

# Where is JavaScript?

Events

# Where is JavaScript?

JavaScript statements can be coded on a Web page using three different techniques

1. Link JavaScript code from an EXTERNAL file

```
<script src="js/scripts.js"></script>
```

2. INTERNAL : Place JavaScript code between script tags

```
<script>  
    alert("Hello World!");  
</script>
```

3. Place JavaScript code as part of an EVENT attached to an HTML element (i.e. click)

```
<div onclick="alert('Hello World!');">  
    Click Me!  
</div>
```

# Order matters

- Where JavaScript is placed in an HTML document matters!

```
<body>
```

```
  <p>This appears first</p>
```

```
  <script>alert("This appears second");</script>
```

```
  <p>This appears third</p>
```

```
  <script>alert("This appears forth");</script>
```

```
</body>
```

```
</html>
```

# Events

When things happen

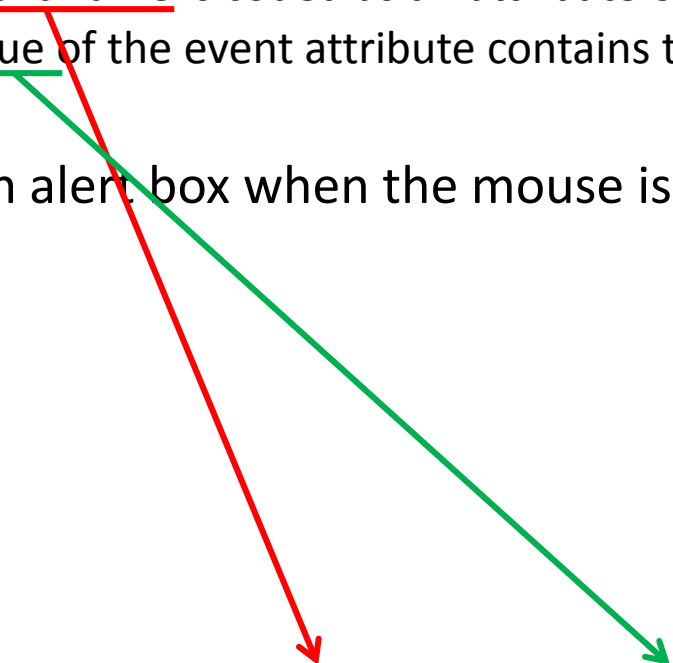
# JavaScript and Events

- Events:
  - actions taken by the Web page visitor
  - a special type of method to which an element can respond
    - clicking (onclick)
    - placing the mouse on an element (onmouseover)
    - removing the mouse from an element (onmouseout)
    - loading the page (onload)
    - unloading the page (onunload)
    - clicking into a form element (onfocus)
    - leaving a form element (onblur)
    - many more ([http://www.w3schools.com/jsref/dom\\_obj\\_event.asp](http://www.w3schools.com/jsref/dom_obj_event.asp))

Remember: JavaScript is case sensitive

# JavaScript and Events

- JavaScript can be configured to perform actions when events occur.
  - The event name is coded as an attribute of an HTML tag
  - The value of the event attribute contains the JavaScript code
- Example:  
Display an alert box when the mouse is placed over a hyperlink.



```
<a href="index.html" onmouseover="alert('Click to go home')">Home</a>
```

# JavaScript Popup Boxes

- JavaScript has three (3) kinds of popup boxes: **alert**, **confirm**, **prompt**
- An **alert** is used to **give information**. User must click "OK" to proceed.
- A **confirm** is used to **verify something**.  
User will have to click either "OK" or "Cancel" to proceed  
("OK" returns true, "Cancel" returns false)
- A **prompt** is used to **gather information** from the user.  
User will have to click either "OK" or "Cancel" to proceed  
("OK" returns the input value, "Cancel" returns null)

