

CSS

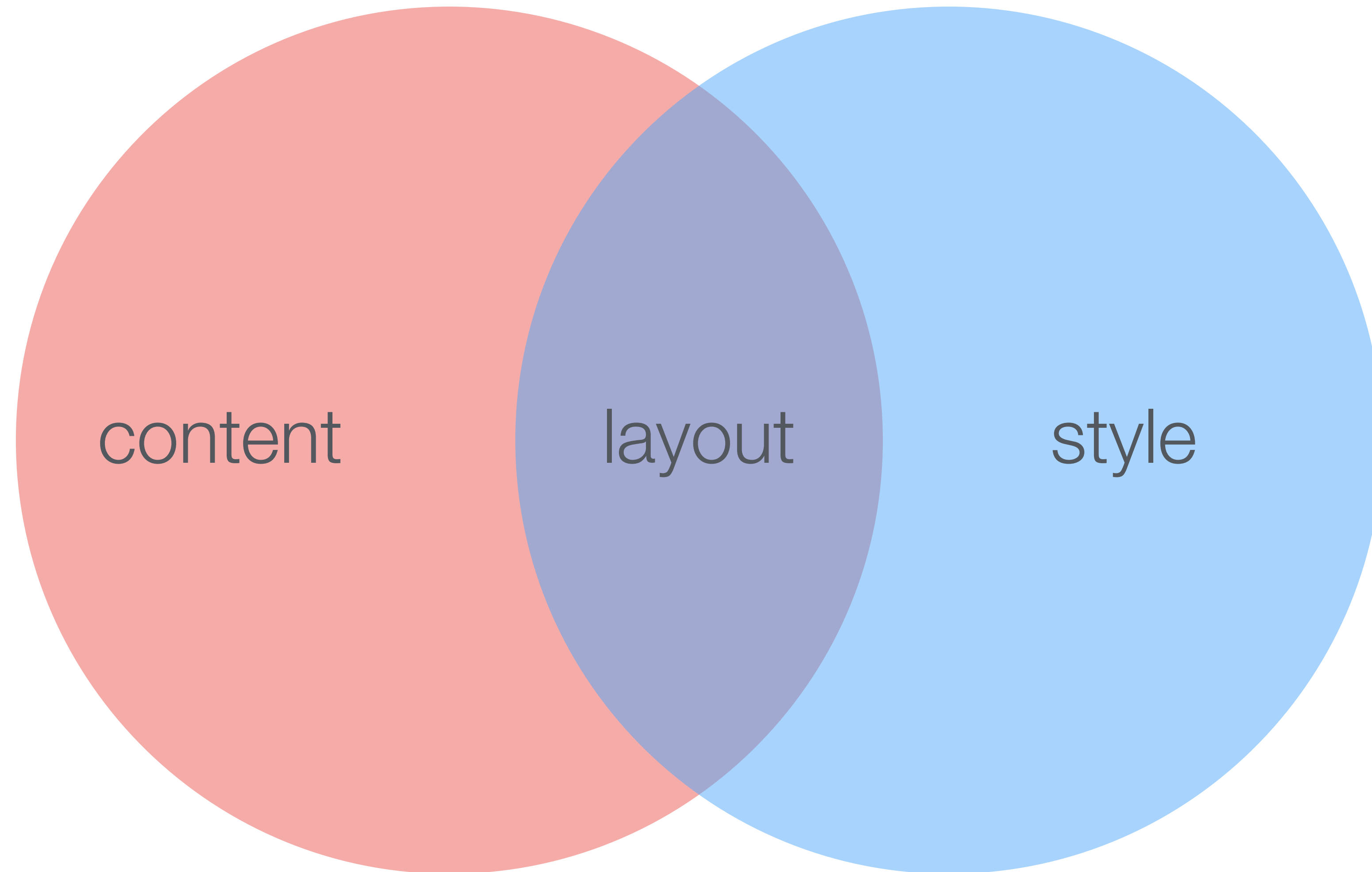
CSS

- ◉ **CSS defines how the content is presented**
 - Determines stuff like font size, colors, animations



HTML

CSS



WITH CSS

CSS

 Languages [Edit](#) 

CSS (Cascading Style Sheets) is a declarative language that controls how webpages look in the browser. The browser applies CSS style declarations to selected elements to display them properly. A style declaration contains the properties and their values, which determine how a webpage looks.

CSS is one of the three core Web technologies, along with [HTML](#) and [JavaScript](#). CSS usually styles [HTML elements](#), but can be also used with other markup languages like [SVG](#) or [XML](#).

A CSS rule is a set of properties associated with a selector. Here is an example that makes every HTML paragraph yellow against a black background:

```
1 /* The selector "p" indicate that all paragraphs in the document will be affected by that rule */
2 p {
3     /* The "color" property defines the text color, in this case yellow. */
4     color: yellow;
5
6     /* The "background-color" property defines the background color, in this case black. */
7     background-color: black
8 }
```

"Cascading" refers to the rules that govern how selectors are prioritized to change a page's appearance. This is a very important feature, since a complex website can have thousands of CSS rules.

Learn more

General knowledge

WITHOUT CSS

CSS

Jump to:

- 1. [Learn more](#)

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Learn more

General knowledge

- [Learn CSS](#)
- [CSS](#) on Wikipedia

Technical reference

- [The CSS documentation on MDN](#)
- [The CSS Working Group current work](#)

Learn about CSS

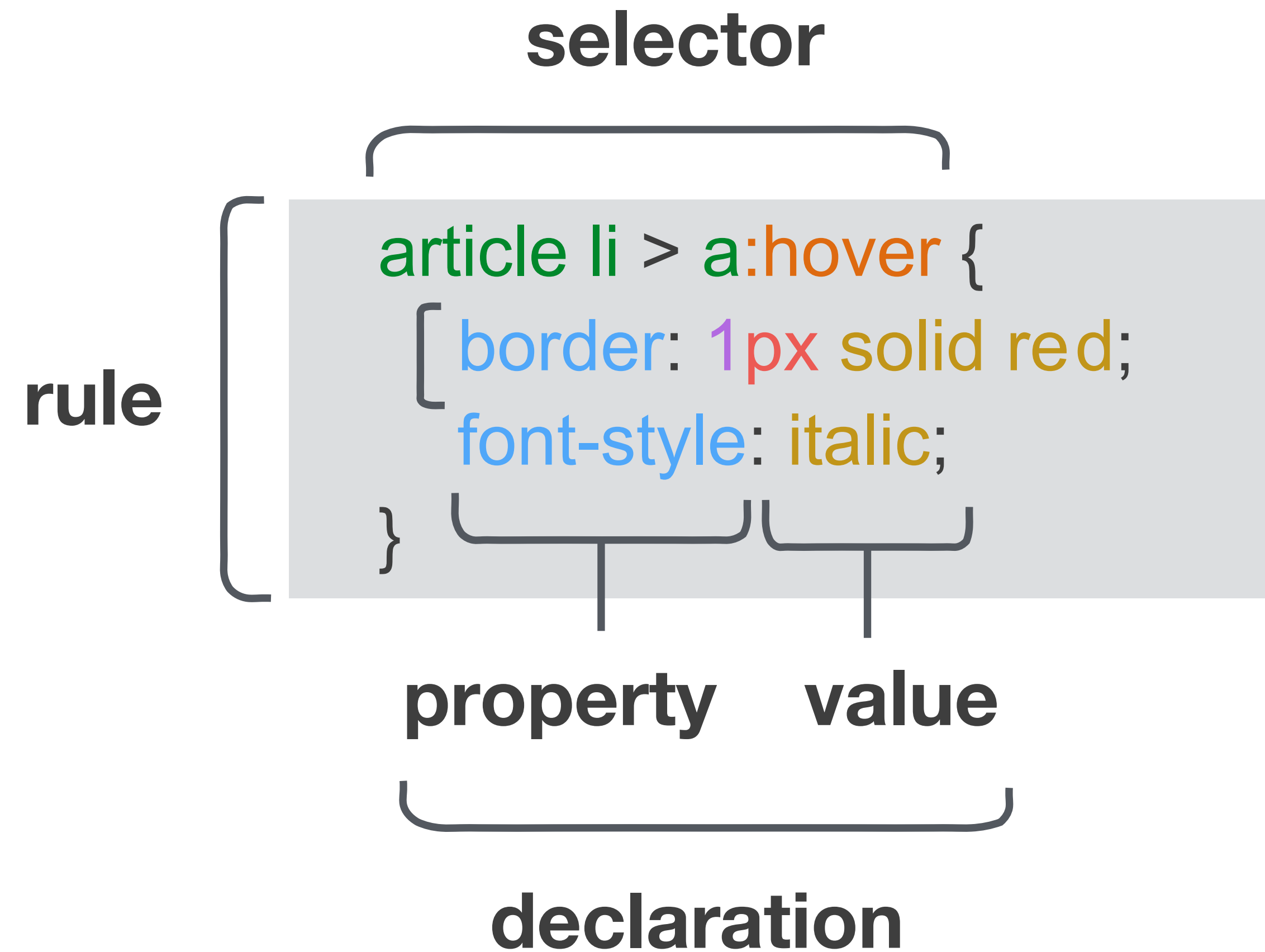
- [The web course on codecademy.com](#)

