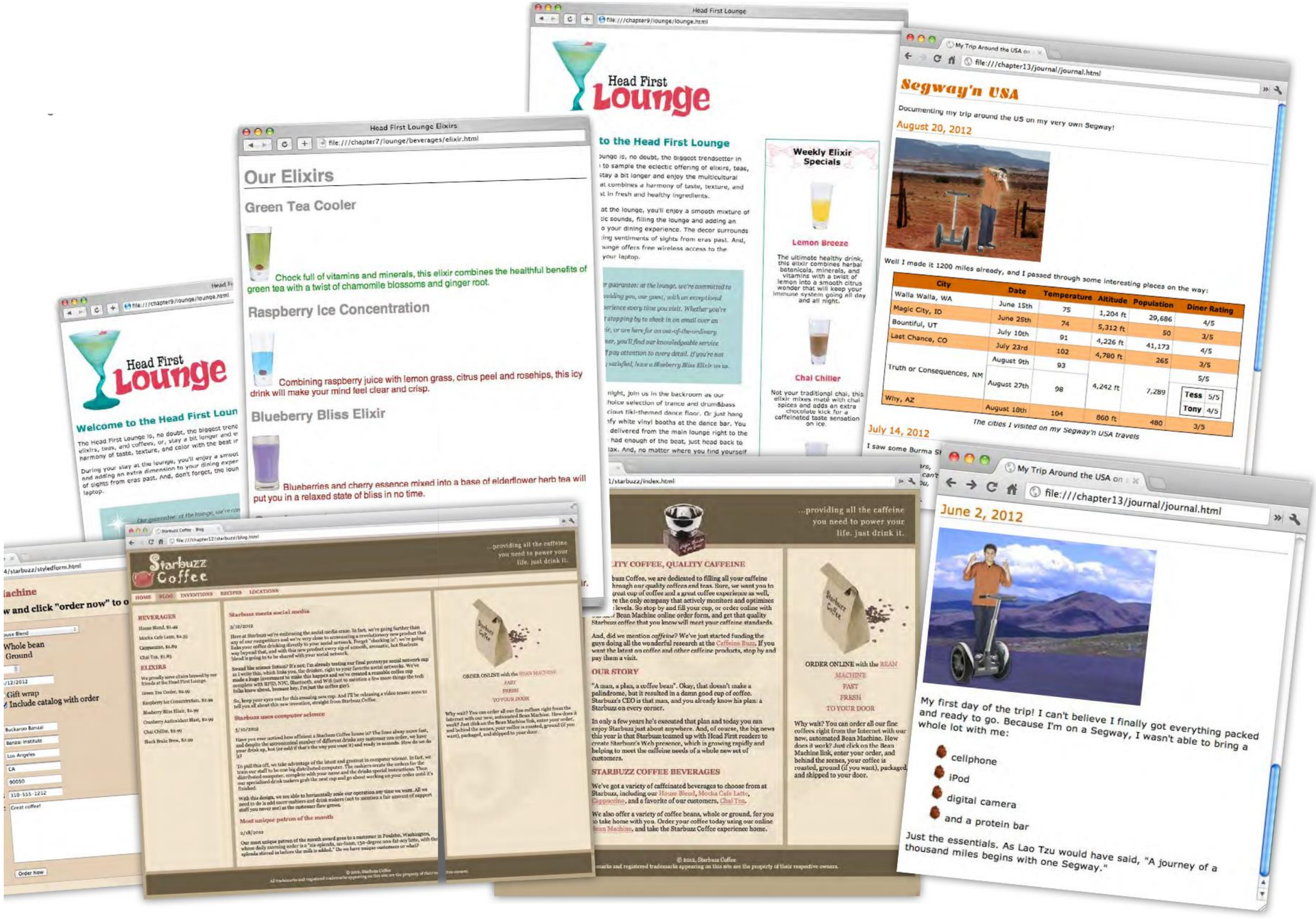
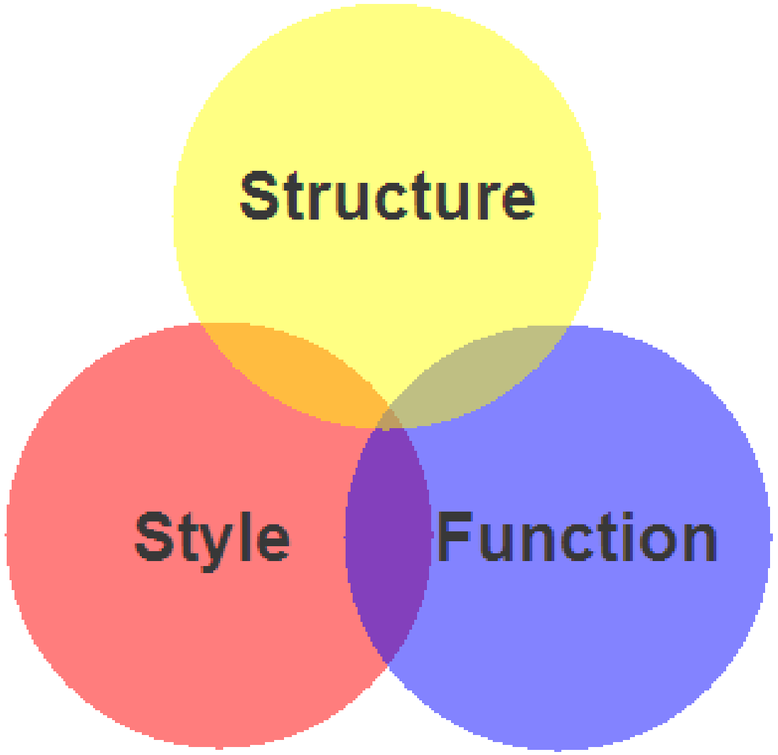
## CSS Basics


