HTML.

HTML is the standard markup language for creating Web pages.

What is HTML?

* HTML stands for Hyper Text Markup Language
* HTML is the standard markup language for creating Web pages
* HTML describes the structure of a Web page
* HTML consists of a series of elements
* HTML elements tell the browser how to display the content
* HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc

## A Simple HTML Document

### **Example**

<!DOCTYPE html>  
<html>  
<head>  
<title>Page Title</title>  
</head>  
<body>  
  
<h1>My First Heading</h1>  
<p>My first paragraph.</p>  
  
</body>  
</html>

## What is an HTML Element?

An HTML element is defined by a start tag, some content, and an end tag:

<tagname>Content goes here...</tagname>

The HTML **element** is everything from the start tag to the end tag:

<h1>My First Heading</h1>

<p>My first paragraph.</p>

|  |  |  |
| --- | --- | --- |
| **Start tag** | **Element content** | **End tag** |
| <h1> | My First Heading | </h1> |
| <p> | My first paragraph. | </p> |
| <br> | none | none |

## HTML History

Since the early days of the World Wide Web, there have been many versions of HTML:

|  |  |
| --- | --- |
| **Year** | **Version** |
| 1989 | Tim Berners-Lee invented www |
| 1991 | Tim Berners-Lee invented HTML |
| 1993 | Dave Raggett drafted HTML+ |
| 1995 | HTML Working Group defined HTML 2.0 |
| 1997 | W3C Recommendation: HTML 3.2 |
| 1999 | W3C Recommendation: HTML 4.01 |
| 2000 | W3C Recommendation: XHTML 1.0 |
| 2008 | WHATWG HTML5 First Public Draft |
| 2012 | [WHATWG HTML5 Living Standard](http://whatwg.org/html/) |
| 2014 | [W3C Recommendation: HTML5](http://www.w3.org/TR/html5/) |
| 2016 | W3C Candidate Recommendation: HTML 5.1 |
| 2017 | [W3C Recommendation: HTML5.1 2nd Edition](http://www.w3.org/TR/html51/) |
| 2017 | [W3C Recommendation: HTML5.2](http://www.w3.org/TR/html52/) |

## What is CSS?

Cascading Style Sheets (CSS) is used to format the layout of a webpage.

With CSS, you can control the color, font, the size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors are to be used, different displays for different devices and screen sizes, and much more!

## HTML Tutorial

## Using CSS

CSS can be added to HTML documents in 3 ways:

* **Inline** - by using the style attribute inside HTML elements
* **Internal** - by using a <style> element in the <head> section
* **xternal** - by using a <link> element to link to an external CSS file

## Internal CSS

An internal CSS is used to define a style for a single HTML page.

An internal CSS is defined in the <head> section of an HTML page, within a <style> element.

The following example sets the text color of ALL the <h1> elements (on that page) to blue, and the text color of ALL the <p> elements to red. In addition, the page will be displayed with a "powderblue" background color:

### **Example**

<!DOCTYPE html>  
<html>  
<head>  
<style>  
body {background-color: powderblue;}  
h1   {color: blue;}  
p    {color: red;}

## External CSS

An external style sheet is used to define the style for many HTML pages.

To use an external style sheet, add a link to it in the <head> section of each HTML page:

### **Example**

<!DOCTYPE html>  
<html>  
<head>  
  <link rel="stylesheet" href="styles.css">  
</head>  
<body>  
  
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>  
  
</body>  
</html>

### **"styles.css":**

body {  
  background-color: powderblue;  
}  
h1 {  
  color: blue;  
}  
p {  
  color: red;  
}

## CSS Colors, Fonts and Sizes

Here, we will demonstrate some commonly used CSS properties. You will learn more about them later.

The CSS color property defines the text color to be used.

The CSS font-family property defines the font to be used.

The CSS font-size property defines the text size to be used.

