

# HTML Events

From W3Schools

# examples of HTML events:

- An HTML web page has finished loading
- An HTML input field was changed
- An HTML button was clicked
- ...

## Examples:

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

```
<button onclick="this.innerHTML = Date()">The time is?</button>
```

```
<button onclick="displayDate()">The time is?</button>
```

# Common HTML Events

- **onchange**
- **onclick**
- **onmouseover**
- **onmouseout**
- **onkeydown**
- **onload**

# What can JavaScript Do?

- Things that should be done every time a page loads
- Things that should be done when the page is closed
- Action that should be performed when a user clicks a button
- Content that should be verified when a user inputs data

# What can JavaScript Do?

- HTML event attributes can execute JavaScript code directly
- HTML event attributes can call JavaScript functions
- You can assign your own event handler functions to HTML elements
- You can prevent events from being sent or being handled

# The addEventListener() method

HTML    <button id="myBtn">Display the date</button>

*element.addEventListener(event, function);*

document.getElementById("myBtn").addEventListener("click", displayDate);

The first parameter is the type of the event (like "click" or "mousedown").

The second parameter is the function we want to call when the event occurs.

function displayDate () {....

Alert "Hello World!" when the user clicks on an element:

```
My Button.addEventListener("click", function(){ alert("Hello World!"); });
```

```
myButton.addEventListener("click", myFunction);
```

```
function myFunction() {  
    alert ("Hello World!");  
}
```

## Multiple events

```
myButton.addEventListener("mouseover", myFunction);  
myButton.addEventListener("click", mySecondFunction);  
myButton.addEventListener("mouseout", myThirdFunction);
```

### *Passing parameters*

```
myButton.addEventListener("click", function(){ myFunction(p1, p2); });
```



# jQuery Examples

```
$("#baseList").on('change', changeBaseRate);
```

```
$("#amount").on("blur", baseToSelected);
```

```
$("#selected").on("blur", selectedToBase);
```

```
function baseToSelected() {  
....}
```

```
function selectedToBase() {  
...}
```

```

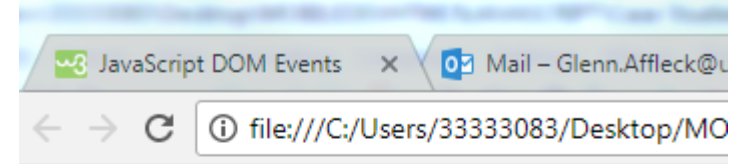
<html>
  <head>
    <script src="http://code.jquery.com/jquery-1.4.3.min.js"></script>
    <script src="ButtonBind.js"></script>
  </head>
<body>
  <h1>Binding a button</h1>

  <p>click the button to run the script function</p>

  <button id="bind">Jquery bind</button>
  <br/>

</body>
</html>

```



## Binding a button

click the button to run the script function

Jquery bind

```

$(document).ready( function(){

  $("#bind").bind('click', function(){
    alert("hello from your button click");

  });
});

```

```

$(document).ready( function(){

  $("#bind").on('click', function(){
    alert("hello from your button click");

  });
});

```

Preferred newer approach

# The ToDo List

Case study 1

---

# To Do List

Enter your 'To Do' details and press OK to add, Cancel to clear.

Subject:

Description

OK

Cancel

---

What we want to happen:

# To Do List

Enter your 'To Do' details and press OK to add, Cancel to clear.

Subject:

Description

OK

Cancel

subject	Description
Assessment	I hope you all pass!

```
<body>
  <header>
    <h1>To Do List</h1>
    <p>Enter your 'To Do' details and press OK to add, Cancel to clear.</p>
  </header>
  <table>
    <tr>
      <td>Subject:</td><td><input type="text" size="40" id="subject" /></td>
    </tr>
    <tr>
      <td>Description</td><td><textarea rows="5" cols="100" maxlength="200" id="description"></textarea></td>
    </tr>
  </table>
  <button id="ok">OK</button><button id="cancel">Cancel</button>
  <hr/>
  <div id="table">
  </div>
</body>
```

## Javascript data overview:

```
var subjectField, descriptionField;
```

```
var todos = [];
```

```
window.onload = function()
```

```
var add = function()
```

```
var addTodo = function(subjField, descField )
```

```
Todo.prototype.tableRow = function()
```

```
var updateList = function()
```

```
var Todo = function(subject, description)
```

```
var clearUI = function()
```

```
var cancel = function()
```

```
window.onload = function(){  
  
    subjectField = document.getElementById("subject");  
    descriptionField = document.getElementById("description");  
  
    okButton = document.getElementById("ok");  
    okButton.onclick = add;  
    cancelButton = document.getElementById("cancel");  
    cancelButton.onclick = cancel;  
  
    clearUI();    };
```



---

## To Do List

Enter your 'To Do' details and press OK to add, Cancel to clear.

Subject:

Description

---

If we press OK ...

```
okButton.onclick = add;
```

```
window.onload = function(){
```

```
  subjectField = document.getElementById("subject");
```

```
  descriptionField = document.getElementById("description");
```

```
  okButton = document.getElementById("ok");
```

```
  okButton.onclick = add;
```

```
  cancelButton = document.getElementById("cancel");
```

```
  cancelButton.onclick = cancel;
```

```
  clearUI();    };
```

```
var add = function(){  
  
  addTodo(subjectField, descriptionField);  
  clearUI();  
  updateList();  
  
};
```

```
var addTodo = function(subjField, descField ){  
  
    a = new Todo(subjField.value, descField.value );  
    todos.push(a);  
  
};
```

```
var Todo = function(subject, description)
```

```
var add = function(){  
  
  addTodo(subjectField, descriptionField);  
  clearUI();  
  updateList();  
  
  };
```

```
var clearUI = function(){  
  
var white = "#fff";  
subjectField.value = "";  
subjectField.style.backgroundColor = white;  
descriptionField.value = "";  
descriptionField.style.backgroundColor = white;  
  
};
```

```
var add = function(){  
  
  addTodo(subjectField, descriptionField);  
  clearUI();  
  updateList();  
  
  };
```

```
var updateList = function(){  
  var tableDiv = document.getElementById("table"),  
  table =  
  "<tableborder='1'><thead><th>subject</th><th>Description</th></thead>";  
  
  for(var i=0, j=todos.length; i<j; i++){  
    var appt = todos[i];  
    table += appt.tableRow(); }  
  
  table+="  
  </table>";  
  tableDiv.innerHTML = table;};
```



```
Todo.prototype.tableRow = function(){  
  
    var tr = "<tr><td>" + this.subject + "</td><td>"  
              + this.description +      "</td></tr>";  
    return tr;  
  
};
```

## To Do List

Enter your 'To Do' details and press OK to add, Cancel to clear.

Subject:

Description

OK

Cancel

---

subject	Description
Assessment	I hope you all pass!