Document Tags and Contributors

 Tags:

- [CodingScripting](#)
- [CSS](#)
- [Glossary](#)
- [110n:priority](#)
- [Web](#)

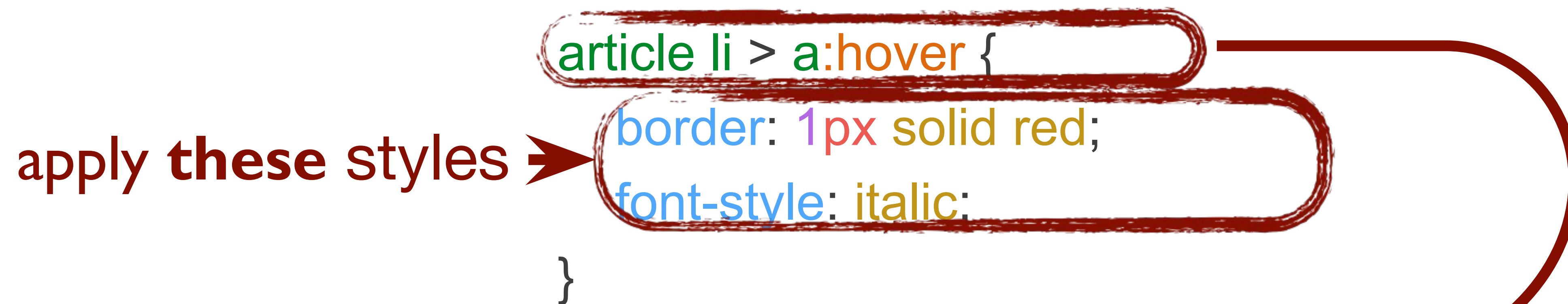
TERMS



RULE EXAMPLE

apply **these** styles ➡

```
article li > a:hover {  
  border: 1px solid red;  
  font-style: italic;  
}
```



to any elements matching **this** selector
even for any future changes

declarative!

SELECTORS

tag	input
class	.btn
id	#upload
attribute	[type="file"]
pseudo-element	::after
pseudo-class	:hover
*	*

COMBINATORS

<code>tag.class</code>	element with BOTH <code>tag</code> AND <code>.class</code>
<code>tag .class</code>	element with <code>.class</code> whose ANCESTOR matches <code>tag</code>
<code>tag,.class</code>	element with EITHER <code>tag</code> OR <code>.class</code>
<code>tag>.class</code>	element with <code>.class</code> whose PARENT matches <code>tag</code>

CASCADING STYLE SHEETS

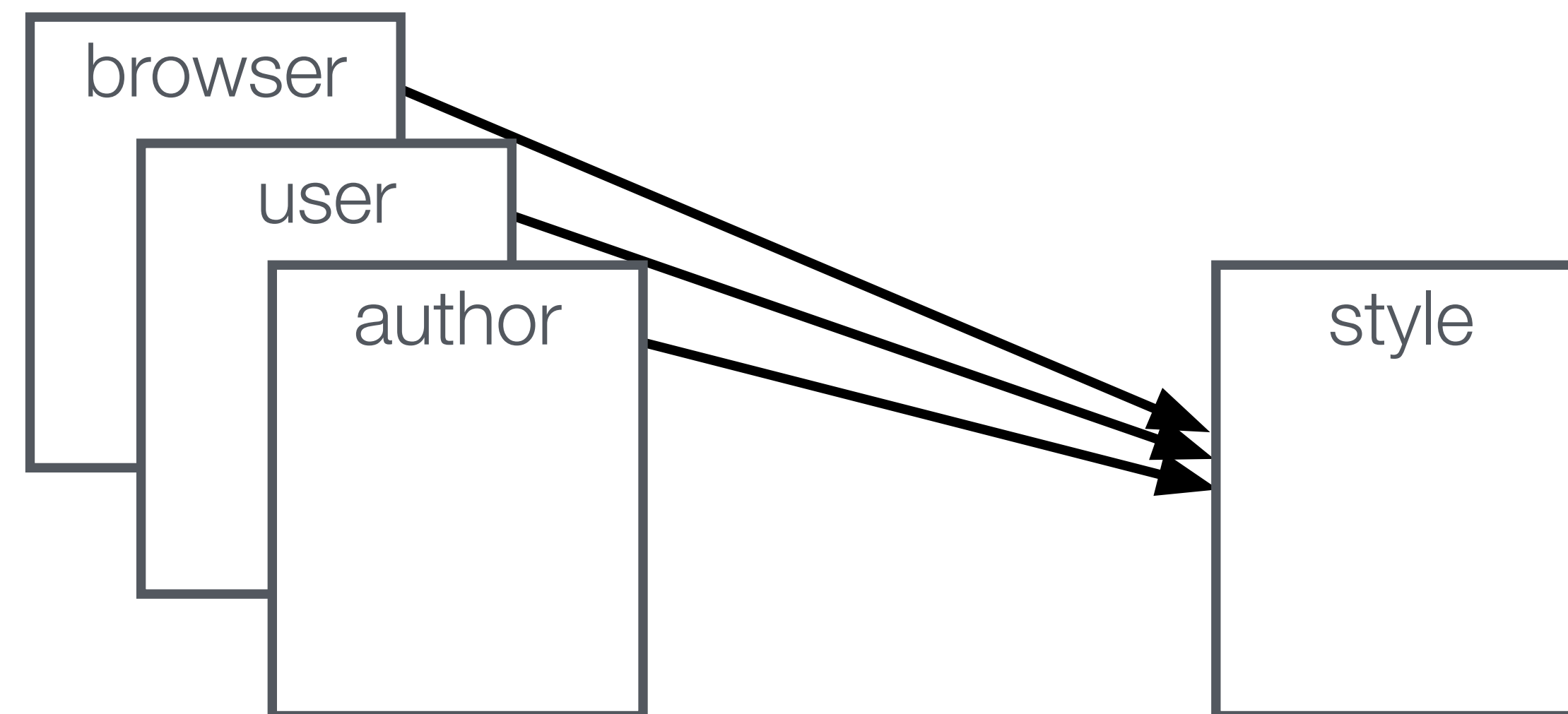
CASCADING

In ~1994... *CSS had one feature that distinguished it from all the [competing style languages]: it took into account that on the Web the style of a document couldn't be designed by either the author or the reader on their own, but that their wishes had to be combined, or "cascaded," in some way.*

CASCADING STYLE SHEETS, DESIGNING FOR THE WEB, BY HÅKON WIUM LIE AND BERT BOS (1999) - CHAPTER 20

CASCADING

An element's style is a merge of every rule whose selector matches



index.html

```
<head>
  <link rel="stylesheet" href="styles-B.css" />
  <link rel="stylesheet" href="styles-A.css" />
</head>
<body>
  <ul>
    <li style="background-color:blue;">A</li>
  </ul>
</body>
```

styles-A.css

```
li {
  color: red;
}
```

styles-B.css

```
li {
  font-size: 40px;
}
```

style

```
element.style {
  background-color: blue;
}
li {
  color: red;
} styles-A.css:1
li {
  font-size: 40px;
} styles-B.css:1
li {
  display: list-item;
  text-align: -webkit-match-parent;
} user agent stylesheet
```

view



What happens when declarations conflict?

