

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

CSS

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

CSS

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**

CSS

STYLE CONSTRUCTION

CSS RULE SET

**SELECTOR: INDICATES WHICH HTML
ELEMENT WILL BE FORMATTED**

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

CSS

STYLE CONSTRUCTION

CSS RULE SET

SELECTOR: INDICATES WHICH HTML
ELEMENT WILL BE FORMATTED

DECLARATION BLOCK: DESCRIBES THE
FORMATTING TO APPLY

```
h1 {  
    color: green;  
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CSS

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

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

CSS

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;  
}
```


CSS

CASCADE

THE PRINCIPLE OF THE “CASCADE” IS APPLIED WHEN STYLE RULES ARE IN CONFLICT

THREE PRIMARY FACTORS DETERMINE WHICH STYLE RULE WINS OUT
(IN ORDER OF WEIGHT):

IMPORTANCE - USE SPARINGLY IF AT ALL (EMERGENCIES)

```
color: green !important;
```

CSS

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SPECIFICITY - ELEMENT < CLASS < ID < STYLE ATTRIBUTE

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

```
h1.complete { color:red; }
```

```
#finished { color:blue; }
```

```
<h1 style="color:yellow;">TEXT</h1>
```

CSS

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SOURCE ORDER - IF ALL ARE EQUAL, LATER RULE IS USED

```
h1{ color:red }
```

...

...

```
h1{ color:blue }
```

CSS

CASCADE

OH YEAH...INHERITANCE

THE IDEA IS THAT SOME PROPERTY VALUES APPLIED TO AN ELEMENT WILL BE INHERITED BY THAT ELEMENT'S CHILDREN, AND SOME WON'T.

FONT-FAMILY AND FONT STYLINGS: INHERITED

MARGINS, PADDINGS, BORDERS AND MORE: NOT INHERITED

CSS3

CASCADE

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

CSS3

BEST PRACTICE

MOVE YOUR CSS STYLES INTO A COMPLETELY SEPARATE FILE, THEN LINK TO THE FILE IN THE <head> ELEMENT -

```
<head>
  <meta charset="utf-8">
  <title>Home Page</title>
  <link rel="stylesheet" type="text/css" href="styles.css">
  <link rel="icon" type="icon-x" href="favicon.ico">
</head>
```

STYLES.CSS

```
body{
  background-color: red;
}
```

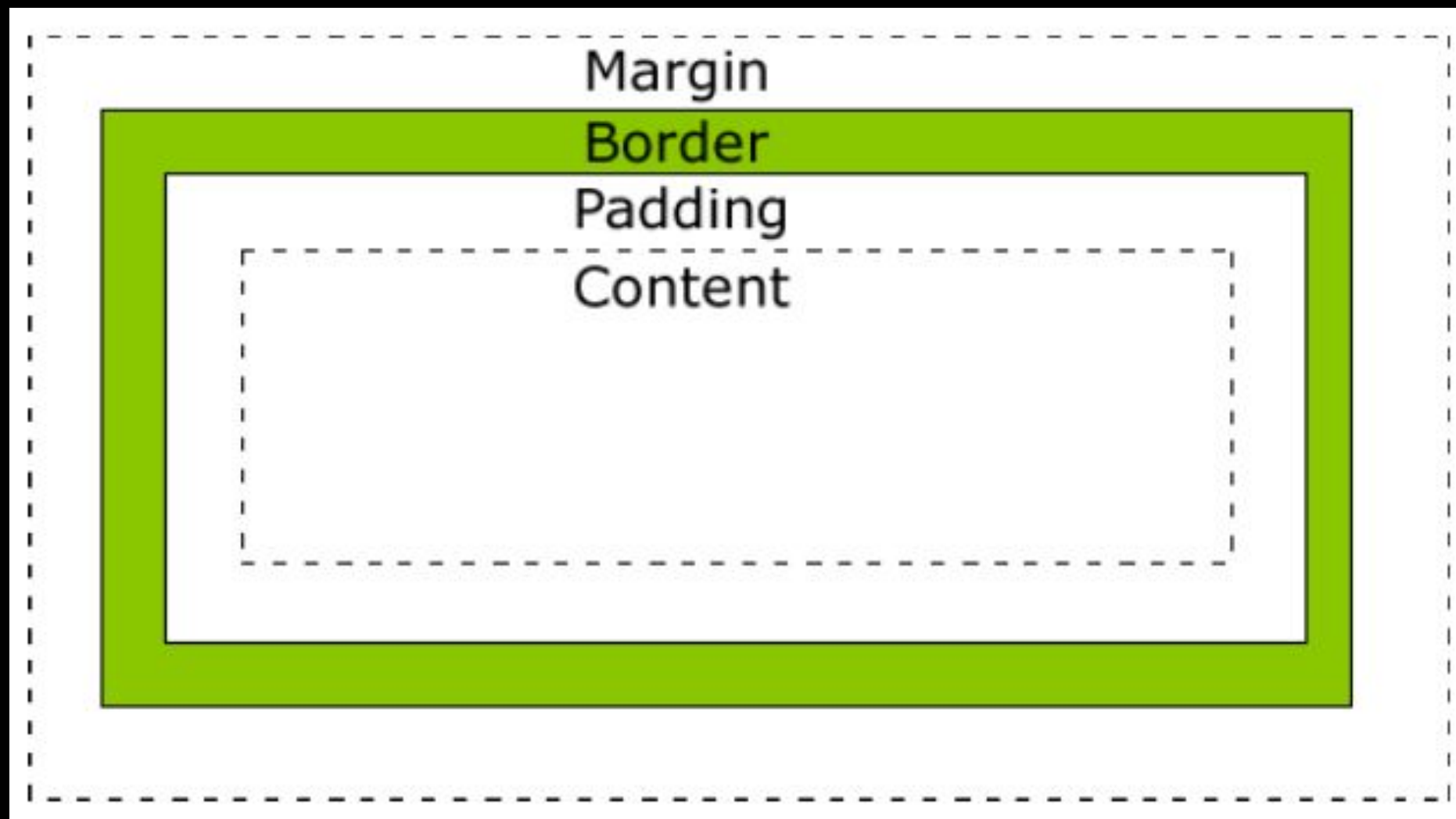
```
h1 {
```

CSS

CSS BOX MODEL

IN A WEB PAGE, EVERY ELEMENT IS RENDERED AS A RECTANGULAR BOX.

THIS BOX INCLUDES THE FOLLOWING, CHANGEABLE PROPERTIES.



CSS

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 container
- `inherit` inherited from the parent element

CSS

CSS UNITS OF MEASUREMENT

ABSOLUTE MEASURE UNIT

px

```
body{  
  width: 1024px;  
  font-size: 16px;  
}
```

RELATIVE MEASURE UNIT

em - relative to font-size of current element (normally 16px, so 1em = 16px;)

% - percentage of containing unit (area) or percentage of font-size of current

vw - viewport width (basically size of window or display, so 100vw = 100% width)

vh - viewport height