

HTML Example

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
  <title>Form Demo</title>
</head>
<body>
  <form name="MyForm" action="Form.html" method="post" enctype="multipart/form-data">
    Name: <input type="text" maxlength="10" size="6" tabindex="1" name="txtName" value="Deccansoft"/><br/>
    Password: <input type="password" name="txtPassword" value="test"/><br/>
    Gender<br/>
    <input type="radio" name="rbnGender" checked="checked"/>Male
    <input type="radio" name="rbnGender"/>Female<br/>
    Hobbies<br/>
    <input type="checkbox" id="chkMusic" name="chkMusic" checked="checked" value="1"/>
    <label for="chkMusic">Music</label>
    <input type="checkbox" name="chkDance"/>Dance<br/>
    Address:<br/>
    <textarea rows="6" cols="50">This is <b>Deccansoft</b></textarea><br/>
    How do you rate my site:
    <select name="rating" size="3" multiple="multiple">
      <option value="A">Good</option>
      <option value="B" selected="selected">Average</option>
      <option value="C">Poor</option>
    </select><br/>
    My Image:
    <input type="file" name="fileMyImage"/><br/>
    <input type="button" name="btnHello" value="Hello"/>
    <input type="reset" value="Reset Button"/>
    <input type="submit" value="Submit"/>
    <input type="image" src="demo.gif" />
    
  </form>
</body>
</html>
```

Javascript

1. Javascript is an Interpreted language and it's executed by the interpreter built in within the web browser on all platforms.
2. It's a specification by initially Netscape and is acknowledge by ECMA (European Computer Manufacturers Association)
3. It is Object based (doesn't support inheritance) and is case sensitive language.
4. It is very loosely typed. i.e it doesn't have any datatypes.
5. Javascript language together with **HTML DOM** (Document Object Model) API is used to make the web page dynamic or interactive. Also we can do client side validations of data before the form is submitted to server.

Steps for Debugging Javascript

1. Browser → Tools → Internet Options... → Advanced
2. Uncheck - Disable Script Debugging (Internet Explorer) → OK
3. Close the browser and start a new instance.
4. In javascript code, to start debugging write the statement: "debugger;"
5. Open the page the in brower
6. When the statement "debugger" is executed, browser shows a dialog for selecting the debugger...
7. Select the already exiting Visual Studio Instance --> OK
8. Continue Debugging using Debug toolbar (right click on menubar and select debug)

Embedding Javascript in Page BODY

Example 1:

Add to

```
<html>
<body>
<script type="text/javascript">
    var i;
    for(i=0;i<100;i++)
        document.write("This is line number: " + i + "<br>");
</script>
</body>
</html>
```

Example 2:

```
<html>
<body>
<table border="1">
    <script type="text/javascript">
        var n;
        n = prompt("Please enter a number", 10);
        if (!isNaN(n))
            for(i=1;i<=10;i++)
            {
```

```

    document.write("<tr>")
    document.write("  <td>" + n + "</td>")
    document.write("  <td>*</td>")
    document.write("  <td>" + i + "</td>")
    document.write("  <td>=</td>")
    document.write("  <td>" + n*i + "</td>")
    document.write("</tr>")
  }
</script>
</table>
</body>
</html>

```

Example 3

```

<html>
<body>
  <select name="day">
    <script type="text/javascript">
      var dt = new Date(); //dt is set to system date of client.
      for(i=1; i<=31; i++)
        if (dt.getDate() == i) //True for today.
          document.write("<option SELECTED value=\"" + i + "\">" + i + "</option>")
        else
          document.write("<option value=\"" + i + "\">" + i + "</option>")
    </script>
  </select>
</body>
</html>

```

Handling Events in Javascript

```

<html>
<head>
  <title>Events Examples</title>
  <script language="javascript" type="text/javascript">
    function SayHello()
    {
      window.alert("Hello " + document.forms[0].txtName.value);
    }
  </script>
</head>
<body>
  <form name="form1">

```

```
<input type="text" name="txtName">
<input type="button" value="Say Hello" onclick="javascript:SayHello()">
</form>
</body>
</html>
```

Using Dropdown List (Select tag)

