

## <a> (a) tag

creates a link to another web page.  
**href** gives the address of the web page.  
**target** is set to ""\_blank"" to show the linked page in a new tab when the user clicks it.

Example code:

```
<a target="_blank" href="http://google.com">Google</a>
<br>
<a href="/m/about.html">
  About Us</a>
```

## <button> (button) tag

adds a button element.  
**type** sets the button type. The type can be "button", "reset" or "submit".

Example code:

```
<h1>Pick 2 numbers:</h1>
<form>
  <label for="number1">Number 1</label>
  <input id="number1" type="number" value="0">
  <br>
  <label for="number2">Number 2</label>
  <input id="number2" type="number" value="0">
  <p><button type="reset">Reset</button>
</form>
```

## doctype

`<!doctype html>` is put at the start of your code to tell the "web browser" that your page uses "HTML5".

Example code:

```
<!doctype html>
<html>
  <head>
    <!-- title, meta and link tags go here -->
  </head>
  <body>
    Visible content goes here!
  </body>
</html>
```

## <h1> (h1) tag

creates a level 1 heading. `<h2>`, `<h3>`, `<h4>`, `<h5>`, `<h6>` are used for sub-headings.

Example code:

```
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
Here is some normal text
```

## id attribute

is an attribute used to specify the unique id of the element. The id attribute can be given to any HTML5 element and is often used in combination with CSS id selectors in order to style the element with the given id.

Example code:

```
<style>
#night {
  background-color: black;
  color: white;
}

#day {
  background-color: lightBlue;
  color: green;
}
</style>

<p id="day">Text with a day time theme
<p>Some normal text
<p id="night">Text with a night time theme
```

## <iframe> (iframe) tag

is used to show another web page on your page.  
**src** sets the page to be displayed in the iframe.  
**height** sets the height of the iframe.  
**width** sets the width of the iframe.  
**frameborder** is set to 0 to hide the border around the iframe.

Example code:

```
<iframe src="http://en.wikipedia.org/wiki/New_Zealand?
printable=yes" width="200" height="250" frameborder="1">
</iframe>
```

## <input> (input) tag

adds an input field where the user enters data.  
**type** sets the type of input.  
**value** sets the text of the input.  
**checked** pre-selects the input when the page loads.  
**maxlength** sets the maximum number of characters that can be entered.  
**name** sets the name and tells the form to send this input to the server when the form is submitted.

Example code:

```
<input type="radio" checked>Radio Button<br>
<input type="checkbox" checked>Checkbox<br>
<input type="color"><br>
<input type="range"><br>
<input type="time"><br>
<input type="week"><br>
<input type="month"><br>
<input type="date" name="birthday"><br>
<input type="datetime-local"><br>
<input type="hidden"><br>
<input type="search"><br>
<input type="number" value="1234"><br>
<input type="text" maxlength="2"><br>
<input type="password" value="text"><br>
<input type="button" value="Button"><br>
<input type="file"><br>
```

## <link> (link) tag

is used to link an **HTML** document to **CSS** stylesheets.  
**rel** sets the type of link  
**href** sets the address of the file to link to

Example code:

```
<link rel="stylesheet" href="/css/profile1.css">
<h1>Stylesheets</h1>
<p>Use the link tag to link to css stylesheets.
```

## onclick

stores a function that is run when the user clicks on the element.

Example code:

```
<button id="redButton">Red</button>
<script>
  function makeBackgroundRed() {
    document.body.style.backgroundColor = 'red';
  }
  redButton.onclick = makeBackgroundRed;
</script>
```

## <script> (script) tag

contains script code, like JavaScript, or points to a script file.  
**src** points to a script file.

Example code:

```
This text gets changed by the script code
<script>
  document.body.innerHTML = 'Change the text using
JavaScript';
</script>
```

## <select> (select) tag

is used to make a drop-down list.  
The {option} elements inside it specify the options in the list.

Example code:

```
<p>Pick a number
<select>
  <option>3
  <option>5
  <option>7
  <option>9
</select>
```

## <style> (style) tag

contains CSS style rules on an HTML page.

Example code:

```
<style>
body {
  background-color: yellow;
}
</style>
```

## <title> (title) tag

sets the text that appears on the web browser tab, and is used in search-engine results, and when a page is added to favorites.

Example code:

```
<!doctype html>
<title>This appears in the tab</title>
This text appears on the page
```

## ++

add 1 to the value of a variable

Example code:

```
var x = 0
x++;
console.log(x);
x += 10;
console.log(x);
x -= 3;
console.log(x);
x--;
console.log(x);
```

## alert(message)

displays a message box with an OK button.  
**message**: the text to display.

Example code:

```
alert('Hello');
```

## function

is a named reusable section of code that does a specific task and may return a value

Example code:

```
function getRandom(range, min) {
  return Math.floor(Math.random() * range) + min;
}

console.log(getRandom(10, 0));
console.log(getRandom(10, 100));
```

## if

Example code:

```
var age = prompt('How old are you?', '21');

if (age <= 12) {
  alert('You are a child');
} else if (age < 20) {
  alert('You are a teen');
} else if (age < 0 || age > 125) {
  alert('Invalid age');
} else {
  alert('You are an adult');
```