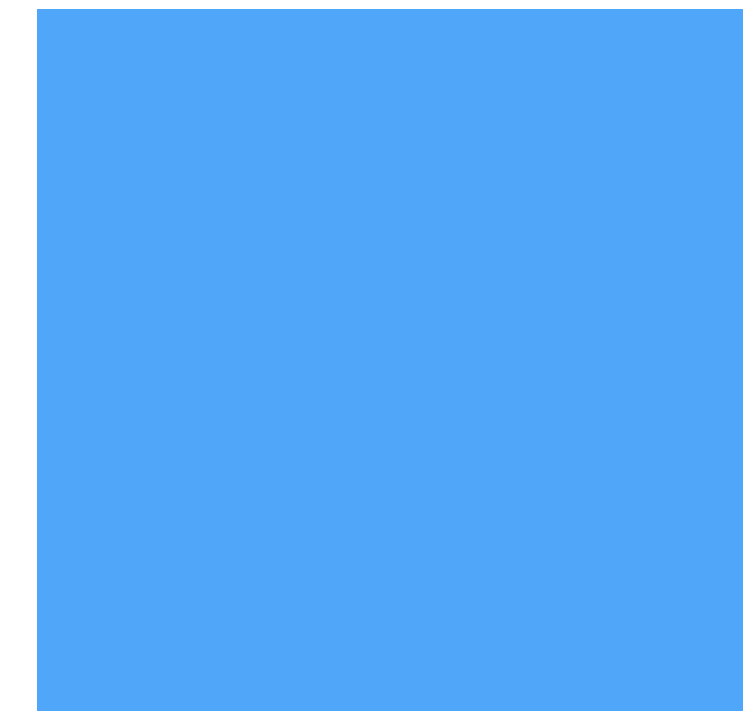


`<div id="thing"></div>`

```
div {  
  background: red;  
}
```



```
#thing {  
  background: blue;  
}
```



<div class="foo"></div>

```
div {  
  background: red;  
}
```

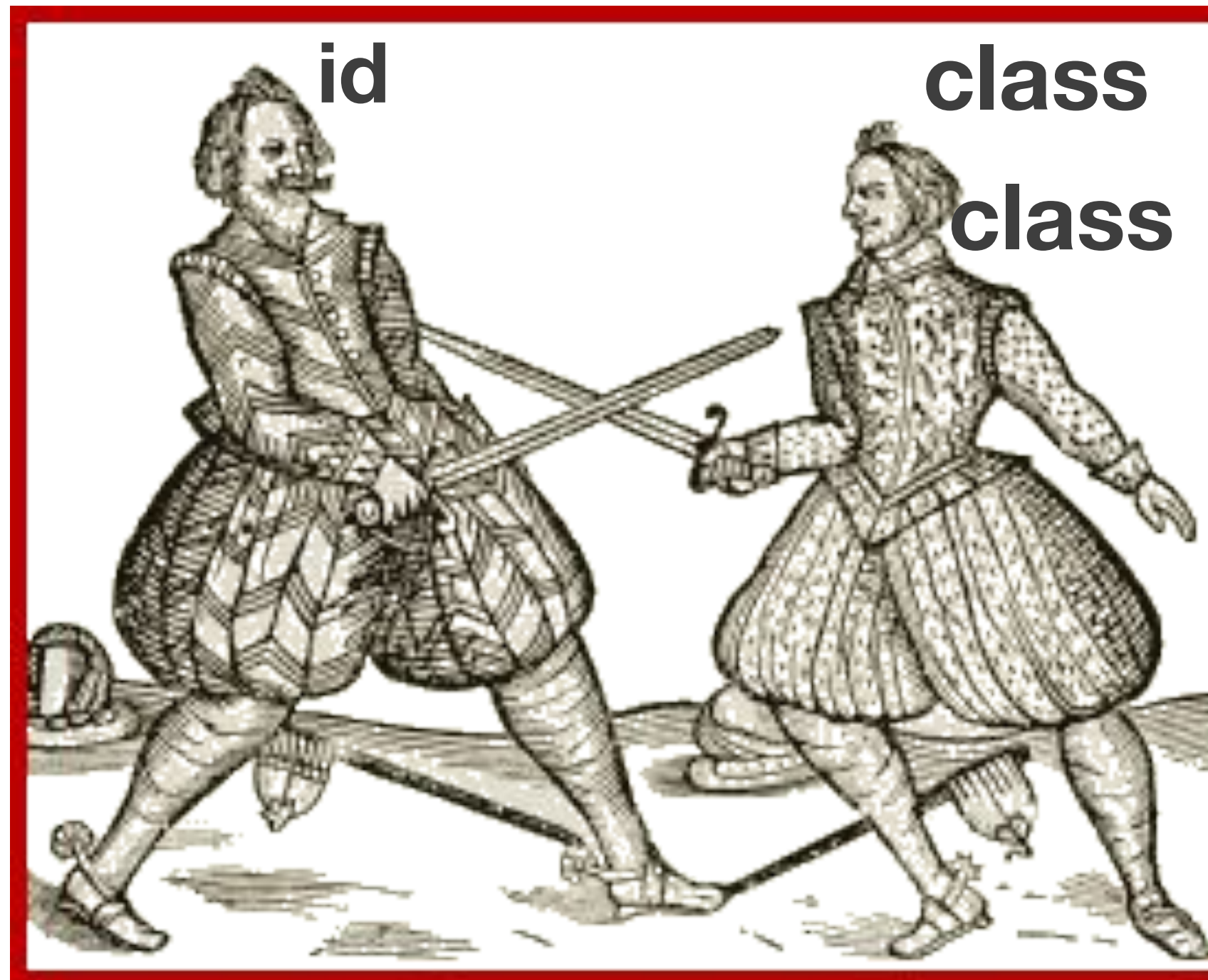


```
.foo {  
  background: green;  
}
```



<div id="thing" class="foo bar"></div>

```
#thing {  
  background: blue;  
}
```



```
.foo.bar {  
  background: green;  
}
```