markup · presentation · style · rules · selectors · declarations · properties...


Head First Lounge
file:///chapter9/lounge/lounge.html
Head First Lounge
to the Head First Lounge
Weekly Elixir Specials
Lemon Breeze
Chai Chiller
Head First Lounge Elixirs
file:///chapter7/lounge/beverages/elixir.html
Our Elixirs
Green Tea Cooler
Chock full of vitamins and minerals, this elixir combines the healthful benefits of green tea with a twist of chamomile blossoms and ginger root.
Raspberry Ice Concentration
Combining raspberry juice with lemon grass, citrus peel and rosehips, this icy drink will make your mind feel clear and crisp.
Blueberry Bliss Elixir
Blueberries and cherry essence mixed into a base of elderflower herb tea will put you in a relaxed state of bliss in no time.
My Trip Around the USA on
file:///chapter13/journal/journal.html
Segway'n USA
Documenting my trip around the US on my very own Segway!
August 20, 2012
Well I made it 1200 miles already, and I passed through some interesting places on the way:
City
Date
Temperature
Altitude
Population
Diner Rating
Walla Walla, WA
June 15th
75
1,204 ft
29,686
4/5
Magic City, ID
June 25th
74
5,312 ft
50
3/5
Bountiful, UT
July 10th
91
4,226 ft
41,173
4/5
Last Chance, CO
July 23rd
102
4,780 ft
265
3/5
Truth or Consequences, NM
August 9th
93
5/5
Why, AZ
August 27th
98
4,242 ft
7,289
August 18th
104
860 ft
480
3/5
Tess 5/5
Tony 4/5
The cities I visited on my Segway'n USA travels
July 14, 2012
I saw some Burma
Starbuzz Coffee
...providing all the caffeine you need to power your life. just drink it.
Starbuzz meets social media
Starbuzz uses computer science
Most unique patron of the month
ORDER ONLINE with the BEAN MACHINE
FAST
FRESH
TO YOUR DOOR
Whole bean
Ground
Gift wrap
Include catalog with order
Order Now
QUALITY COFFEE, QUALITY CAFFEINE
OUR STORY
STARBUZZ COFFEE BEVERAGES
June 2, 2012
My first day of the trip! I can't believe I finally got everything packed and ready to go. Because I'm on a Segway, I wasn't able to bring a whole lot with me:
cellphone
iPod
digital camera
and a protein bar
Just the essentials. As Lao Tzu would have said, "A journey of a thousand miles begins with one Segway."

# Markup, Style, Function

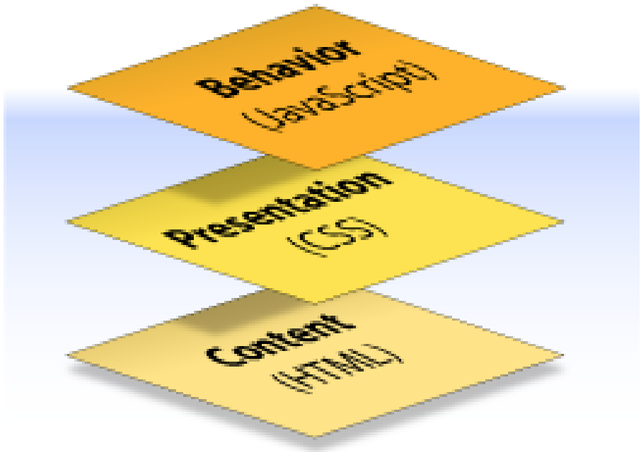
- Markup (XHTML, HTML)
  - Structure
  - Content
- Style (CSS)
  - Style
  - Presentation
  - Appearance
- Function (Javascript)
  - Actions
  - Manipulations



# Content, Presentation, Behavior

- **Content** comprises the information the author wishes to convey to his or her audience, and is embedded within HTML or XHTML markup that defines its structure and semantics.