### **Example**

Use of CSS color, font-family and font-size properties:

<!DOCTYPE html>  
<html>  
<head>  
<style>  
h1 {  
  color: blue;  
  font-family: verdana;  
  font-size: 300%;  
}  
p {  
  color: red;  
  font-family: courier;  
  font-size: 160%;  
}  
</style>  
</head>  
<body>  
  
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>  
  
</body>  
</html>

## Basic Shortcuts

|  |  |  |
| --- | --- | --- |
| **Description** | **Windows** | **Mac OS** |
| Edit menu | Alt + E | Ctrl + F2 + F |
| File menu | Alt + F | Ctrl + F2 + E |
| View menu | Alt + V | Ctrl + F2 + V |
| Select all text | Ctrl + A | Cmd + A |
| Copy text | Ctrl + C | Cmd + C |
| Find text | Ctrl + F | Cmd + F |
| Find and replace text | Ctrl + H | Cmd + F |
| New Document | Ctrl + N | Cmd + N |
| Open a file | Ctrl + O | Cmd + O |
| Print options | Ctrl + P | Cmd + P |
| Save file | Ctrl + S | Cmd + S |
| Paste text | Ctrl + V | Cmd + V |
| Cut text | Ctrl + X | Cmd + X |
| Redo text | Ctrl + Y | Shift + Cmd + Z |
| Undo text | Ctrl + Z | Cmd + Z |

## Text Editing

|  |  |  |
| --- | --- | --- |
| **Description** | **Windows** | **Mac OS** |
| **Cursor Movement** |  |  |
| Go to the right or to the beginning of next line break | Right Arrow | Right Arrow |
| Go to the left or to the end of previous line break | Left Arrow | Left Arrow |
| Go up one row | Up Arrow | Up Arrow |
| Go down one row | Down Arrow | Down Arrow |
| Go to the beginning of the current line | Home | Cmd + Left Arrow |
| Go to the end of the current line | End | Cmd + Right Arrow |
| Go to the beginning of the document | Ctrl + Home | Cmd + Up Arrow |
| Go to the end of the document | Ctrl + End | Cmd + Down Arrow |
| Move up one frame | Page Up | Fn + Up Arrow |
| Move down one frame | Page Down | Fn + Down Arrow |
| Go to beginning of previous word | Ctrl + Left Arrow | Option + Left Arrow |
| Go to beginning of next word | Ctrl + Right Arrow | Option + Right Arrow |
| Go to beginning of line break | Ctrl + Up Arrow | Cmd + Left Arrow |
| Go to end of line break | Ctrl + Down Arrow | Cmd + Right Arrow |
|  |  |  |
| **Text Selection** |  |  |
| Select characters to the left | Shift + Left Arrow | Shift + Left Arrow |
| Select characters to the right | Shift + Right Arrow | Shift + Right Arrow |
| Select lines upwards | Shift + Up Arrow | Shift + Up Arrow |
| Select lines downwards | Shift + Down Arrow | Shift + Down Arrow |
| Select words to the left | Shift + Ctrl + Left | Shift + Opt + Left |
| Select words to the right | Shift + Ctrl + Right | Shift + Opt + Right |
| Select paragraphs to the left | Shift + Ctrl + Up | Shift + Opt + Up |
| Select paragraphs to the right | Shift + Ctrl + Down | Shift + Opt + Down |
| Select text between the cursor and the beginning of the current line | Shift + Home | Cmd + Shift + Left Arrow |
| Select text between the cursor and the end of the current line | Shift + End | Cmd + Shift + Right Arrow |
| Select text between the cursor and the beginning of the document | Shift + Ctrl + Home | Cmd + Shift + Up Arrow or Cmd + Shift + Fn + Left Arrow |
| Select text between the cursor and the end of the document | Shift + Ctrl + End | Cmd + Shift + Down Arrow or Cmd + Shift + Fn + Right Arrow |
| Select one frame at a time of text above the cursor | Shift + Page Up | Shift + Fn + Up Arrow |
| Select one frame at a time of text below the cursor | Shift + Page Down | Shift + Fn + Down Arrow |
| Select all text | Ctrl + A | Cmd + A |
| Find text | Ctrl + F | Cmd + F |
|  |  |  |
| **Text Formatting** |  |  |
| Make selected text bold | Ctrl + B | Cmd + B |
| Make selected text italic | Ctrl + I | Cmd + I |
| Underline selected text | Ctrl + U | Cmd + U |
| Make selected text superscript | Ctrl + Shift + = | Cmd + Shift + = |
| Make selected text subscript | Ctrl + = | Cmd + = |
|  |  |  |
| **Text Editing** |  |  |
| Delete characters to the left | Backspace | Backspace |
| Delete characters to the right | Delete | Fn + Backspace |
| Delete words to the right | Ctrl + Del | Cmd + Backspace |
| Delete words to the left | Ctrl + Backspace | Cmd + Fn + Backspace |
| Indent | Tab | Tab |
| Outdent | Shift + Tab | Shift + Tab |
| Copy text | Ctrl + C | Cmd + C |
| Find and replace text | Ctrl + H | Cmd + F |
| Paste text | Ctrl + V | Cmd + V |
| Cut text | Ctrl + X | Cmd + X |
| Redo text | Ctrl + Y | Shift + Cmd + Z |
| Undo text | Ctrl + Z | Cmd + Z |

