

# Web Development

Bsc Applied, Forensics, Entertainment Systems, IOT

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# CSS - Part 1

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# Agenda

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## Use of CSS for styling:

- Rules, Selectors, Declarations, Properties, Values
- CSS Binding

Kirs  
lelixir.html

ir combines the healthful benefits of  
ginger root.

ss, citrus peel and rosehips, this icy

to a base of elderflower herb tea will

...providing all the caffeine  
you need to power your  
life. Just drink it.

ORDER ONLINE with the **BEAN MACHINE**

WHY? You can order all our fine coffee right from the  
Internet with our new, patented Bean Machine. How does it  
work? Just click on the Bean Machine link, enter your address,  
and behind the scenes, your coffee is carefully ground (if you  
want), packaged, and shipped to your door.

# Head First Lounge

to the Head First Lounge

Lounge is, no doubt, the biggest trendsetter in  
to sample the eclectic offering of elixirs, teas,  
stay a bit longer and enjoy the multicultural  
it combines a harmony of taste, texture, and  
it in fresh and healthy ingredients.

at the lounge, you'll enjoy a smooth mixture of  
to sounds, filling the lounge and adding an  
to your dining experience. The decor surround-  
ing environments of sights from areas past. And,  
range offers free wireless access to the  
your laptop.

reparation of the lounge, we've committed to  
adding you, our guest, with an exceptional  
service every time you visit. Whether you're  
stopping by to check in at work or over an  
to, or are here for an out-of-the-ordinary  
er, you'll find our knowledgeable service  
pay attention to every detail. If you're not  
satisfied, have a Starbucks Ellixir on us.

right, join us in the backroom as our  
holic selection of trance and drum&bass  
class like-themed dance floor. Or just hang  
ly white vinyl booths at the dance bar. You  
delivered from the main lounge right to the  
head enough of the beat, just head back to  
ix. And, no matter where you find yourself

### Weekly Elixir Specials

**Lemon Breeze**

The ultimate healthy drink,  
the elixir combines herbal  
botanicals, minerals, and  
vitamins with a swirl of  
lemon into a smooth citrus  
wonder that will keep your  
immune system going all day  
and all night.

**Chai Chiller**

Not your traditional chai, this  
elixir mixes mild with chai  
spices and adds an extra  
chocolate kick for a  
caffeinated taste sensation  
on ice.

...providing all the caffeine  
you need to power your  
life. Just drink it.

### STARBUZZ COFFEE, QUALITY CAFFEINE

Starbuzz Coffee, we are dedicated to filling all your caffeine  
needs with our quality coffee and teas. Here, we want you to  
put a cup of coffee and a great coffee experience as well,  
to the only company that actively monitors and optimizes  
levels. So stop by and fill your cup, or order online with  
Bean Machine online order form, and get that quality  
Starbuzz coffee that you know will meet your caffeine needs.

And, did we mention coffee? We've just started funding  
the guys doing all the wonderful research at the **Coffee Buzz**. If you  
want the latest on coffee and other caffeine products, stop by and  
pay them a visit.

### OUR STORY

"A man, a plan, a coffee bean." Okay, that doesn't make a  
palindromic, but it resulted in a damn good cup of coffee.  
Starbuzz's CEO is that man, and you already know his plan: a  
Starbuzz on every corner.

In only a few years he's succeeded that plan and today you can  
enjoy Starbuzz just about anywhere. And, of course, the big news  
this year is that Starbuzz teamed up with Head First readers to  
create Starbuzz's Web presence, which is growing rapidly and  
helping to meet the caffeine needs of a whole new set of  
customers.

### STARBUZZ COFFEE BEVERAGES

We've got a variety of caffeinated beverages to choose from at  
Starbuzz, including our **Starbuzz Blend**, **Starbuzz Caramel**,  
**Starbuzz Hazelnut**, and a host of our customers' **Chai Teas**.

We also offer a variety of coffee beans, whole or ground, for you  
to take home with you. Order your coffee today using our online  
**Bean Machine**, and take the Starbuzz Coffee experience home.

ORDER ONLINE with the **BEAN MACHINE**

WHY? You can order all our fine  
coffee right from the Internet with our  
new, patented Bean Machine. How  
does it work? Just click on the Bean  
Machine link, enter your order, and  
behind the scenes, your coffee is  
carefully ground (if you want), packaged,  
and shipped to your door.

© 2004, Starbuzz Coffee  
Starbuzz and registered trademarks appearing on this site are the property of their respective owners.

