

Objectives

- ◆ In this session, you will learn to:
 - ◆ JavaScript HTML DOM Events



- ◆ A JavaScript can be executed when an event occurs, like when a user clicks on an HTML element.
- ◆ To execute code when a user clicks on an element, add JavaScript code to an HTML event attribute:
 - ◆ Example: `onclick=JavaScript`

Examples of HTML events:

- When a user clicks the mouse
- When a web page has loaded
- When an image has been loaded
- When the mouse moves over an element
- When an input field is changed
- When an HTML form is submitted
- When a user strokes a key

```
<!DOCTYPE html>
<html>
<body>

<h1 onclick="this.innerHTML = 'Ooops!'">Click on this text!</h1>

</body>
</html>
```



- ◆ We can associate an event with an event handler

```
<!DOCTYPE html>
<html>
<body>

<h1 onclick="changeText(this)">Click on this text!</h1>

<script>
function changeText(id) {
    id.innerHTML = "Ooops!";
}
</script>

</body>
</html>
```

Assign Events Using the HTML DOM

- ◆ The HTML DOM allows you to assign events to HTML elements using JavaScript:

```
<!DOCTYPE html>
<html>
<body>

<p>Click "Try it" to execute the displayDate() function.</p>

<button id="myBtn">Try it</button>

<p id="demo"></p>

<script>
document.getElementById("myBtn").onclick = displayDate;

function displayDate() {
    document.getElementById("demo").innerHTML = Date();
}
</script>

</body>
</html>
```

Output:

Click "Try it" to execute the displayDate() function.

Try it

Thu Jan 04 2018 17:00:09 GMT+0700 (SE Asia Standard Time)

- ◆ The onload and onunload events are triggered when the user enters or leaves the page.
- ◆ The onchange event is often used in combination with validation of input fields.
- ◆ The onmouseover and onmouseout events can be used to trigger a function when the user mouses over, or out of, an HTML element.
- ◆ The onfocus event: is triggered when user put focus into a control.
- ◆ The onblur event: is triggered when user leave from a control.
- ◆ The onresize event: is triggered when user resize a web page.
- ◆ The onsubmit event: is triggered when user submit form.
- ◆ The onmousedown, onmouseup, and onclick events are all parts of a mouse-click.
 - ◆ First when a mouse-button is clicked, the onmousedown event is triggered,
 - ◆ then, when the mouse-button is released, the onmouseup event is triggered,
 - ◆ finally, when the mouse-click is completed, the onclick event is triggered.

◇ Example of onload event:

```
<!DOCTYPE html>
<html>
<head>

<script>
function mymessage() {
    alert("This message was triggered from the onload event");
}
</script>
</head>

<body onload="mymessage()">
</body>

</html>
```

◇ Example of mouse events:

```
<!DOCTYPE html>
<html>
<head>
<script>
function lighton() {
    document.getElementById('myimage').src = "bulbon.gif";
}
function lightoff() {
    document.getElementById('myimage').src = "bulboff.gif";
}
</script>
</head>

<body>



<p>Click mouse and hold down!</p>

</body>
</html>
```



Click mouse and hold down!

◇ Example of onfocus events:

```
<!DOCTYPE html>
<html>
<head>
<script>
function myFunction(x) {
  x.style.background = "yellow";
}
</script>
</head>
<body>
```

Enter your name:

<p>When the input field gets focus, a function is triggered which changes the background-color.</p>

```
</body>
</html>
```

Enter your name:

When the input field gets focus, a function is triggered which changes the background-color.

◇ Example of onmouseover/onmouseout events:

```
<!DOCTYPE html>
<html>
<body>

<h1 onmouseover="style.color='red'"
onmouseout="style.color='black'">
Mouse over this text</h1>

</body>
</html>
```

Mouse over this text



Summary

- ◆ In this session, you learned that:
 - ◆ List of event in JavaScript
 - ◆ The meaning of each event