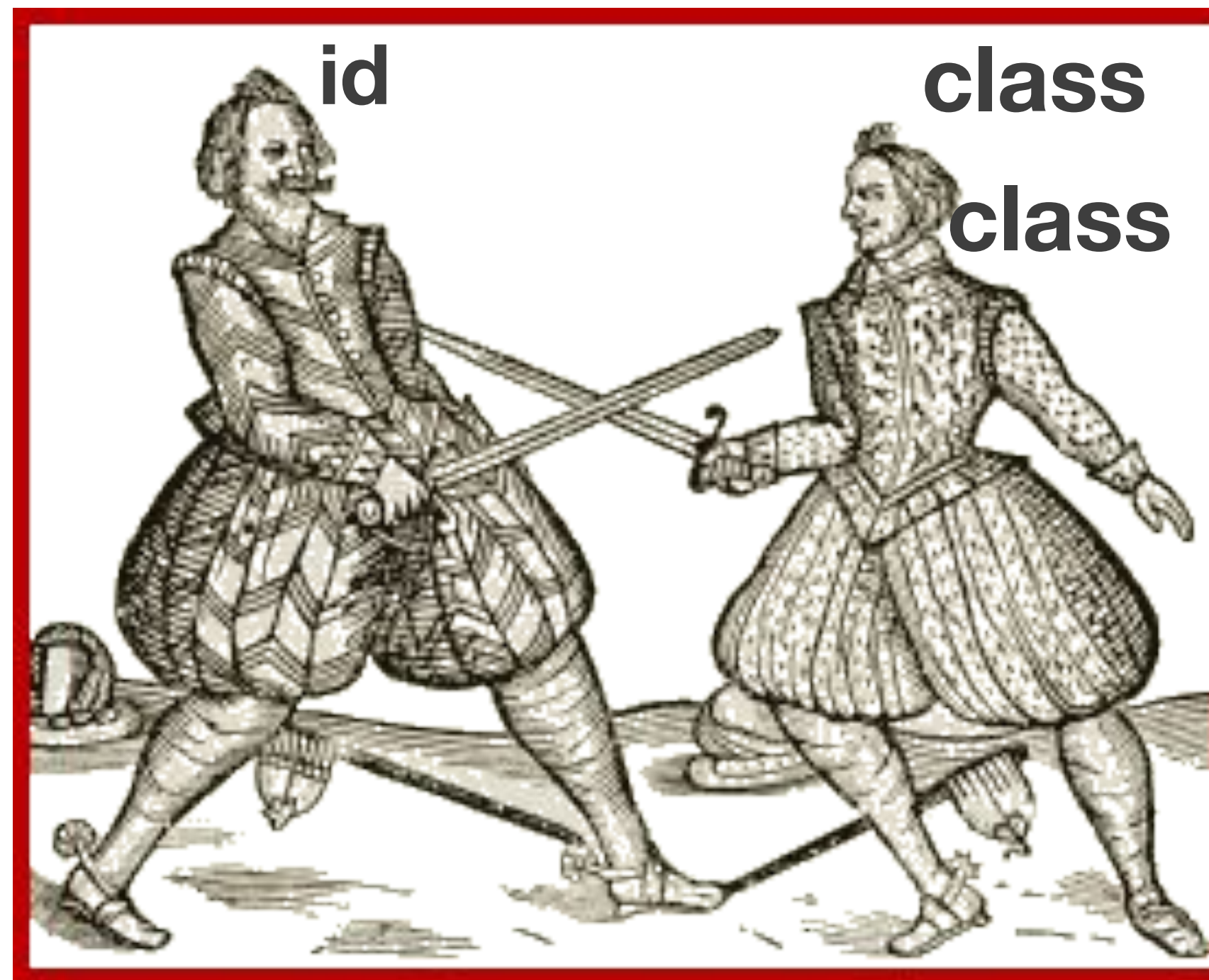
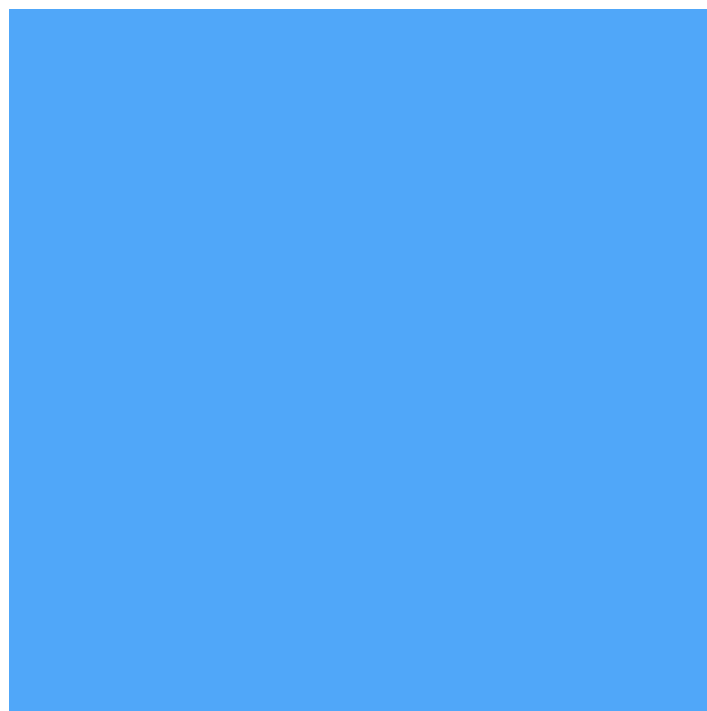



```
<div class="outer">
```

```
  <div id="thing" class="foo" style="background:orange;"></div>
```

```
</div>
```

```
#thing {  
  background: blue;  
}
```



```
.outer .foo {  
  background: green;  
}
```



SPECIFICITY

- ◉ **If there are two or more conflicting rules that point to the same element, there are rules the browser follows to figure out what is the most specific one**
 - That most specific one will be the style the browser goes with
- ◉ **CSS Gotcha:** Check your specificity if some CSS rules are not being applied
- ◉ **Rule of specificity**
 - Inline styling > IDs > Classes, Pseudo-classes, Attributes > Elements, Pseudo-elements
- ◉ **[Specificity Calculator](#):** For when your styling gets out of control

THE BOX MODEL

THE BOX MODEL

- ◉ **A set of rules that define how every webpage on the Internet is rendered**
- ◉ **CSS treats each element in your HTML document as box with different properties that determine where/how it appears on a page**
 - Recall: HTML Elements have two flavors:
 - Block elements
 - Inline elements

SOME TERMINOLOGY OF THE BOX MODEL

- ◉ **Content:** The text, image, or other media content in the element
- ◉ **Padding:** The space between the box's content and its border
- ◉ **Border:** The line between the box's padding and margin
- ◉ **Margin:** The space between the box and surrounding boxes