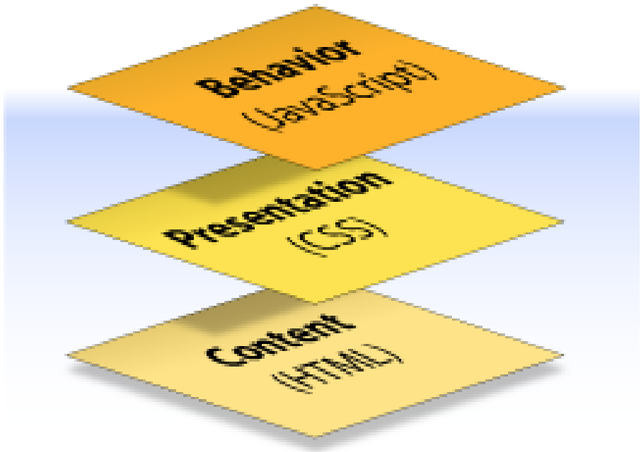
- Most of the content on the Web today is text, but content can also be provided through images, animations, sound, video, and whatever else an author wants to publish



# Content, Presentation, Behavior

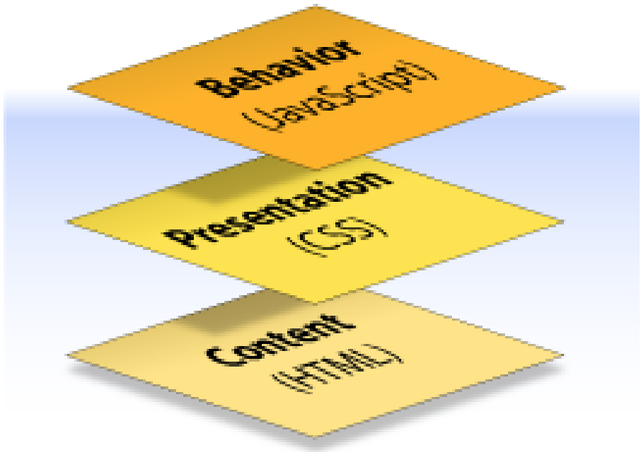
- **Presentation** defines how the content will appear to a human being who accesses the document in one way or another

- The conventional way to view a web page is with a regular web browser, of course, but that’s only one of many possible access methods. For example, content can also be converted to synthetic speech for users who have impaired vision or reading difficulties



# Content, Presentation, Behaviour

- **Behaviour** layer involves real-time user interaction with the document.
- This task is normally handled by JavaScript.
- The interaction can be anything from a trivial validation that ensures a required field is filled in before an order form can be submitted, to sophisticated web applications that work much like ordinary desktop programs.



# Separation of Concerns


- It’s possible to embed all three layers within the same document
  -  and <b> can be used to control the presentation of text, and <hr> will insert a visible rule element

- Sometimes called *Presentational Markup*, these types of elements embed presentation-layer information within the content layer, they negate any advantage we may have gained by keeping the layers separate.

Keeping them separate gives us one valuable advantage:

We can modify or replace any of the layers without having to change the others.

