



Technical University of Sofia
Faculty of Computer Systems and Control

Web Programming

Lecture 5

JavaScript – part 2

JAVASCRIPT AND FORMS

Page Title

```
<!DOCTYPE html>
<html>
  <head>
    <title>W3Schools Demo</title>
  </head>
  <body>
    <p id="demo"></p>
    <script>
      document.getElementById("demo").innerHTML =
        "The title of this document is: " + document.title;
    </script>
  </body>
</html>
```

Disable a button

```
<input type="button" id="btn01" value="OK">
```

```
<p>Click the "Disable" button to disable the "OK" button:</p>
```

```
<button onclick="disableElement()">Disable</button>
```

```
<script>
```

```
function disableElement() {
```

```
    document.getElementById("btn01").disabled = true;
```

```
}
```

```
</script>
```

Disable/Enable a select

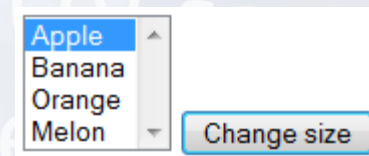
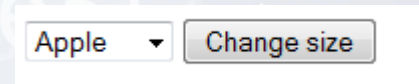
```
<script>
function disable() {
    document.getElementById("mySelect").disabled=true;
}
function enable() {
    document.getElementById("mySelect").disabled=false;
}
</script>
```

```
<select id="mySelect">
  <option>Apple</option>
  <option>Pear</option>
</select>
<br><br>
<input type="button" onclick="disable()" value="Disable list">
<input type="button" onclick="enable()" value="Enable list">
```

Select – multiline list

```
<script>  
function changeSize() {  
    document.getElementById("mySelect").size = 4;  
}  
</script>
```

```
<form>  
<select id="mySelect">  
    <option>Apple</option>  
    <option>Banana</option>  
    <option>Orange</option>  
    <option>Melon</option>  
</select>  
<input type="button" onclick="changeSize()" value="Change size">  
</form>
```

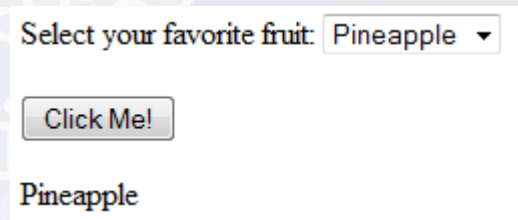


Selected option

```
<script>
function getOption() {
    var obj = document.getElementById("mySelect");
    document.getElementById("demo").innerHTML=obj.options[obj.selectedIndex].text;
}
</script>
```

Select your favorite fruit:

```
<select id="mySelect">
  <option>Apple</option>
  <option>Orange</option>
  <option>Pineapple</option>
  <option>Banana</option>
</select> <br><br>
<input type="button" onclick="getOption()" value="Click Me!">
<p id="demo"></p>
```

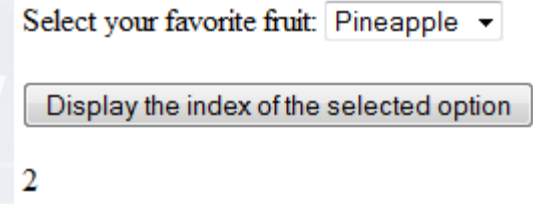


Selected option (index)

```
<script>
function getIndex() {
    document.getElementById("demo").innerHTML =
        document.getElementById("mySelect").selectedIndex;
}
</script>
```

Select your favorite fruit:

```
<select id="mySelect">
    <option>Apple</option>
    <option>Orange</option>
    <option>Pineapple</option>
    <option>Banana</option>
</select> <br><br>
<input type="button" onclick="getIndex()" value="Display the index " />
<p id="demo"></p>
```



Remove options

```
<script>
function removeOption() {
    var x = document.getElementById("mySelect");
    x.remove(x.selectedIndex);
}
</script>
```

```
<form>
```

```
<select id="mySelect">
```

```
    <option>Apple</option>
```

```
    <option>Pear</option>
```