## Text Editing

|  |  |  |
| --- | --- | --- |
| **Description** | **Windows** | **Mac OS** |
| **Cursor Movement** |  |  |
| Go to the right or to the beginning of next line break | Right Arrow | Right Arrow |
| Go to the left or to the end of previous line break | Left Arrow | Left Arrow |
| Go up one row | Up Arrow | Up Arrow |
| Go down one row | Down Arrow | Down Arrow |
| Go to the beginning of the current line | Home | Cmd + Left Arrow |
| Go to the end of the current line | End | Cmd + Right Arrow |
| Go to the beginning of the document | Ctrl + Home | Cmd + Up Arrow |
| Go to the end of the document | Ctrl + End | Cmd + Down Arrow |
| Move up one frame | Page Up | Fn + Up Arrow |
| Move down one frame | Page Down | Fn + Down Arrow |
| Go to beginning of previous word | Ctrl + Left Arrow | Option + Left Arrow |
| Go to beginning of next word | Ctrl + Right Arrow | Option + Right Arrow |
| Go to beginning of line break | Ctrl + Up Arrow | Cmd + Left Arrow |
| Go to end of line break | Ctrl + Down Arrow | Cmd + Right Arrow |
|  |  |  |
| **Text Selection** |  |  |
| Select characters to the left | Shift + Left Arrow | Shift + Left Arrow |
| Select characters to the right | Shift + Right Arrow | Shift + Right Arrow |
| Select lines upwards | Shift + Up Arrow | Shift + Up Arrow |
| Select lines downwards | Shift + Down Arrow | Shift + Down Arrow |
| Select words to the left | Shift + Ctrl + Left | Shift + Opt + Left |
| Select words to the right | Shift + Ctrl + Right | Shift + Opt + Right |
| Select paragraphs to the left | Shift + Ctrl + Up | Shift + Opt + Up |
| Select paragraphs to the right | Shift + Ctrl + Down | Shift + Opt + Down |
| Select text between the cursor and the beginning of the current line | Shift + Home | Cmd + Shift + Left Arrow |
| Select text between the cursor and the end of the current line | Shift + End | Cmd + Shift + Right Arrow |
| Select text between the cursor and the beginning of the document | Shift + Ctrl + Home | Cmd + Shift + Up Arrow or Cmd + Shift + Fn + Left Arrow |
| Select text between the cursor and the end of the document | Shift + Ctrl + End | Cmd + Shift + Down Arrow or Cmd + Shift + Fn + Right Arrow |
| Select one frame at a time of text above the cursor | Shift + Page Up | Shift + Fn + Up Arrow |
| Select one frame at a time of text below the cursor | Shift + Page Down | Shift + Fn + Down Arrow |
| Select all text | Ctrl + A | Cmd + A |
| Find text | Ctrl + F | Cmd + F |
|  |  |  |
| **Text Formatting** |  |  |
| Make selected text bold | Ctrl + B | Cmd + B |
| Make selected text italic | Ctrl + I | Cmd + I |
| Underline selected text | Ctrl + U | Cmd + U |
| Make selected text superscript | Ctrl + Shift + = | Cmd + Shift + = |
| Make selected text subscript | Ctrl + = | Cmd + = |
|  |  |  |
| **Text Editing** |  |  |
| Delete characters to the left | Backspace | Backspace |
| Delete characters to the right | Delete | Fn + Backspace |
| Delete words to the right | Ctrl + Del | Cmd + Backspace |
| Delete words to the left | Ctrl + Backspace | Cmd + Fn + Backspace |
| Indent | Tab | Tab |
| Outdent | Shift + Tab | Shift + Tab |
| Copy text | Ctrl + C | Cmd + C |
| Find and replace text | Ctrl + H | Cmd + F |
| Paste text | Ctrl + V | Cmd + V |
| Cut text | Ctrl + X | Cmd + X |
| Redo text | Ctrl + Y | Shift + Cmd + Z |
| Undo text | Ctrl + Z | Cmd + Z |