```
<html>
<head>
<script type="text/javascript">
  function Calculate()
  {
    var n1 = document.form1.txtN1.value;
    var n2 = document.form1.txtN2.value;
    var ddl = document.form1.selOperation
    var opt = ddl.options[ddl.selectedIndex]; //returns selected option
    switch (opt.value)
    {
      case "+":
        document.form1.txtResult.value = parseInt(n1) + parseInt(n2);
        break;
      case "-":
        document.form1.txtResult.value = n1-n2;
        break;
      case "*":
        document.form1.txtResult.value = n1*n2;
        break;
      case "/":
        document.form1.txtResult.value = n1/n2;
        break;
    }
  }
</script>
</head>
<body>
  <form name="form1">
    <input type="text" name="txtN1" />
    <select name="selOperation" onchange="Calculate()">
      <option value="+">+</option>
      <option value="-">-</option>
      <option value="*">*</option>
```

```

    <option value=""></option>
  </select>
  <input type="text" name="txtN2" />
  =
  <input type="text" name="txtResult" readonly="readonly" />
</form>
</body>
</html>

```

To Show / Hide a Block Using Style

```

<html>
<head>
<title>JS Demo</title>
<script type="text/javascript">
function r1_click()
{
  if (document.form1.r1[0].checked)
    document.getElementById("spn").style["display"] = "";
  else
    document.getElementById("spn").style["display"] = "none";
}
function ShowHTMLOutput(ta)
{
  spn.innerHTML = ta.value
}
</script>
</head>
<body>
  <form name="form1" action="">
    <input type="radio" name="r1" value="show" checked="checked" onclick="r1_click()" />Show
    <input type="radio" name="r1" value="hide" onclick="r1_click()" />Hide
    <span id="spn">This is some text...</span>
    <textarea name="taDemo" rows="5" cols="20" onchange="ShowHTMLOutput(this)"></textarea>
  </form>
</body>
</html>

```

Note: If we have more than one element with same name, automatically an array with name of that element is created in form. In the example, "r1" array is created in form.

Example to Show Image Changing and using "this"

```
<html>
<head>
<title>Image Page</title>
<script type="text/javascript">
  function changeImage()
  {
    document.images["img1"].src = "Hover.jpg"
  }
  function restoreImage()
  {
    document.images[0].src = "Main.jpg"
  }
</script>
</head>
<body>


</body>
</html>
```

To open a new Window

```
window.open("JS1.htm", "wn", "menubar=no,width=200,height=300,scrollbars=yes,resizable=yes,location=yes")
```

To include Javascript in multiple files:

```
<script type="text/javascript" src="MyLibrary.js"></script>
```

Performing Client side validations before the form is submitted to server

```
<html>
<head>
  <title>Validation On Submit</title>
  <script language="javascript">
    function validate()
    {
      n1 = document.Form1.txtN1.value
      n2 = document.Form1.txtN2.value
      if (n1 == "" || n2 == "")
      {
        alert("Please enter all the values")
        return false; //Form is not Submitted
      }
      return true; //Form is Submitted
    }
    function div_Click()
    {
      if (document.Form1.txtN2.value == "0")
      {
        alert("Denominator cannot be zero");
        return false; //Form is not Submitted
      }
      return true; //Form is Submitted
    }
  </script>
</head>
<body>
  <form name="Form1" onsubmit="return validate()>
    N1 <input type="text" name="txtN1" /><br />
    N2 <input type="text" name="txtN2" /><br />
    <input type="submit" value="Add" />
    <input type="submit" value="Sub" />
    <input type="submit" value="Mul" />
    <input type="submit" value="Div" onclick="return div_Click()"/>
    <input type="submit" value="Delete" onclick="return confirm('Are you sure')" />
  </form>
</body>
</html>
```

If either OnSubmit event handler of Form or OnClick event handler of Submit button returns false, then the form is not submitted to server.

Timer Demo

```
<html>
<head>
<script language="javascript">
  function showClientTime ()
  {
    var dt = new Date()
    spnTime.innerHTML = dt.toLocaleTimeString();
    setTimeout("showClientTime ()",1000);
  }
</script>
</head>
<body onload="showClientTime()">
  <span id="spnTime"></span>
</body>
</html>
```