

Anatomy of an HTML Document

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">    <!-- contains important metadata; won't be rendered -->
  <title>Title of page</title>    <!-- is displayed in the browser tab -->
  <link rel="stylesheet" href="style.css">    <!-- links a css stylesheet to the html -->
</head>
<body>    <!-- contains everything that will be rendered -->
  <header></header>    <!-- typically contains the title and navigation -->
  <main></main>    <!-- contains the primary content of the webpage -->
  <footer></footer>    <!-- contains links and supplementary material -->
</body>
</html>
```

Headings

Used for titles of sections and subsections:

- Use a single `<h1></h1>` element for the main heading of a web page
- Use `<h2></h2>` for the main sections of the page, `<h3></h3>` for subsections, and so on
- Don't skip any levels:

✓ `<h1>`, `<h2>`, `<h3>`, ... ✗ `<h1>`, `<h3>`, `<h5>`

Other Elements

```
<div>    <!-- <div> is a generic block container -->
  <p>Some text</p>    <!-- <p> wraps and separates blocks of text -->
  <p>Some <span>inline</span> text</p>    <!-- <span> is a generic inline container -->
  <a href="http://example.com">Link text</a>    <!-- <a> (for 'anchor') makes a hyperlink -->
      <!-- <img> embeds an image on the page -->
</div>
```

Lists

Used for representing collections of elements.

List related tags:

Markup example:

<code></code>	unordered lists
<code></code>	ordered lists
<code></code>	list items

```
<ul>
  <li>First item</li>
  <li>Second item</li>
</ul>
```

Basic CSS Margins and Padding

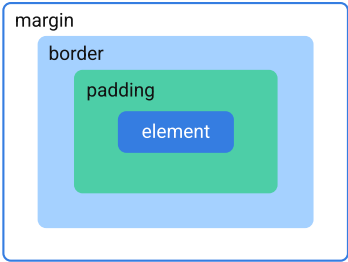
Dimensions

Used for font sizes and an element's height, width, margins, and padding.

<code>px</code>	Specifies an element's dimension explicitly in pixels
<code>%</code>	Specifies an element's dimension as a percentage of its parent's width
<code>vw</code>	Specifies an element's dimension as a percentage of viewport width
<code>vh</code>	Specifies an element's dimension as a percentage of viewport height

The Box Model

- Each HTML element (shown in blue) is wrapped in a box of padding
- The padding is wrapped by borders
- The border is wrapped by margins



Margins and Padding

<code>margin: auto;</code>	Determines margins automatically (default)
<code>margin: 0;</code>	Sets all margins to <code>0</code> . Useful for resetting default styles
<code>margin: 20px;</code>	Sets margin of <code>20px</code> on all sides
<code>margin: 10px 20px;</code>	Sets top/bottom margins to <code>10px</code> and left/right margins to <code>20px</code>
<code>margin-top: 20px;</code>	Sets margin of <code>20px</code> on top of element. Similarly, you can use <code>margin-right</code> , <code>margin-bottom</code> , and <code>margin-left</code>
<code>margin: 10px 20px 30px 40px;</code>	Sets margins to top, right, bottom, and left, respectively

Note: The syntax for `padding` is the same, except there is no `padding: auto`

Borders

<code>border-color: #000;</code>	Sets border color to black
<code>border-width: 1px;</code>	Sets border width to <code>1px</code>
<code>border-style: solid;</code>	Options include <code>solid</code> , <code>dashed</code> , <code>dotted</code> , and <code>double</code>
<code>border: #000 1px solid;</code>	Shorthand syntax

Typographic Styles

Font Properties:

font-size	Controls font size. Typically specified using pixels
font-weight	Controls boldness. Specified using pixels or numbers, e.g. font-weight: 500
font-family	Specifies the font family, plus fallbacks, e.g. font-family: Arial, sans-serif
font-style	For italicized text, use font-style: italic; default: normal

Text Properties:

text-align	Options include left, right, and center; default: center
text-decoration	Options include none and underline; default: none
text-transform	Options include capitalize, uppercase, and lowercase; default: none

Line Height and Letter Spacing:




line-height	Controls spacing between lines of text. Specified either using pixels or a number. If a number is used, it is multiplied by the element's font-size. Defaults to 1.0
letter-spacing	Controls horizontal spacing between text characters. Usually specified using pixels. Defaults to normal

Basic CSS Colors and Backgrounds

Sprint 0

Representing Colors

Hexadecimal:

- black: `#000000` 
- white: `#FFFFFF` 
- green: `#00FF00` 

RGB (red, green, blue):

- black: `rgb(0, 0, 0)`
- white: `rgb(255, 255, 255)`
- green: `rgb(0, 255, 0)`

Note: These values are not case sensitive.

RGBA (red, green, blue, alpha):

- Like RGB, but adds a fourth parameter, `alpha`, that controls the opacity of the colors
- `0 <= alpha <= 1`, with `0` representing complete translucence and `1` representing complete opacity

Example: `rgba(0, 255, 0, 0.5)` 

Background

`background-color` — sets an element's background color

`background-image: url(path/to/image)` — sets a background image for the element

- Use this for images that are only decorative
- For informative images, use an `` tag with an appropriate `alt` description

`background-size` — controls the size of a background image

- Keyword options include `contain` and `cover`
- Can be specified using percentages, e.g. `background-size: 30%`
- Can be specified using pixels, e.g. `background-size: 200px 100px`

`background-position` — controls the position of a background image within an element

- Keyword options include `top`, `left` and `center`
- Can also be specified using pixels or percentages

`background-repeat` — controls whether a background image repeats

- Options include `repeat` and `no-repeat`