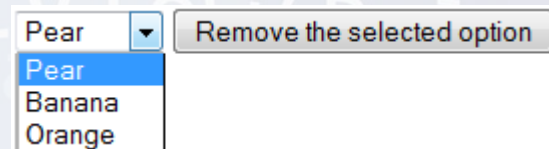
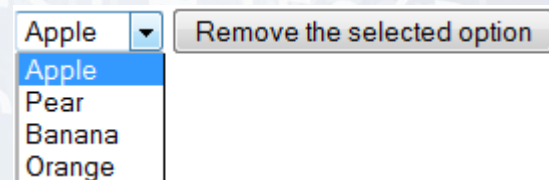
```
    <option>Banana</option>
```

```
    <option>Orange</option>
```

```
</select>
```

```
<input type="button" onclick="removeOption()" value="Remove the selected  
option">
```

```
</form>
```



name

```
<button id="btn1" name="subject" type="submit" value="HTML">HTML</button>
```

```
<p>Click the "Try it" button to display the name of the "HTML" button:</p>
```

```
<button onclick="myFunction()">Try it</button>
```

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

```
<script>
```

```
function myFunction() {
```

```
    var x = document.getElementById("btn1").name;
```

```
    document.getElementById("demo").innerHTML = x;
```

```
}
```

```
</script>
```

type

```
<button id="btn1" type="button">HTML</button>
```

```
<p>Click the "Try it" button to return the type of the "HTML" button:</p>
```

```
<button onclick="myFunction()">Try it</button>
```

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

```
<script>
```

```
function myFunction() {
```

```
    var x = document.getElementById("btn1").type;
```

```
    document.getElementById("demo").innerHTML = x;
```

```
}
```

```
</script>
```

value

```
<form id="frm1" action="form_action.asp">  
<button id="btn1" name="subject" type="submit" value="fav_HTML">HTML</button>  
<button id="btn2" name="subject" type="submit" value="fav_CSS">CSS</button>  
</form>
```

<p>Click the "Try it" button to return the value of the "HTML" button:</p>

```
<button onclick="myFunction()">Try it</button>
```

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

```
<script>
```

```
function myFunction() {
```

```
    var x = document.getElementById("btn1").value;
```

```
    document.getElementById("demo").innerHTML = x;
```

```
}
```

```
</script>
```

text displayed on a button

```
<form id="frm1" action="form_action.asp">  
<button id="btn1" name="subject" type="submit" value="fav_HTML">HTML</button>  
<button id="btn2" name="subject" type="submit" value="fav_CSS">CSS</button>  
</form>
```

```
<p>Click the "Try it" button to return the text on the "HTML" button:</p>
```

```
<button onclick="myFunction()">Try it</button>
```

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

```
<script>
```

```
function myFunction() {
```

```
    var x = document.getElementById("btn1").innerHTML;
```

```
    document.getElementById("demo").innerHTML = x;
```

```
}
```

```
</script>
```

Reset a Form

Enter names in the fields below, then click "Reset" to reset the form.

```
<form id="frm1">
```

```
First name: <input type="text" name="fname"><br>
```

```
Last name: <input type="text" name="lname"><br><br>
```

```
<input type="button" onclick="myFunction()" value="Reset">
```

```
</form>
```

```
<script>
```

```
function myFunction() {
```

```
    document.getElementById("frm1").reset();
```

```
}
```

```
</script>
```

Find elements in a form

```
<form id="frm1" action="form_action.asp">
```

```
  First name: <input type="text" name="fname" value="Donald"><br>
```

```
  Last name: <input type="text" name="lname" value="Duck"><br><br>
```

```
  <input type="submit" value="Submit">
```

```
</form>
```

```
<p>Click "Try it" to display the value of each element in the form.</p>
```

```
<button onclick="myFunction()">Try it</button>
```