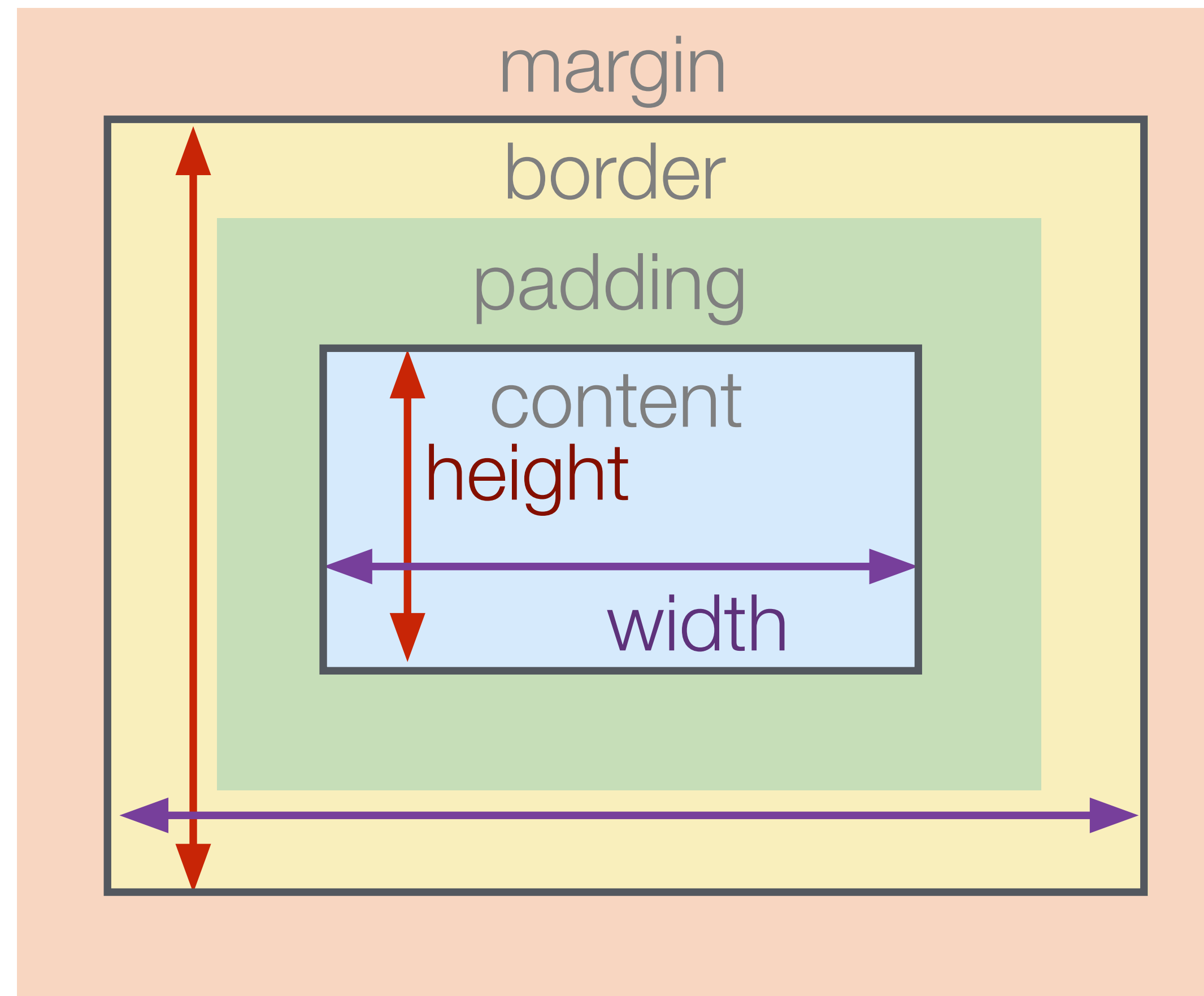
BOX MODEL

border box

```
{  
  box-sizing: border-box;  
}
```

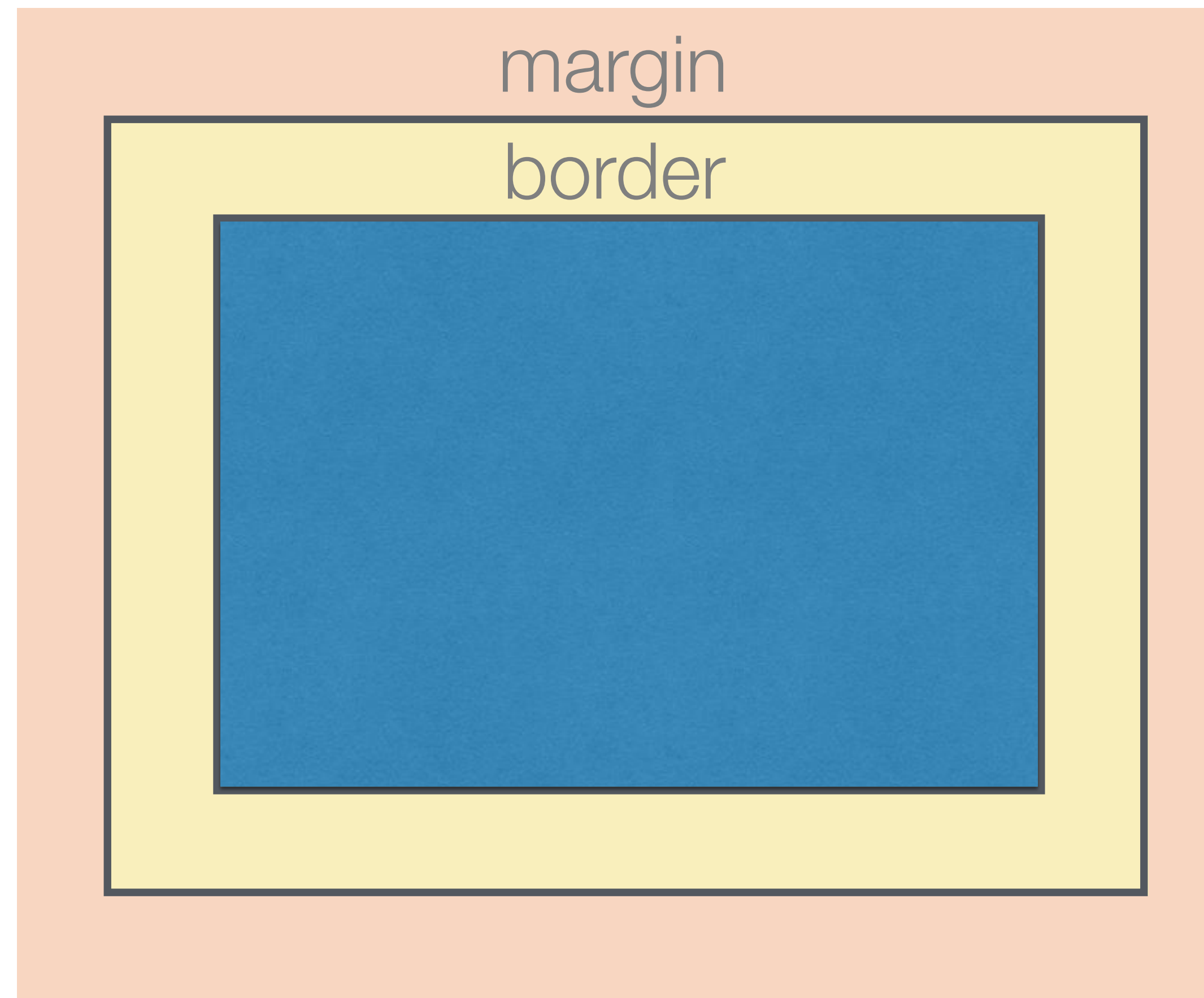
content box

```
{  
  box-sizing: content-box;  
}
```