# What is CSS?

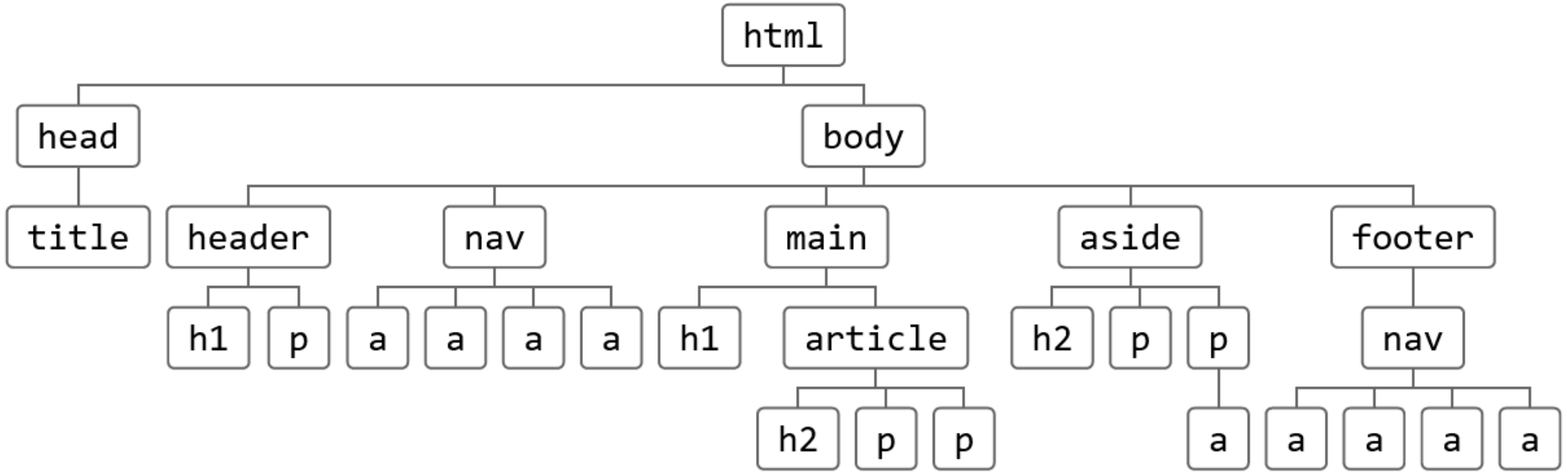

CSS is a language for specifying how documents are presented to users — how they are styled & laid out

Cascading Style Sheets is the recommended way to control the presentation layer in a web document.

The main advantage of CSS over presentational HTML markup is that the styling can be kept entirely separate from the content.

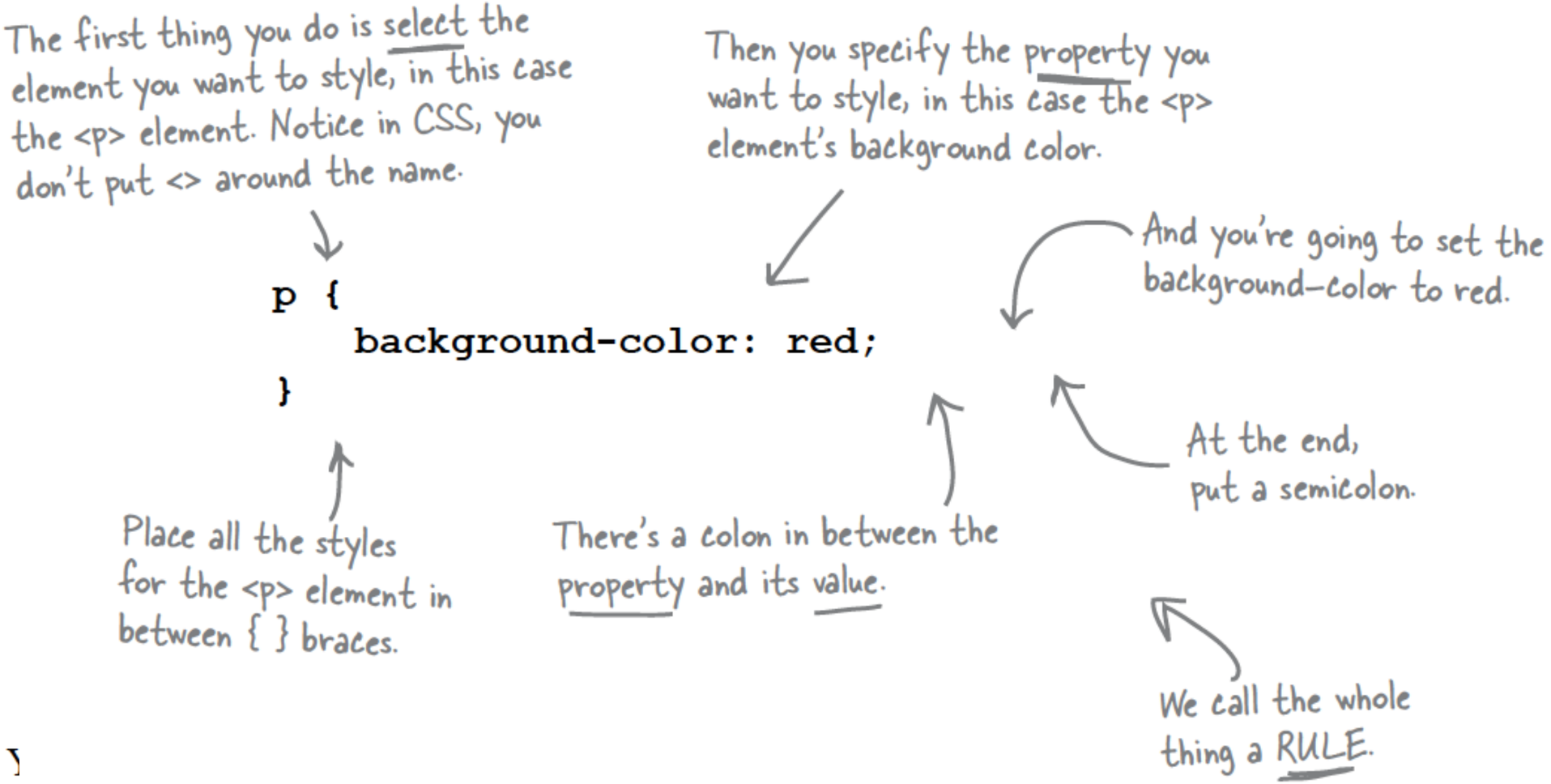
CSS also provides far better control over presentation than do presentational element types in HTML.