## Web Browsers

|  |  |  |
| --- | --- | --- |
| **Description** | **Windows** | **Mac OS** |
| **Navigation** |  |  |
| Scroll down a frame | Space or Page Down | Space or Fn + Down Arrow |
| Scroll up a frame | Shift + Space or Page Up | Shift + Space or Fn + Up Arrow |
| Go to bottom of the page | End | Cmd + Down Arrow |
| Go to top of the page | Home | Cmd + Up Arrow |
| Go back | Alt + Left Arrow or Backspace | Cmd + Left Arrow |
| Go forward | Alt + Right Arrow or Shift + Backspace | Cmd + Right Arrow |
| Refresh a webpage | F5 | Cmd + R |
| Refresh a webpage (no cache) | Ctrl + F5 | Cmd + Shift + R |
| Stop | Esc | Esc |
| Toggle full-screen | F11 | Cmd + Shift + F |
| Zoom in | Ctrl + + | Cmd + + |
| Zoom out | Ctrl + - | Cmd + - |
| Zoom 100% (default) | Ctrl + 0 | Cmd + 0 |
| Open homepage | Alt + Home | Option + Home or Option + Fn + Left Arrow |
| Find text | Ctrl + F | Cmd + F |
|  |  |  |
| **Tab / Window Management** |  |  |
| Open a new tab | Ctrl + T | Cmd + T |
| Close current tab | Ctrl + W | Cmd + W |
| Close all tabs | Ctrl + Shift + W | Cmd + Q |
| Close all tabs except the current tab | Ctrl + Alt + F4 | Cmd + Opt + W |
| Go to next tab | Ctrl + Tab | Control + Tab or Cmd + Shift + Right Arrow |
| Go to previous tab | Ctrl + Shift + Tab | Shift + Control + Tab or Cmd + Shift + Left Arrow |
| Go to a specific tab number | Ctrl + 1-8 | Cmd + 1-8 |
| Go to the last tab | Ctrl + 9 | Cmd + 9 |
| Reopen the last closed tab | Ctrl + Shift + T | Cmd + Shift + T |
| Open a new window | Ctrl + N | Cmd + N |
| Close current window | Alt + F4 | Cmd + W |
| Go to next window | Alt + Tab | Cmd + Tab |
| Go to previous window | Alt + Shift + Tab | Cmd + Shift + Tab |
| Reopen the last closed window | Ctrl + Shift + N |  |
| Open links in a new tab in the background | Ctrl + Click | Cmd + Click |
| Open links in a new tab in the foreground | Ctrl + Shift + Click | Cmd + Shift + Click |
| Print current webpage | Ctrl + P | Cmd + P |
| Save current webpage | Ctrl + S | Cmd + S |
|  |  |  |
| **Address Bar** |  |  |
| Cycle between toolbar, search bar, and page elements | Tab | Tab |
| Go to browser's address bar | Ctrl + L or Alt + D | Cmd + L |
| Focus and select the browser's search bar | Ctrl + E | Cmd + E / Cmd + K |
| Open the address bar location in a new tab | Alt + Enter | Opt + Enter |
| Display a list of previously typed addresses | F4 |  |
| Add "www." to the beginning and ".com" to the end of the text typed in the address bar (e.g., type "w3schools" and press Ctrl + Enter to open "www.w3schools.com") | Ctrl + Enter | Cmd + Enter or Control + Enter |
|  |  |  |
| **Bookmarks** |  |  |
| Open the bookmarks menu | Ctrl + B | Cmd + B |
| Add bookmark for current page | Ctrl + D | Cmd + Opt + B or Cmd + Shift + B |
| Open browsing history | Ctrl + H | Cmd + Shift + H or Cmd + Y |
| Open download history | Ctrl + J | Cmd + J or Cmd + Shift + J |