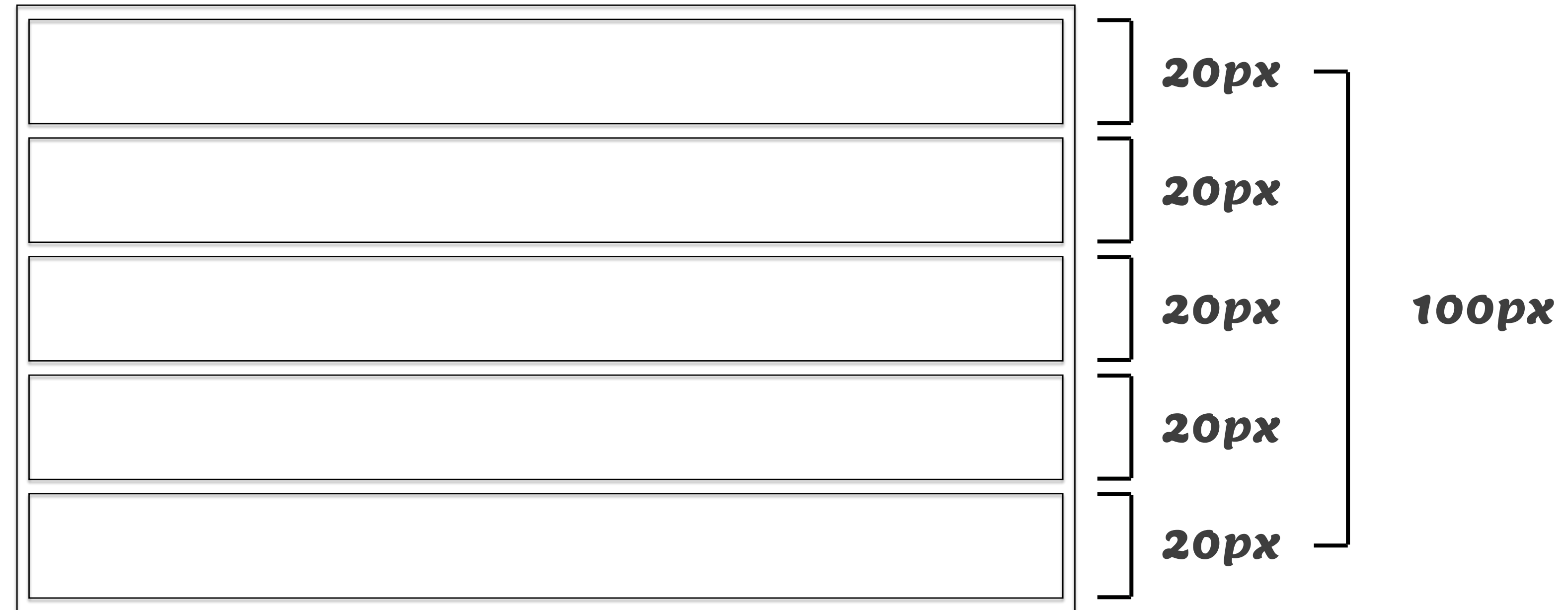


BOX MODEL

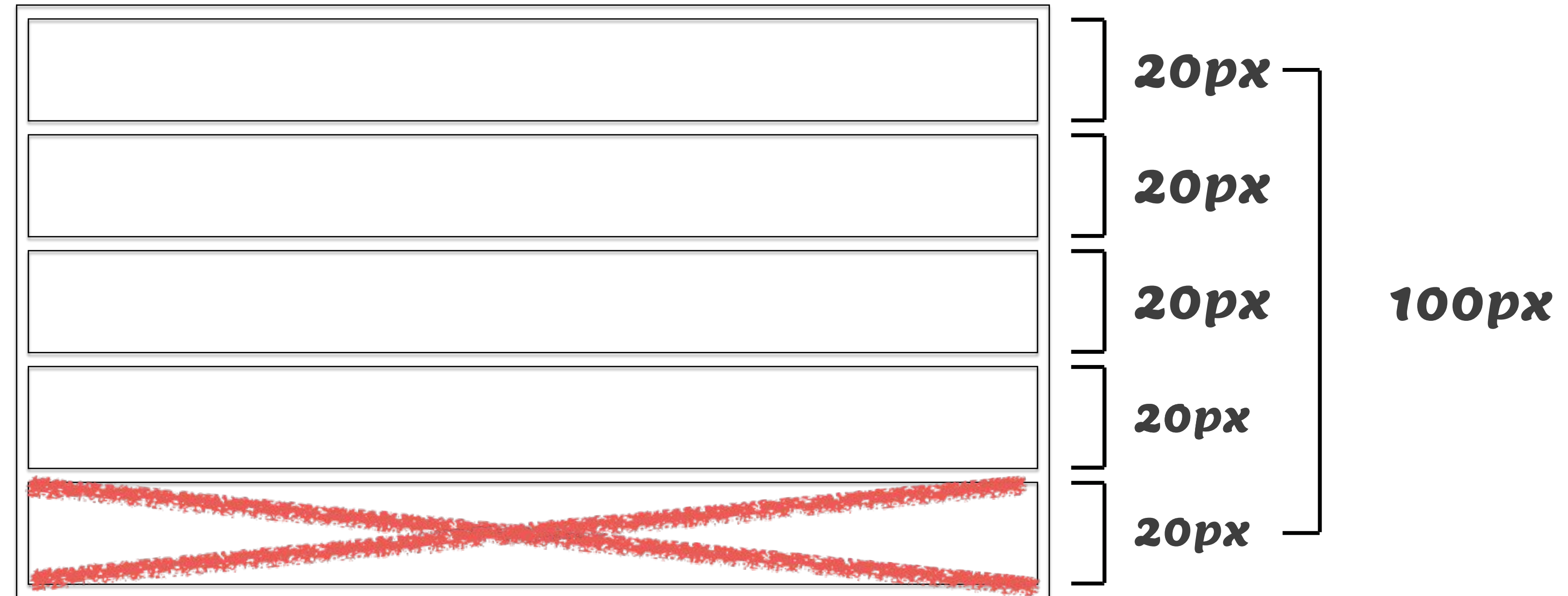
background



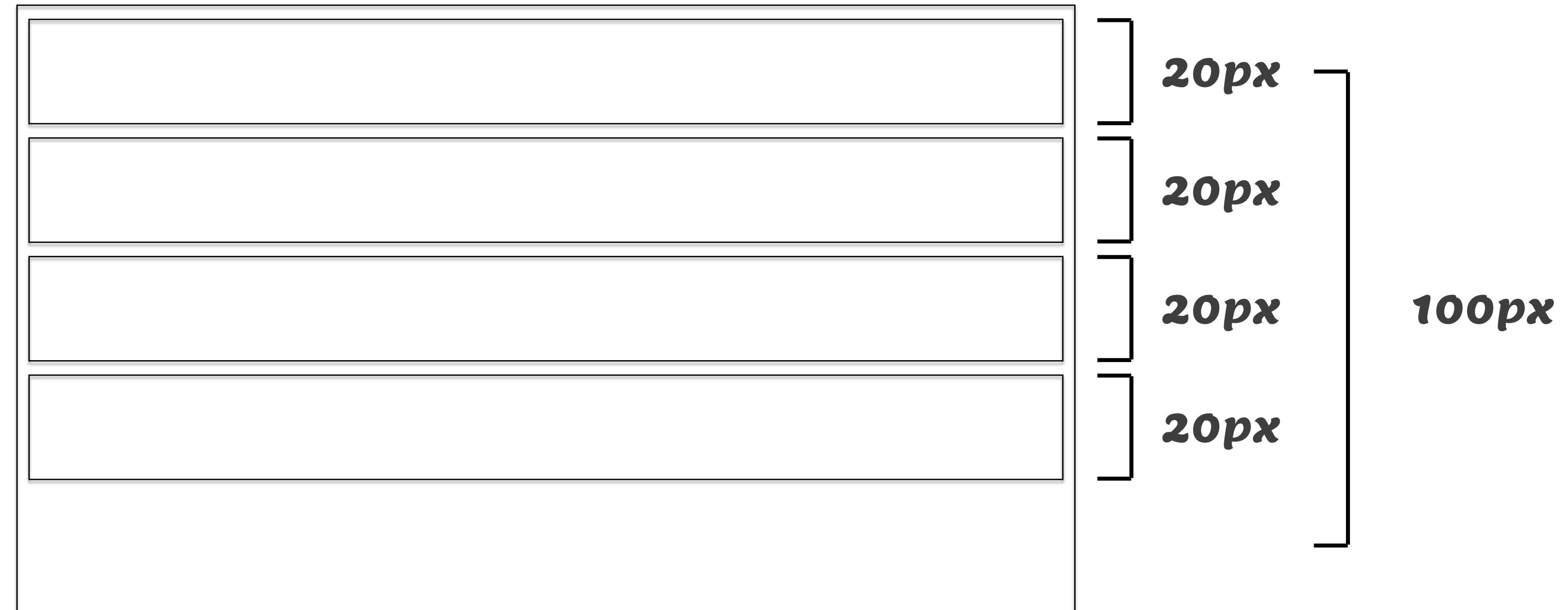
parent.height = Σ children.height



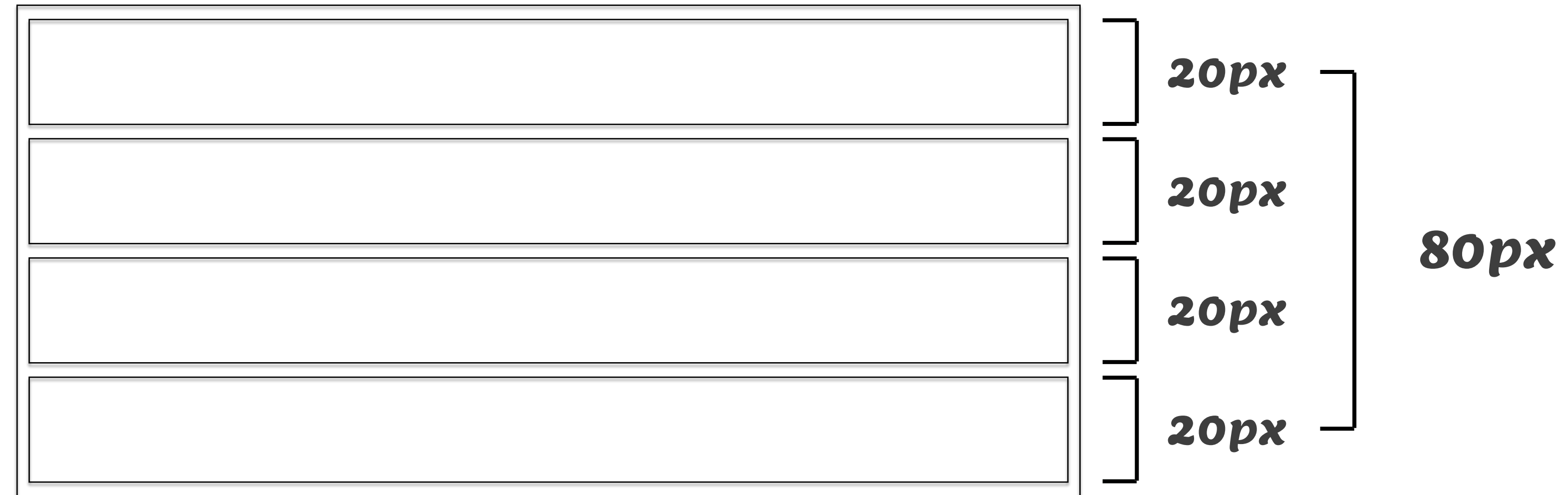
$\text{parent.height} = \sum \text{children.height}$