# What is Cascading?




The “cascading” in CSS refers to the fact that styling rules “cascade” down from several sources. This means that CSS has an inherent hierarchy and styles of a higher precedence will overwrite rules of a lower precedence.

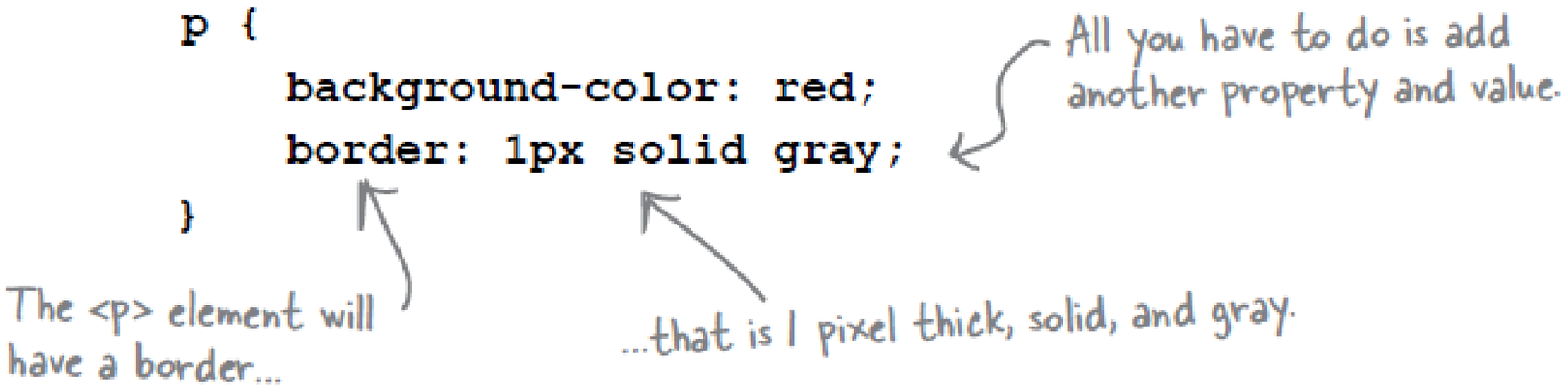
# A CSS Rule


The first thing you do is select the element you want to style, in this case the <p> element. Notice in CSS, you don't put <> around the name.
Then you specify the property you want to style, in this case the <p> element's background color.
And you're going to set the background-color to red.
p {
background-color: red;
}
Place all the styles for the <p> element in between { } braces.
There's a colon in between the property and its value.
At the end, put a semicolon.
We call the whole thing a RULE.

# More Properties...

- You can add as many properties and values as you like in each CSS rule.

- To put a border around your paragraphs:



# Example

## index.html

```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My CSS experiment</title>
    <link rel="stylesheet" href="style.css">
  </head>
  <body>
    <h1>Hello World!</h1>
    <p>This is my first CSS example</p>
  </body>
</html>
```

## style.css

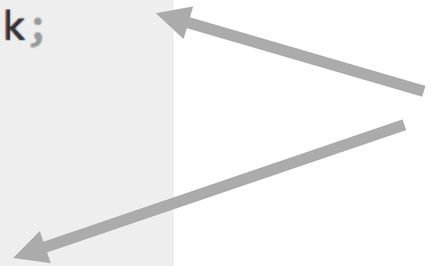
```css
h1 {
  color: blue;
  background-color: yellow;
  border: 1px solid black;
}

p {
  color: red;
}
```


My CSS experiment
file:///Users/chrismills/
Search
Most Visited
MDN
Mozilla general
FirefoxOS ecosy...
Hello World!
This is my first CSS example

```css
h1 {
  color: blue;
  background-color: yellow;
  border: 1px solid black;
}

p {
  color: red;
}
```



Two rules

```css
h1 {
  color: blue;
  background-color: yellow;
  border: 1px solid black;
}
```

The first rule starts with an h1 selector, which means that it will apply its property values to the <h1> element. It contains three properties and their values:

1. The first one sets the text color to blue.
2. The second sets the background color to yellow.
3. The third one puts a border around the header that is 1 pixel wide, solid (not dotted, or dashed, etc.), and colored black.

```
p {
  color: red;
}
```

The second rule starts with a p selector, which means that it will apply its property values to the <p> element.