# alert()

```
alert("message");
```

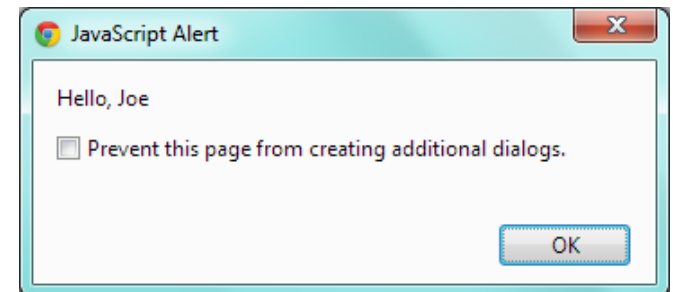
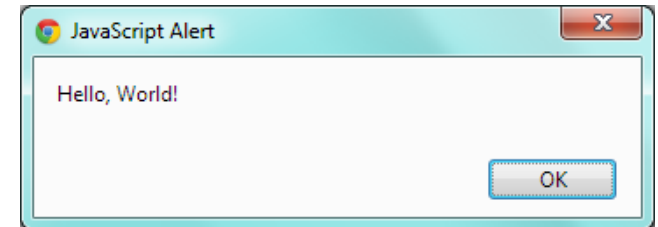
Examples:

```
alert("Hello, World");
```

```
var firstName;
```

```
firstName = prompt("Enter your First Name");
```

```
alert("Hello, " + firstName);
```





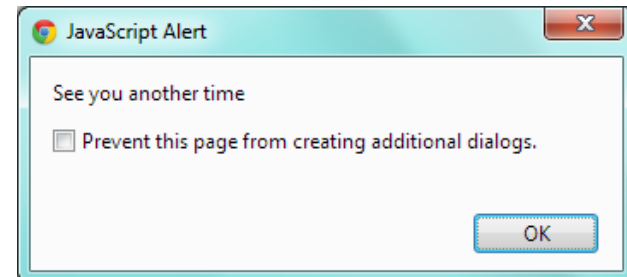
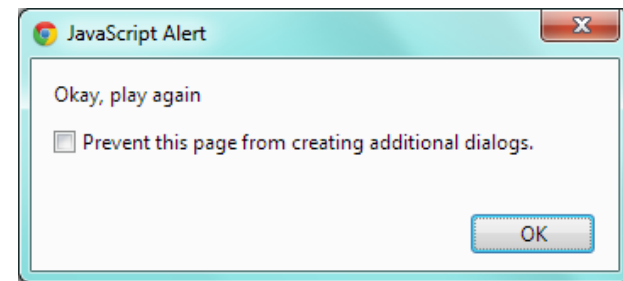
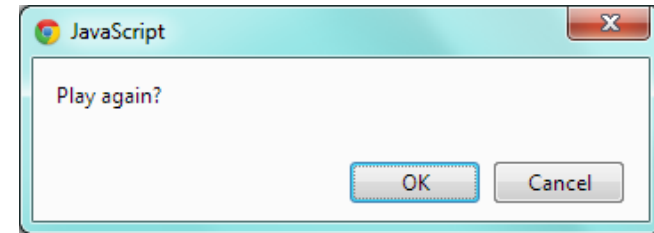
# confirm()

```
var = confirm("message");
```

```
var again = confirm("Play again?");
```

```
while (again == true) {  
    again = confirm("Okay, play again");  
}
```

```
alert("See you another time");
```



# prompt()

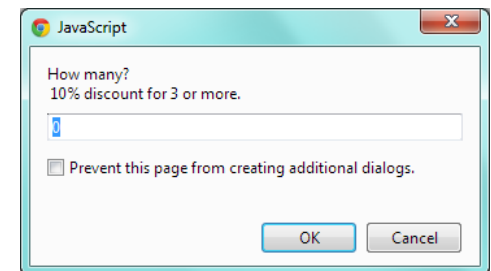
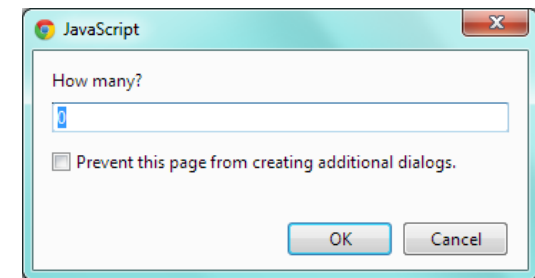
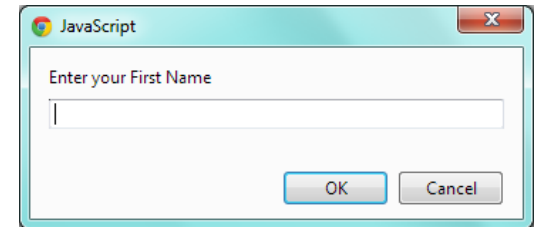
```
var = prompt("prompt message", "default value");
```

- The value typed by the user is stored in the variable (var)

Examples:

```
var firstName = prompt("Enter your First Name");
```

```
var quantity = prompt("How many things do you want?", "0");
```



```
alert("Hello " + firstName + ".\nYou will get " + quantity + " things.")
```

Note: To display line breaks in a popup box, use `\n`