

CSS



CSS

Cascading Style Sheets

Defines a Web page's appearance

CSS separates style and content

Consists of a plain text file with rules for the display of HTML elements

Formatting includes fonts and colors as well as layout and position

Can be created outside of your HTML and applied to multiple Web pages

Well-formed HTML is important for your CSS to work properly

History

Prior to CSS, Web pages were commonly styled with HTML tags and structured with tables

This was both tedious and inefficient

Nine different style sheet languages were proposed, two were chosen as the foundation

CSS Level 1 emerged as a W3C

Recommendation in December 1996

Browsers began to support CSS over the next few years

Application

CSS can be applied in three different ways to a Web page:

- In an external .css file
- In the `<head>` section of an HTML document
- Inline with HTML code

Style Construction

CSS Rule Set

Selector: Indicates which HTML element will be formatted

Declaration block: Describes the formatting to apply

Property/value pair: Specifies format

Style rules are separated by a semicolon

```
h1 {  
    color: green;  
    background: yellow;  
}
```

Cascade

The principle of the “cascade” is applied when style rules are in conflict

Three primary factors determine which style rule wins out:

- Inheritance
- Specificity
- Location

CSS3

Latest standard for CSS

CSS2 is best supported

CSS3 is still evolving but offers new features for designers and developers

Modern browsers support many aspects of CSS3

Backwards compatible with CSS2

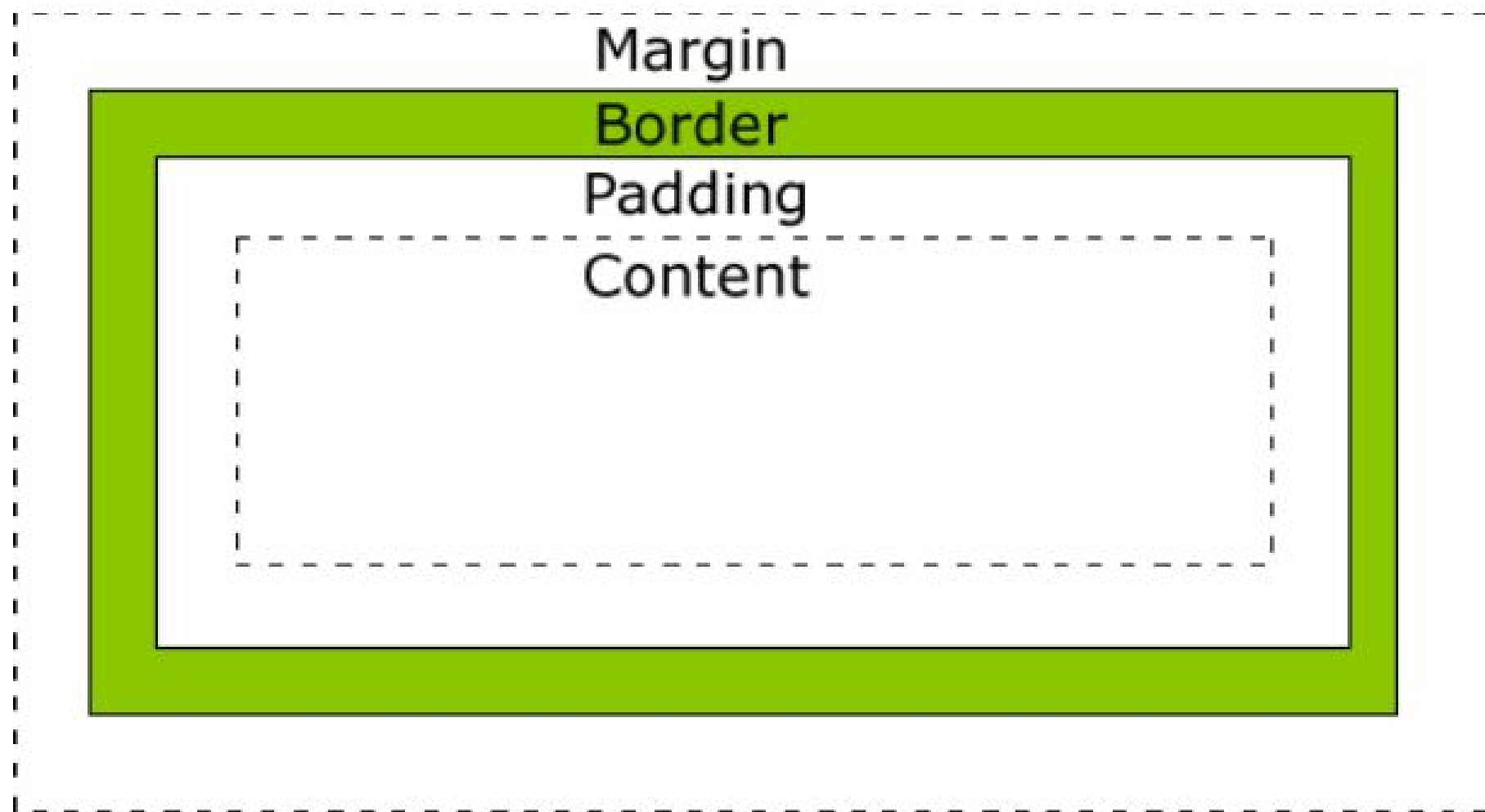
CSS Box Model

In a web page, every element is rendered as a rectangular box.

This box includes the following, changeable properties.

- Content
- Padding
- Border
- Margin

CSS Box Model



CSS Box Model

Setting an Element's Width and Height

- `auto` (default)

Browser calculates the dimensions

- `Length`

Define the dimensions in pixels or ems

- `%`

Define the dimensions in percent of the containing block (parent element)

- `inherit`

Specifies that the dimension should be inherited from the parent element

Page Layout

The HTML `<div>` tag can be used to give your page structure.

It has no specific meaning except to outline a section of content.

The `div` tag is only used in the `body` section of an HTML document.

Initially, this structure will not be visible to the user.

Used in conjunction with CSS, we will have more control over the form and layout of web pages.

Page Layout

<div>

Page Layout

`display` Property

Elements in HTML are primarily “inline” or “block” elements.

- An inline element has floating content on its left and right side.
- A block element fills the entire line, and nothing is displayed on its left or right side.

The CSS `display` property allows you to specify the type of box used for an HTML element.

Page Layout

`float` Property

The CSS `float` property allows you to position block elements inline

This means that any element, block or inline, can be positioned alongside another element

The CSS `float` property is one of the main techniques of web page layout

Color

color

background-color

RGB and RGBA : `rgba(100,100,100, .5)`

HEX : `#FFFFFF`

NAMES : red, gray (there are 147)

HSL and HSLA : `hsla(15, 10%, 10%, .5)`

hsla(degrees on color wheel, percntage saturation, percentage lightness, decimal opacity)