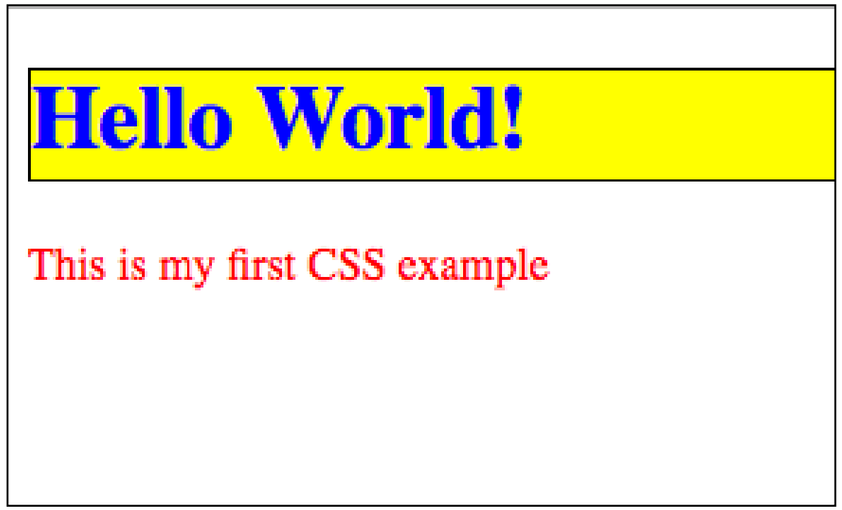
It contains one declaration, which sets the text color to red.

```css
h1 {
  color: blue;
  background-color: yellow;
  border: 1px solid black;
}

p {
  color: red;
}
```

```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My CSS experiment</title>
    <link rel="stylesheet" href="style.css">
  </head>
  <body>
    <h1>Hello World!</h1>
    <p>This is my first CSS example</p>
  </body>
</html>
```