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

```
<script>
```

```
  function myFunction() {
```

```
    var x = document.getElementById("frm1");
```

```
    var text = "";    var i;
```

```
    for (i = 0; i < x.length ;i++) {
```

```
      text += x.elements[i].value + "<br>";
```

```
    }
```

```
    document.getElementById("demo").innerHTML = text;
```

```
  }
```

```
</script>
```

Browser Info

<p>What is the name(s) of your browser?</p>

<button onclick="myFunction()">Try it</button>

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

<script>

```
function myFunction() {  
    document.getElementById("demo").innerHTML =  
        "Name is " + navigator.appName +  
        "<br>Code name is " + navigator.appCodeName;  
}
```

</script>


```
class MainActivity extends AppCompatActivity {
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

JQUERY

What is jQuery

- An open source JavaScript library that simplifies the interaction between HTML and JavaScript.
- Created by John Resig in 2005, released in January of 2006.
- **jQuery** is the most popular JavaScript framework on the Internet today.
- Built in an attempt to simplify the existing DOM APIs and abstract away cross-browser issues.
- It uses CSS selectors to access and manipulate HTML elements (DOM Objects) on a web page.
- jQuery also provides a companion UI (user interface) framework and numerous other plug-ins.

What Is The DOM?

- Long story short, the DOM is your html document code. From the `<!DOCTYPE>` to the `</html>`
- The DOM is loaded top to bottom, so include your scripts at the bottom of the page for best performance.
- The DOM is "ready" when everything on the page has loaded.
 - Stylesheets
 - JavaScripts
 - Images

How to include jQuery

- Simply add the link or add the file to your site and address it locally
- **In order to use jQuery you need to load it.**
- You can include it locally on your own server:
 - `<script src="/js/jquery.js">`
- Or use one of the CDN's made available:
 - ajax.googleapis.com/ajax/libs/jquery/1.4.2/jquery.min.js
 - ajax.microsoft.com/ajax/jquery/jquery-1.4.2.js
 - CDN's are Gzipped and minified

```
<script  
src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.1/jquery.min.js">  
</script>
```

Ready Event

- In order to make sure that jQuery can find the element you asked it for, your browser needs to have loaded it (the DOM needs to be ready).

Q. How can I be sure my code runs at DOM ready?

A. Wrap all your jQuery code with the document ready function:

```
$(document).ready(function(){  
    // insert sweet, sweet jQuery code here...
```

```
});
```

JavaScript vs jQuery

Example 1 - Hide an element with id "textbox"

//javascript

```
document.getElementById('textbox').style.display = "none";
```

//jQuery

```
$('#textbox').hide();
```

Example 2 - Create a <h1> tag with "my text"

//javascript

```
var h1 = document.createElement("h1");
```

```
h1.innerHTML = "my text";
```

```
document.getElementsByTagName('body')[0].appendChild(h1);
```

//jQuery

```
$('body').append( $("

# 


```

Finding things - selectors

- TagName

```
document.getElementsByTagName("tagName");  
$("#tagName") - $("#div"), $("#p"), $("#div"),.....
```

- Tag ID

```
document.getElementById("id");  
$("#id") - $("#name"), $("#address")
```

- Tag Class

```
document.getElementsByClassName("className");  
$(".className") - $(".comment"), $(".code")
```

- To select all elements - `$("#*")`

Example

```
<!DOCTYPE html>
<html>
<head>
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.11.1/jquery.min.js">
</script>
<script>
function myFunction() {
    $("#h01").attr("style", "color:red").html("Hello jQuery")
}
$(document).ready(myFunction);
</script>
</head>

<body>
<h1 id="h01"></h1>
</body>
</html>
```


More examples

[Site with jQuery](http://ejohn.org/apps/workshop/intro/#11)

<http://ejohn.org/apps/workshop/intro/#11>

**Thank you for
your attention!**