# 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	20,686	4/5
Magic City, ID	June 25th	74	5,312 ft	50	3/5
Bountiful, UT	July 10th	91	4,326 ft	41,173	4/5
Last Chance, CO	July 23rd	102	4,780 ft	265	3/5
Truth or Consequences, NM	August 9th	93	4,262 ft	7,289	5/5
Why, AZ	August 27th	98	860 ft	400	3/5

The cities I visited on my segway'n USA travels

July 14, 2012

I saw some Burma Q

# 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:

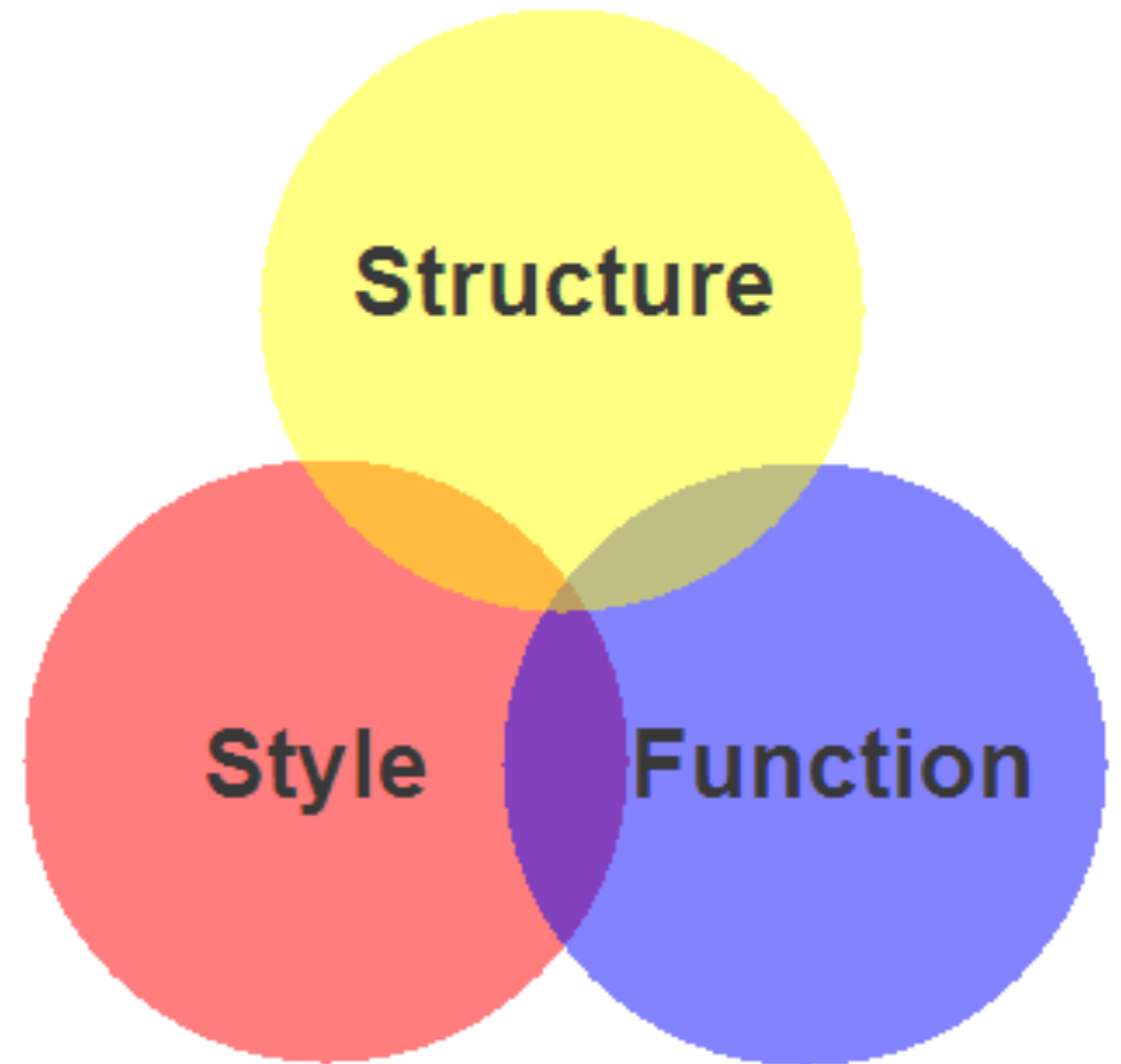
- cellphone
- iPod
- digital camera
- and a protein bar

Just the essentials. As Lao Tzu would have said, "A journey of a  
thousand miles begins with one Segway."