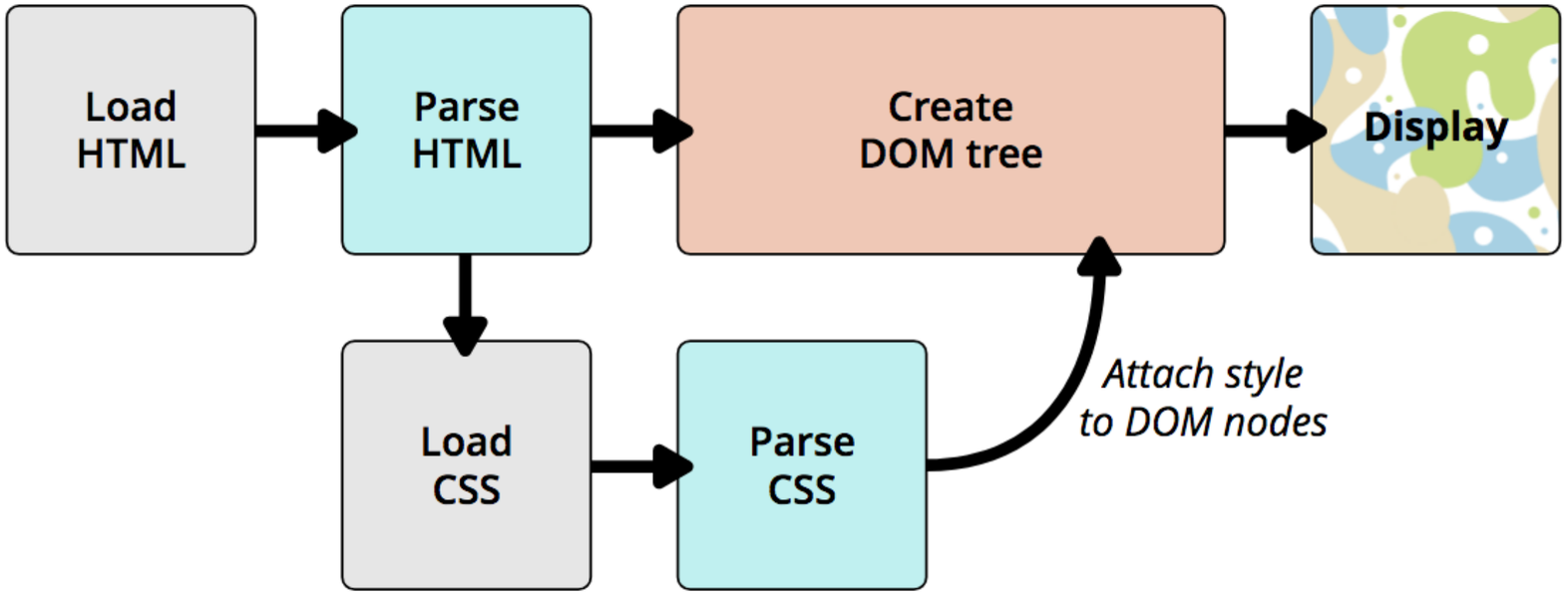
Rules Applied to HTML document




Browser Render

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My CSS experiment</title>
    <link rel="stylesheet" href="style.css">
  </head>
  <body>
    <h1>Hello World!</h1>
    <p>This is my first CSS example</p>
  </body>
</html>
```

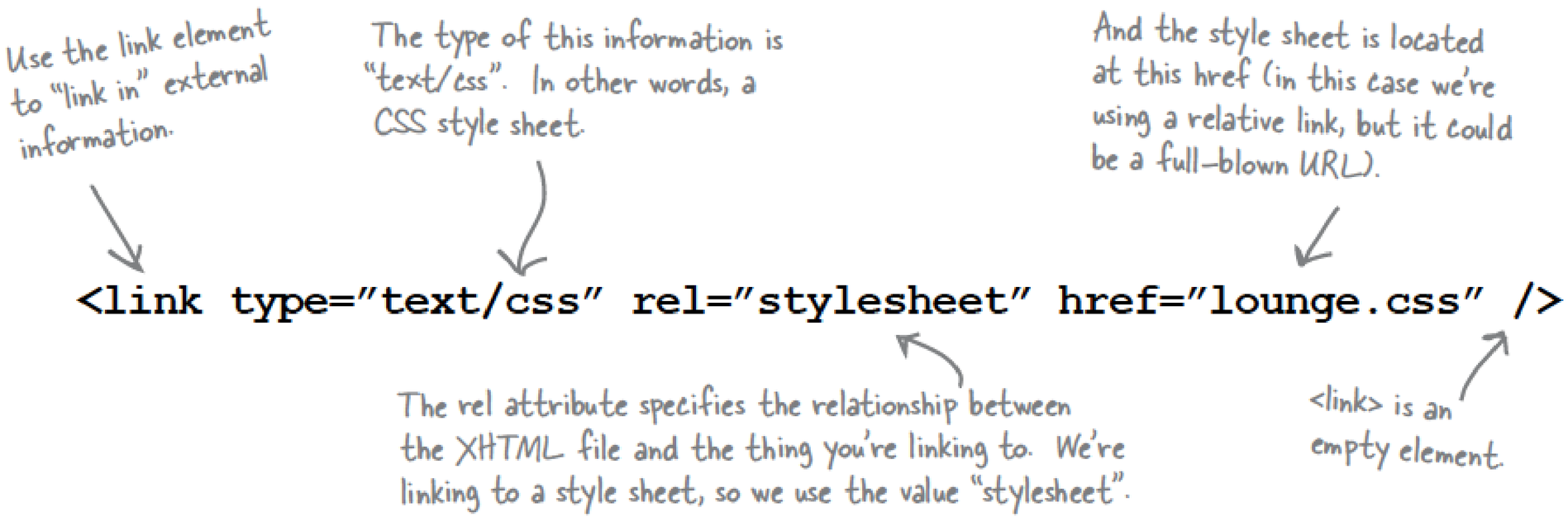
# How CSS Does it Work?




1. The browser converts HTML and CSS into the DOM (Document Object Model). The DOM represents the document in the computer's memory. It combines the document's content with its style.

2. The browser displays the contents of the DOM.

# <link> element



# One Stylesheet - Multiple html pages

Index.html

```
<head>
  <title>App Store</title>
  <link type="text/css" rel="stylesheet" href="style.css" />
</head>
```

movies.html

```
<head>
  <title>Movies</title>
  <link type="text/css" rel="stylesheet" href="style.css" />
</head>
```

music.html

