<element onclick="myScript">
```

  - ○ **JavaScript:**

```
object.onclick = function(){myScript};
```

  - ○ **Example:**

```
buttonStart.onclick = function(){
// script to be executed
}
```