# Markup, Style, Function

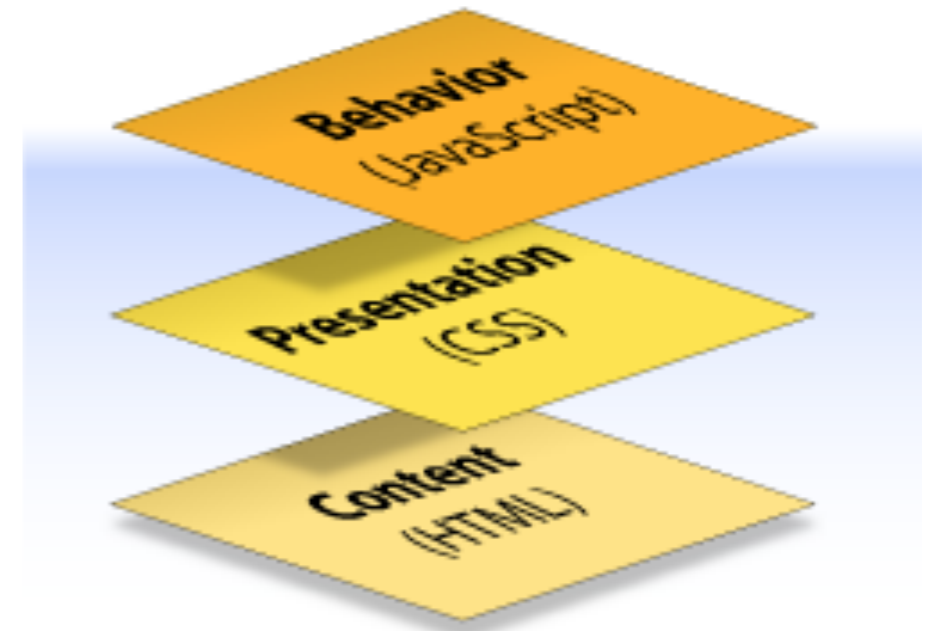
---

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



# Content, Presentation, Behavior

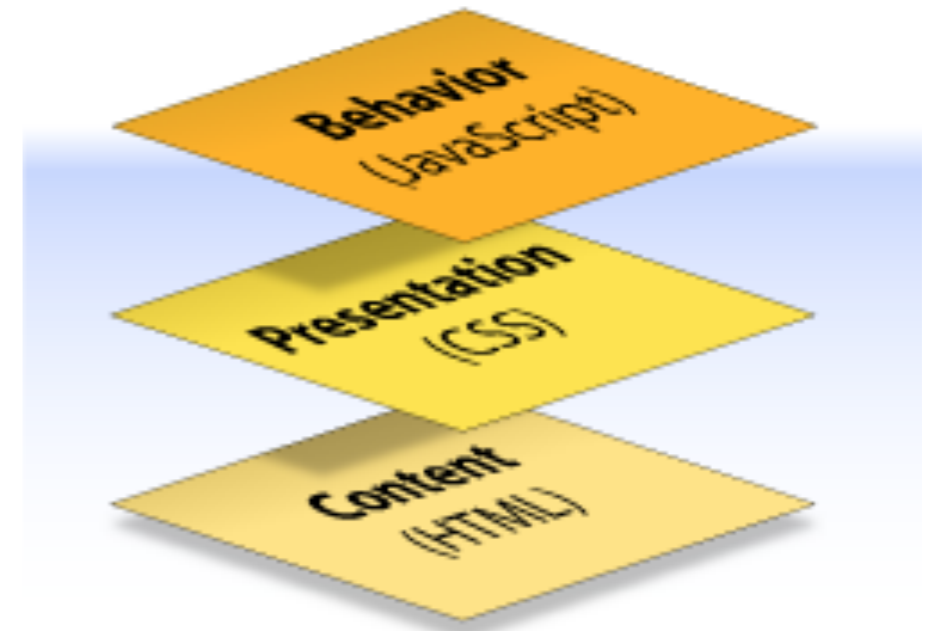
- **Content** comprises the information the author wishes to convey to his or her audience, and is embedded within HTML or XHTML markup that defines its structure and semantics.
- Most of the content on the Web today is text, but content can also be provided through images, animations, sound, video, and whatever else an author wants to publish