```
<head>
  <title>Music</title>
  <link type="text/css" rel="stylesheet" href="style.css" />
</head>
```

Rules

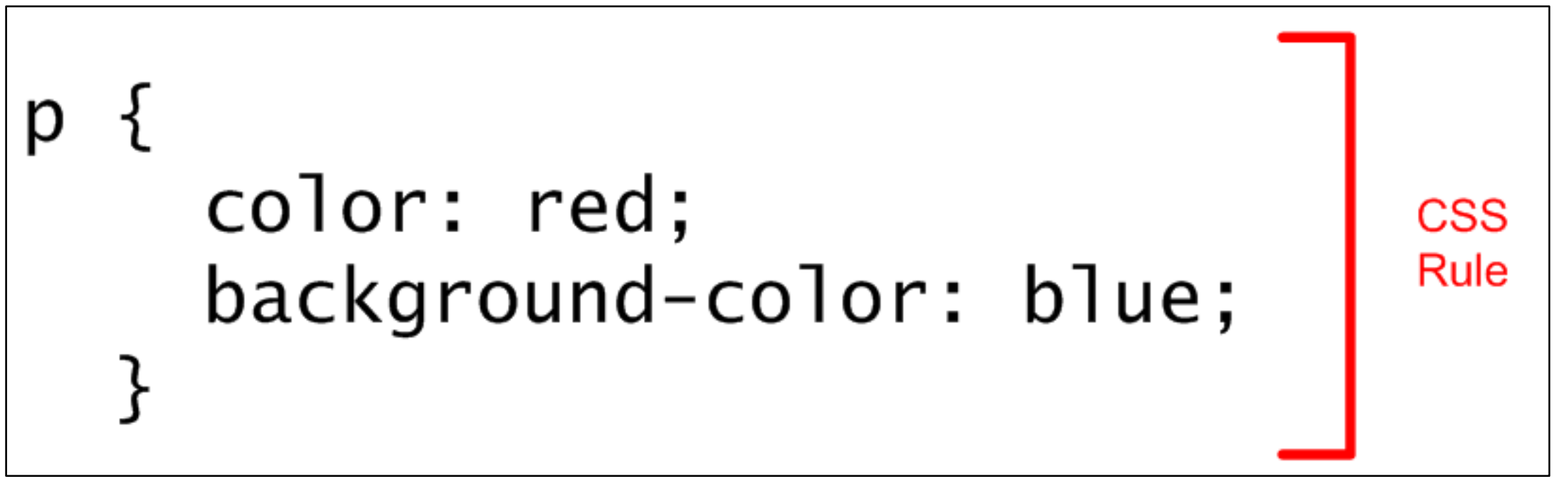
Selectors

Declarations

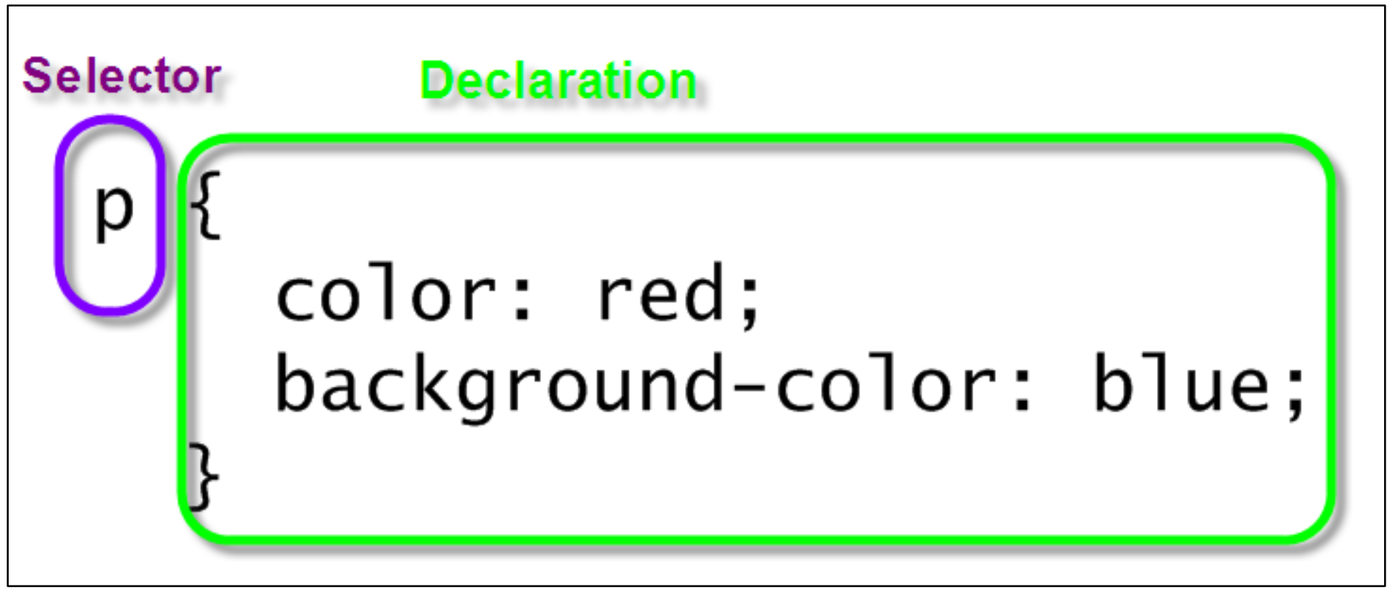
Properties

Values

# CSS Rule



# Selector and Declarations



# Properties & Values