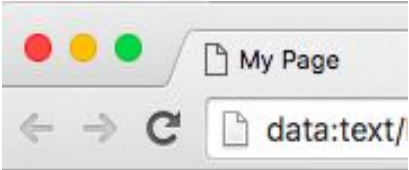


HTML Syntax and Documentation

| Concept | Example | |
|--|--|---|
| Structure an HTML page (head & body) | <pre><!DOCTYPE html> <html> <head> <title>My Page</title> </head> <body> <p>My first paragraph</p> </body> </html></pre> |  <p>My first paragraph</p> |
| Paragraph tag | <pre><p>This is a paragraph.</p></pre> | This is a paragraph. |
| Create headings (adjust from 1 to 6) | <pre><h1>Heading level 1</h1> ... <h6>Heading level 6</h6></pre> | Heading level 1 <small>Heading level 6</small> |
| Div tag | <pre><div>This is a div</div></pre> | This is a div |
| Add an image | <pre></pre> |  |
| Create a numbered list | <pre> George Washington John Adams </pre> | 1. George Washington 2. John Adams |
| Add a link to another web page which opens in a separate window/tab | <pre>This is a link to Google</pre> | This is a link to Google |
| Adding IDs | <pre><p id="oneID">text</div></pre> | text |
| Adding Classes | <pre><h1 class="aClass">text</div></pre> | text |
| Add a comment, which is not visible to the user, within an HTML page | <pre><!-- These are instructions in the code. The user won't see them --></pre> | |
| Add a link in the <head> of an HTML document to an external CSS file | <pre><link rel="stylesheet" type="text/css" href="mystyles.css"></pre> | |
| Link to a Javascript file | <pre><script src="index.js"></script></pre> | |

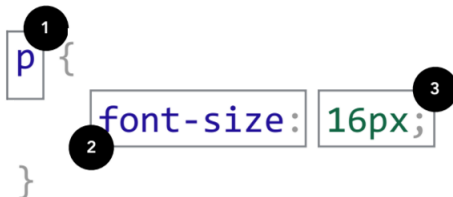
Syntax Reference

| Symbol | Name | Example |
|--------|-----------------|--|
| / | Backslash | <code><body></body></code> |
| " " | Quotes | <code></code> |
| < > | Angle Brackets | <code><head> </head></code> |
| { } | Curly Brackets | <code>p{color: blue;}</code> |
| [] | Square Brackets | <code>var colors = ["red", "blue", "yellow"];</code> |
| () | Parenthesis | <code>\$("h1").hide();</code> |
| ; | Semicolon | <code>var word = "hello";</code> |
| : | Colon | <code>#two{font-size: 20px;}</code> |

CSS Syntax and Documentation

Cascading Style Sheets (CSS) are used to change the way your HTML looks in a Web browser.

CSS Rules



1. **Selector:** Represents the parts of your HTML that will be affected by this CSS rule. Multiple selectors can be used, separated by commas.
2. **Property:** The thing you want to change for the HTML you've selected. Each property should be followed by a colon.
3. **Value:** What you want to set this property to. Each value should be followed by a semicolon.

A property and value together are called a **declaration**. A single CSS rule can contain multiple declarations.

CSS Value Types: Colors

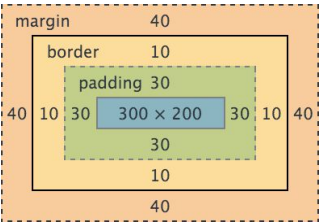
| Value Type | Definition | Examples |
|-------------|--|---|
| Color names | Some colors can be used by typing the color name. | red yellow cornflowerblue |
| Hex codes | Hex codes start with a pound sign/hashtag, then 6 numbers or letters, 0-9 and a-f. | #000000 (black) #ffffff (white) #9400d3 (a shade of purple) |

Tip: Try Googling "HTML color picker" to figure out the hex code for any color.

CSS Selectors

| Selector Type | Definition | Example |
|-----------------------|--|-------------------------------------|
| HTML tag name | Selects all HTML elements with this tag name on the page. | <code>p{color:red;}</code> |
| ID | Selects the HTML element which has this value for its ID attribute. Use a hashtag/pound sign followed by the ID value. | <code>#myID{color:blue;}</code> |
| Class | Selects the HTML element(s) with this value in its class attribute. Use a period followed by the class value. | <code>.myClass{color:green;}</code> |
| HTML tag name + class | Selects the HTML element(s) with a certain name AND class. Use the tag name followed by a period, then the class. | <code>p.myClass{color:blue;}</code> |

CSS Box Model

| Given this CSS... | ...here's that <div> in Chrome Developer Tools: |
|---|--|
| <pre>div { width: 300px; height: 200px; padding: 30px; border: 10px solid red; margin: 40px; }</pre> |  |
| <ul style="list-style-type: none">● width and height apply only to the content box (the inner-most box, in blue).● padding goes immediately outside the content box (as shown in green).● border goes around the padding (as shown in yellow).● margin goes around the border (as shown in orange). | |

CSS Documentation Reference

| Concept | Description | Example |
|---------------------------------|---|---|
| Font Styling | Changes the font and size of text on a webpage | <code>body{font-family: "Comic Sans";font-size: 22px;}</code> |
| Float | Allows an element to be placed on the left or right of a webpage | <code>h1{ float: right; }</code> |
| Position: Fixed vs. Absolute | A fixed element will not move while a page is scrolling. Absolute elements will move with the page. | <code>div{position: fixed;}</code> |
| Background | Changes the background to a specified color or image. | <code>body{background: url("ex.png");}</code> |

CSS Value Types: Sizing

| Value Type | Definition | Examples |
|-------------|--|---|
| Pixels | Use pixels when you want the element to be a certain size no matter the screen the user is viewing on. | <code>height: 1000px;</code> <code>border-width: 5px;</code> |
| Percentages | Use a percentage to change the size of the object based on the screen the user is viewing on. | <code>width: 25%;</code> <code>font-size: 150%;</code> |

GitHub Tips and Tricks

Git: A version control system for keeping history of and sharing coding projects.