# Content, Presentation, Behavior

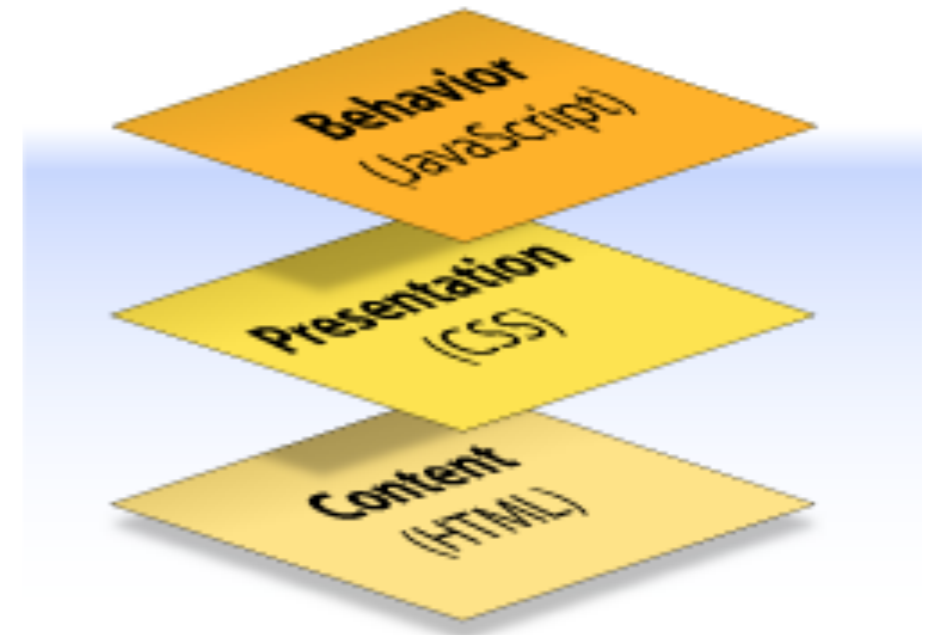
---

- **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, Behavior

- **Behavior** 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

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- It's possible to embed all three layers within the same document
  - eg `<em>` and `<b>` can be used to control the presentation of text, and `<hr>` will insert a visible rule element.
  - Sometimes called *Presentation 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?

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- 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.
- e.g. it's possible to store all the presentational styles for a 10,000-page web site in a single CSS file.
- CSS also provides far better control over presentation than do presentational element types in HTML.

# Advantages of CSS

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- All styling is kept in a limited number of style sheets.
- Saving on bandwidth: The style sheet is cached (kept on client machine) after the first request and can be reused for every page on the site, it doesn't have to be downloaded with each web page. Could reduce bandwidth usage—by more than 50% in many documented cases.
- The separation of content from presentation makes it easier for site owners to reuse the content for other purposes, such as RSS feeds or text-to-speech conversion.
- Separate styling rules can be used for different output media. We no longer need to create a special version of each page for printing—we can simply create a single style sheet that controls how every page on the site will be printed.

# Separating Style Sheets from HTML

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- Ideally, a site may have a single style sheet for most purposes. It is possible to include the css rules within your html files but this is not advisable.
- In a separate style.css file the rules are written.
- It is then necessary to link from the html file to the style.css file

# <link> element

---

Use the link element to "link in" external information.

The type of this information is "text/css". In other words, a CSS style sheet.

And the style sheet is located at this href (in this case we're using a relative link, but it could be a full-blown URL).

`<link type="text/css" rel="stylesheet" href="lounge.css" />`

The rel attribute specifies the relationship between the XHTML file and the thing you're linking to. We're linking to a style sheet, so we use the value "stylesheet".

<link> is an empty 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>
...
```

Style.css



Okay, let's get some design in this place...

```
bedroom {  
  drapes: blue;  
  carpet: wool shag;  
}
```

...and this bathroom needs some serious help!

```
bathroom {  
  tile: 1in white;  
  drapes: pink;  
}
```



Of course, in the Webville edition of the show, everyone talks about design in CSS. If you're having trouble understanding them, here's a little translation tip: each statement in CSS consists of a location (like bedroom), a property in that location (like drapes or carpet), and a style to apply to that property (like the color blue, or 1 inch tiles).

# CSS Rule

---