parent.height = Σ children.height

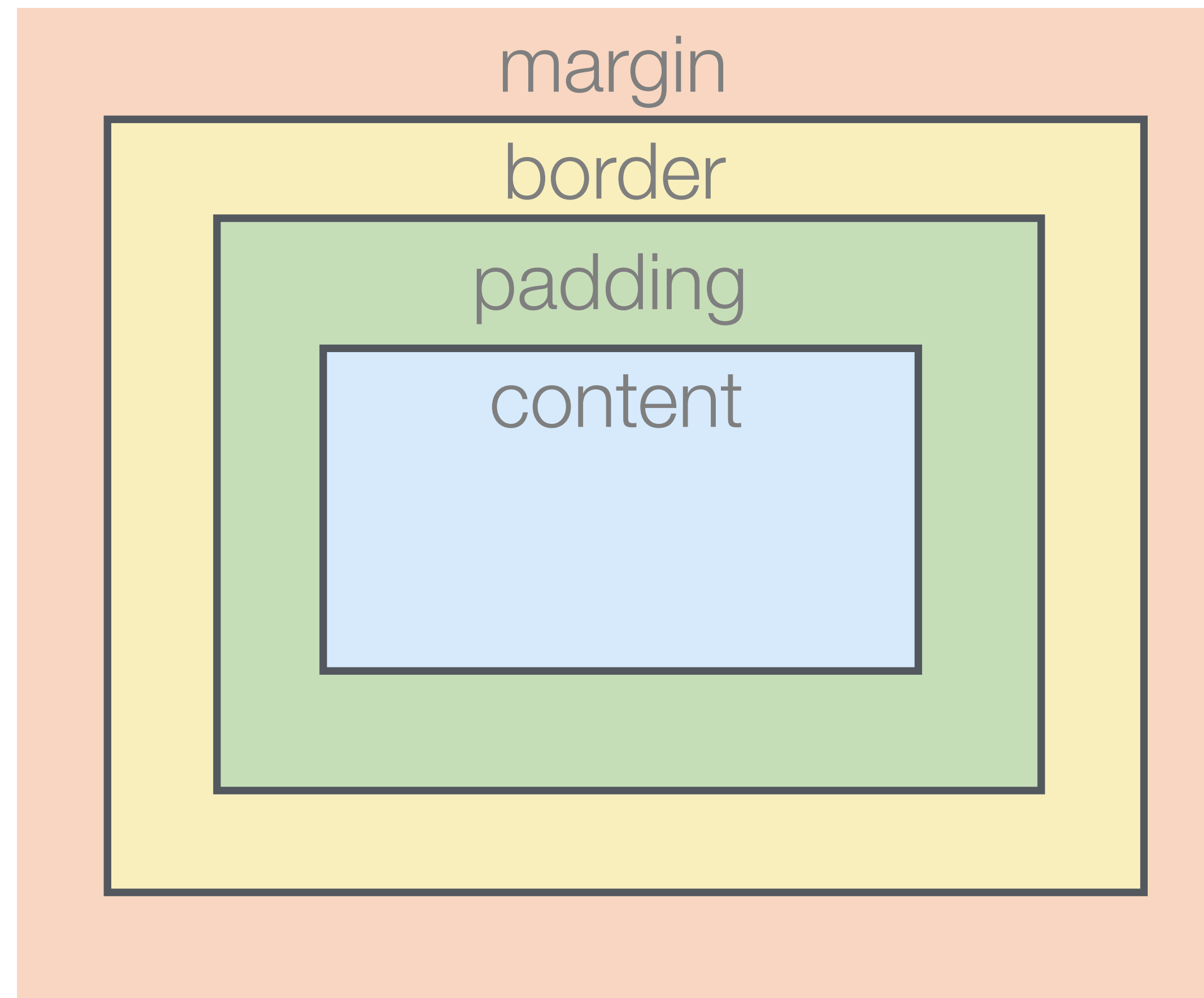


`parent.height = Σ children.height`



`parent.height = Σ children.height`

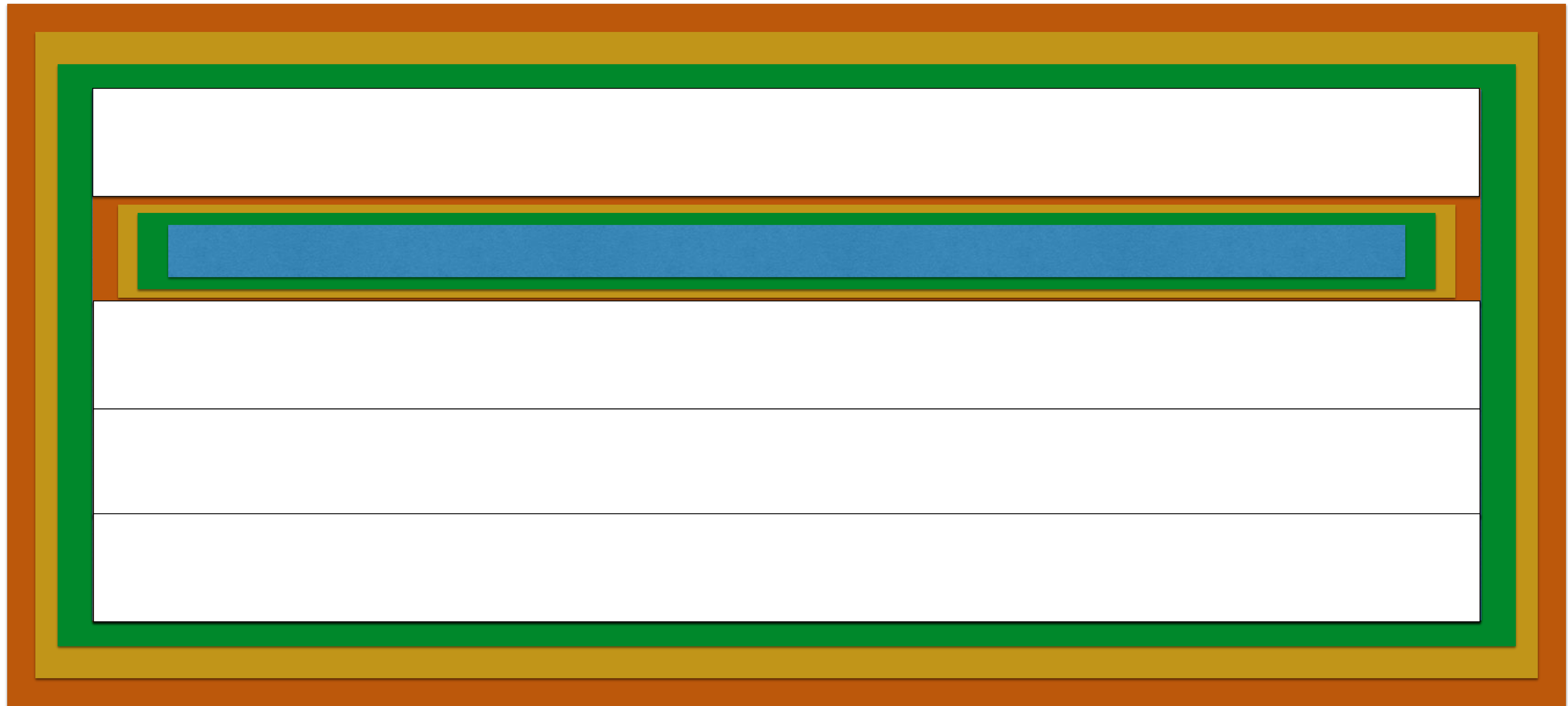
BOX MODEL



The diagram illustrates the layers of a box, showing a series of nested rectangles. The layers are colored as follows:

- Outermost layer: Orange
- Second layer: Gold
- Third layer: Green
- Innermost layer: Blue

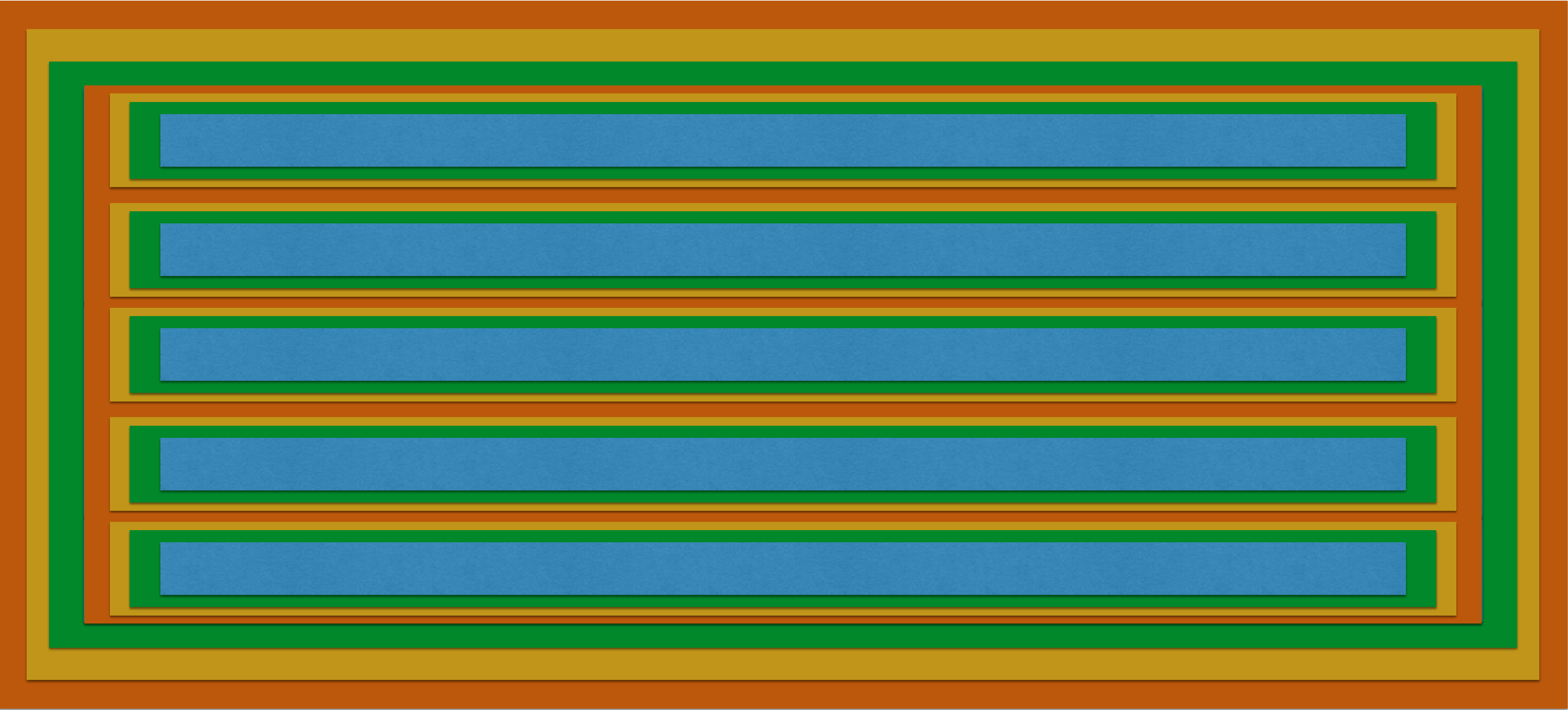
The blue layer is divided into four horizontal sections, while the other layers are solid colors.













RESPONSIVE





RESPONSIVE DESIGN

- ◉ Website is fully functional for all screen sizes, resolutions and orientations
- ◉ Born out of necessity (see previous slide)
- ◉ Developers and designers should cater to the user's environment, not the other way around





MEDIA QUERIES

- ◉ Uses @media rule to conditionally apply CSS properties

MEDIA QUERY

“At rule”

Media Type

Media Feature

```
@media only screen and (max-width: 400px) {  
  body {  
    background-color: blue;  
  }  
}
```

If the browser window is 400px or smaller, the background color will be blue

Developer Tools

DOM Lecture Outline - drav x

JS Bin - Collaborative Java x

Google Analytics x

Issues · FullstackAcademy/ x

GitHub, Inc. [US] https://github.com/FullstackAcademy/newlearn/issues?utf8=✓&q=is%3Aissue+is%3Aopen+comments

David

This repository

Search

Pull requests

Issues

Gist

+

▼

👤

▼

FullstackAcademy / newlearn

PRIVATE

Unwatch ▼

24

Star 11

Fork 5

Issues

Pull requests

Labels

Milestones

Filters ▼

is:issue is:open comments

New issue

<>

Clear current search query, filters, and sorts

Elements

Network

Sources

Timeline

Profiles

Resources

Audits

Console

<!DOCTYPE html>

<html lang="en" class=" is-copy-enabled">

><head prefix="og: http://ogp.me/ns# fb: http://ogp.me/ns/fb# object: http://ogp.me/ns/object# article: http://ogp.me/ns/article# profile: http://ogp.me/ns/profile#">...</head>

▼<body class="logged_in env-production macintosh vis-private">

Skip to content

><div class="header header-logged-in true" role="banner">...</div>

><div id="start-of-content" class="accessibility-aid"></div>

><div id="js-flash-container">

</div>

><div role="main" class="main-content">...</div>

><div class="container">...</div>

><div id="ajax-error-message" class="flash flash-error">...</div>

><script crossorigin="anonymous" integrity="sha256-Ln/D0mSiC0E4PehbgVN5vsz/VsH5d3FFFdTKx4I07z4=" src="https://assets-cdn.github.com/assets/frameworks-2e7fc3d264a208e1383de85b815379beccff56c1f977714515d4cac7820eef3e.js"></script>

><script async="async" crossorigin="anonymous" integrity="sha256-0ZauYVQU9+hAsJTbTqtuSyWQK5rrZ0UHUHJlozDGwA=" src="https://assets-cdn.github.com/assets/github-d196ae615414f7e840b094db4eab6e4b25902b9aeb674507521265a330c6c1d0.js"></script>

><div class="js-stale-session-flash stale-session-flash flash flash-warn flash-banner hidden">...</div>

><div class="facebox" id="facebox" style="display:none;">...</div>

><script id="hiddenSubmitdiv" style="display: none;"></script>

><script>...</script>

</body>

</html>

Styles

Computed

Event Listeners

DOM Breakpoints

Properties

Filter

+ ↕ 📌

element.style {

}

media="all" issues

body { github-f8ab60c8...936c414b.css:1

word-wrap: break-word;

}

media="all" issues

body { github-f8ab60c8...936c414b.css:1

font: 13px/1.4 Helvetica, arial, nimbussansl, liberationans, liberationans, clean, sans-serif, "Segoe UI Emoji", "Segoe UI Symbol";

color: #333;

background-color: #fff;

}

media="all" issues

body { github-f8ab60c8...936c414b.css:1

margin: 0;

}

media="all" issues

* { github-f8ab60c8...936c414b.css:1

box-sizing: border-box;

}

body { user agent stylesheet

display: block;

margin: 8px;

}

Inherited from html.is-copy-enabled

media="all" issues

html { github-f8ab60c8...936c414b.css:1

font-family: sans-serif;

html.is-copy-enabled

body.logged_in.env-production.macintosh.vis-private