GitHub: The platform we use to use Git.

| | |
|---------|---|
| Step 1: | <code>git status</code> |
| Step 2: | <code>git add .</code> |
| Step 3: | <code>git commit -m "my comment"</code> |
| Step 4: | <code>git push origin master</code> |

The four steps to pushing (saving) a change to GitHub

JavaScript Syntax and Documentation

Values/Types

| Concept | Syntax/Description | Examples |
|-----------|---|--|
| Number | | <code>var rank = 1;</code> <code>var price = 5.99;</code> |
| String | Must be inside single (' ') or double (" ") quotes | <code>var name = "Kevin";</code> |
| Boolean | <code>true</code> or <code>false</code> | <code>var isTrue = true;</code> |
| Array | Values separated by commas inside square brackets ([]) <code>var anArray = [value1, value2, value3, ...]</code> | <code>var oddNumbers = [1,3,5,7,9];</code> <code>var places = ["Milan", "NYC", "Bangkok"];</code> |
| Object | <code>var objectName = { key1: value1, key2: value2 // etc. }</code> | <code>var profile = { name: "Ada", rank: 10, id: "1", likesScriptEd: true }</code> |
| Undefined | Declared, but unassigned variables have a value of undefined. | <code>var undefinedVariable;</code> <code>undefinedVariable //undefined</code> |

Control Flow

| Concept | Syntax/Description | Examples |
|------------------|---|---|
| If-else if -else | <pre>if (condition1) { // execute these lines if // condition1 is true } else if (condition2) { // execute these lines if // condition2 is true } else { // execute these lines }</pre> | <pre>var num = 11; if (num < 5) { console.log("Less than 5"); } else if (num < 10) { console.log("Less than 10"); } else { console.log("Greater than 10"); } // Greater than 10</pre> |
| && (and) | <pre>if (conditionA && conditionB) { // code 1 } else { // code 2 }</pre> <p>'code 1' will happen only if BOTH conditionA and conditionB are true. Otherwise, code 2 happens.</p> | <pre>function canDrive (name, age, passedTest) { if (age > 16 && passedTest) { return name + " can drive."; } else { return name + " can't drive."; } }</pre> |
| (or) | <pre>if (conditionA conditionB){ // code 1 } else { // code 2 }</pre> <p>If ANY of the conditions are true, code 1 will execute.</p> | <pre>function passedCourse(grade, regents) { if (grade > 65 passedRegents) { return "passed"; } else { return "failed"; } }</pre> |
| ! (not) | Returns the opposite Boolean of the expression. | <pre>(3 > 5) // false !(3 > 5) // true</pre> |
| For loop | <pre>for (declare; condition; modify) { does something; }</pre> | <pre>for (var i = 0; i < 5; i=i+1) { console.log(i); } // 0 1 2 3 4</pre> |

Variables

| Concept | Syntax/Description | Examples |
|---------------------|----------------------------|--|
| Variable assignment | var variableName = "value" | <pre>var thisIsAVariable = 5; var fifthLetter = "e";</pre> |

Operators

| Concept | Syntax/Description | Examples |
|-----------------------|--|--|
| Strict Equality (===) | <p>expressionA === expressionB</p> <p>Checks to see if both expressions are the same type and value, and if so, return true.</p> | <pre>var a = 1; a === b // true var b = 1; a === c // false var c = "1"; a === d // false var d = true;</pre> |

Functions

| Concept | Syntax/Description | Examples |
|--|--|---|
| Function declaration (creating a new function with a name/identifier) | <pre>function functionName (parameters--optional) { // function body }</pre> | <pre>function add(a, b) { return a + b; }</pre> |
| Calling a function | <pre>functionName(arguments)</pre> | <pre>add(1,5); // 6</pre> |

jQuery Syntax and Documentation

| <script src="https://code.jquery.com/jquery-2.1.4.js"></script> | | |
|---|---|--|
| Concept | Syntax | Example |
| Prepares the document for jQuery | <pre>\$(document).ready(function(){ // Code to run goes here });</pre> | <pre>\$(document).ready(function(){ // Code to run goes here });</pre> |
| Run code when the document structure is fully loaded | <pre>\$(function() { // Code to run goes here });</pre> | <pre>\$(function() { alert("There are " + \$('p').length + " paragraphs on the page"); });</pre> |
| Append (attach) content to an element | <pre>\$(selector).append(content)</pre> | <pre>\$("p").append("...more text");</pre> |
| Change the content of an element | <pre>\$(selector).html(content)</pre> | <pre>\$("#id1").html("This is a dynamic web page.");</pre> |
| Change the content of an element | <pre>\$(selector).css(property, value)</pre> | <pre>\$(".container").css("color", "red")</pre> |
| Add or change an attribute | <pre>\$(selector).attr(name, value)</pre> | <pre>\$(img).attr("src", "http://coolpics.com/rhinoceros.jpg");</pre> |
| Show an element | <pre>\$(selector).show()</pre> | <pre>\$(".class1").show();</pre> |
| Hide an element | <pre>\$(selector).hide()</pre> | <pre>\$("#quietID").hide();</pre> |
| Do something when an element is clicked | <pre>\$(selector).click(function() { // Code to run goes here });</pre> | <pre>\$("#one").click(function() { alert("hello"); });</pre> |
| Get the value from another element | <pre>\$(selector).val()</pre> | <pre>\$("#button").click(function() { var name = \$("#box").val() });</pre> |