```
p {  
    color: red;  
    background-color: blue;  
}
```

CSS  
Rule



# Selector and Declarations

---

Selector

Declaration

p

{

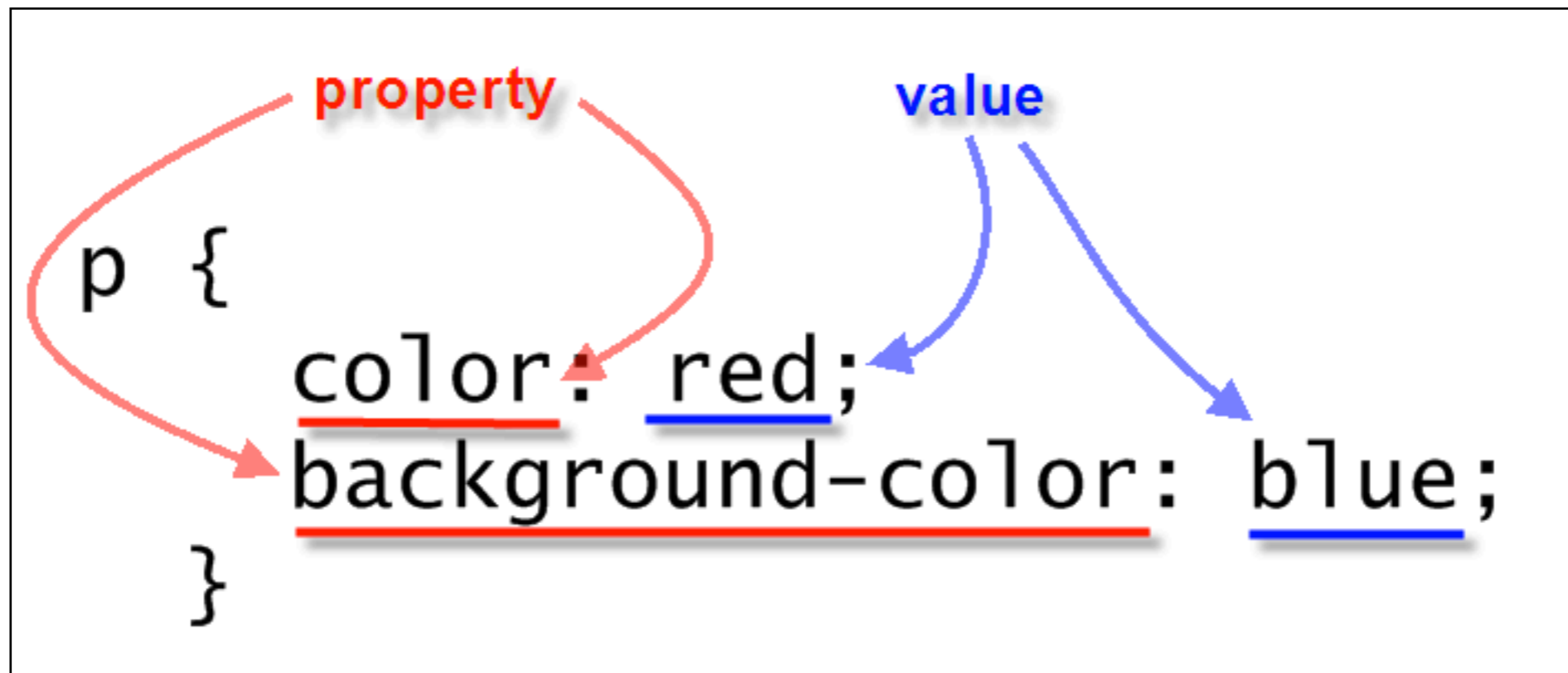
color: red;

background-color: blue;

}

# Properties & Values

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# 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.

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

Place all the styles for the <p> element in between { } braces.

Then you specify the property you want to style, in this case the <p> element's background color.

There's a colon in between the property and its value.

And you're going to set the background-color to red.

At the end, put a semicolon.

We call the whole thing a RULE.

# More Properties...

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- You can add as many properties and values as you like in each CSS rule.
- To put a border around your paragraphs:

```
p {  
    background-color: red;  
    border: 1px solid gray;  
}
```

The <p> element will have a border...

...that is 1 pixel thick, solid, and gray.

All you have to do is add another property and value.

If you have errors in your CSS, usually what happens is all the rules below the error are ignored. So, get in the habit of looking for errors now, by doing this exercise.



## BE the Browser

Below, you'll find the CSS file "style.css", with some errors in it. Your job is to play like you're the browser and locate all the errors. After you've done the exercise, look at the end of the chapter to see if you caught all the errors.

---

The file "style.css" →

```
body {
  background-color: white

h1, {
  gray;
  font-family: sans-serif;
}

h2, p {
  color:

<em> {
  font-style: italic;
}
```