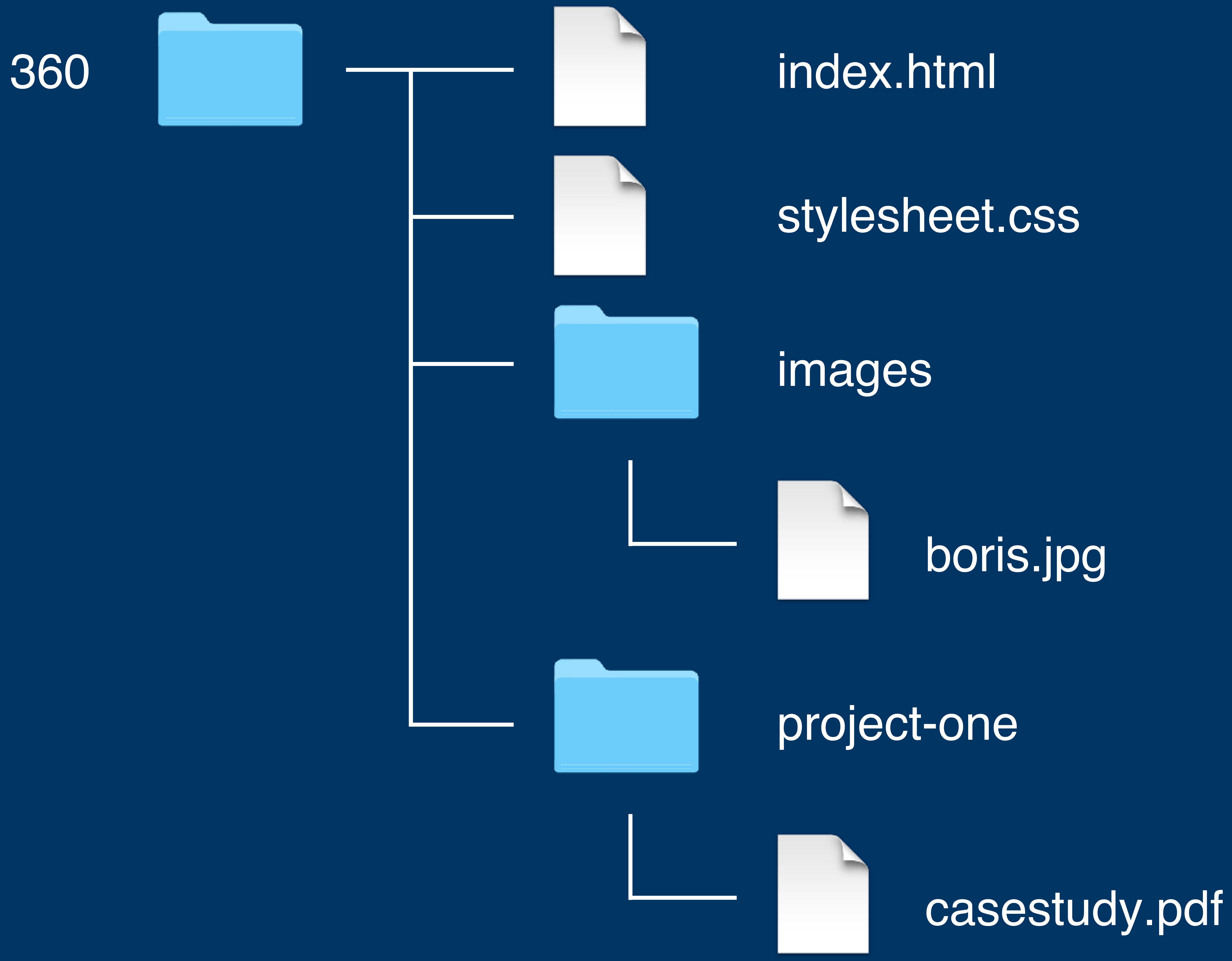
CSS

Cascading Style Sheets



360

index.html

stylesheet.css

images

boris.jpg

project-one

casestudy.pdf

Types of CSS

External

Internal

Inline

External CSS

An external style sheet is a text document with a .css extension that links to your HTML page from the <head> element. This allows all of your webpages to share the same style sheet.

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

Internal CSS

Embedded styles are found in the <head> of your HTML document. Embedded styles only apply to that one page.

```
<head>
<style type=“text/css”>
body {
font-family: arial;
}
</style>
</head>
```

Inline CSS

Inline styles are nestled in with the HTML syntax using a style attribute. Inline styles are used to override external style sheets and only apply to that one element.

```
<p>The quick <style=“color: red”>red</style>fox
jumped over the six lazy <style=“color:
brown”>brown</style>dogs.</p>
```

Selectors and Declarations

A CSS rule contains two parts: a selector and a declaration.

```
h1 {
font-family: serif;
}
```

Selectors indicate which element the rule applies to.

```
h1 {
font-family: serif;
}
```

Declarations indicate how the elements selected are to be styled.

They are made up of two parts: property and value. Properties indicate what you want to change. Values specify the settings you want for the property.

```
h1 {
font-family: serif;
}
```

You can specify many declarations for each selector, just separate them by a semicolon.

```
h1 {
font-family: serif;
font-size: 20px;
color: pink;
}
```

There lots of properties available in css. These are some of the most frequently used:

align
background-color
background-image
border
cellpadding
cellspacing
color
float
font
font-family
font-size
font-style
font-weight
height
href
letter-spacing
margin
name
padding
rel
src
title
text-align
text-decoration
text-indent
text-transform
white-space
width
word-spacing

CSS Selectors

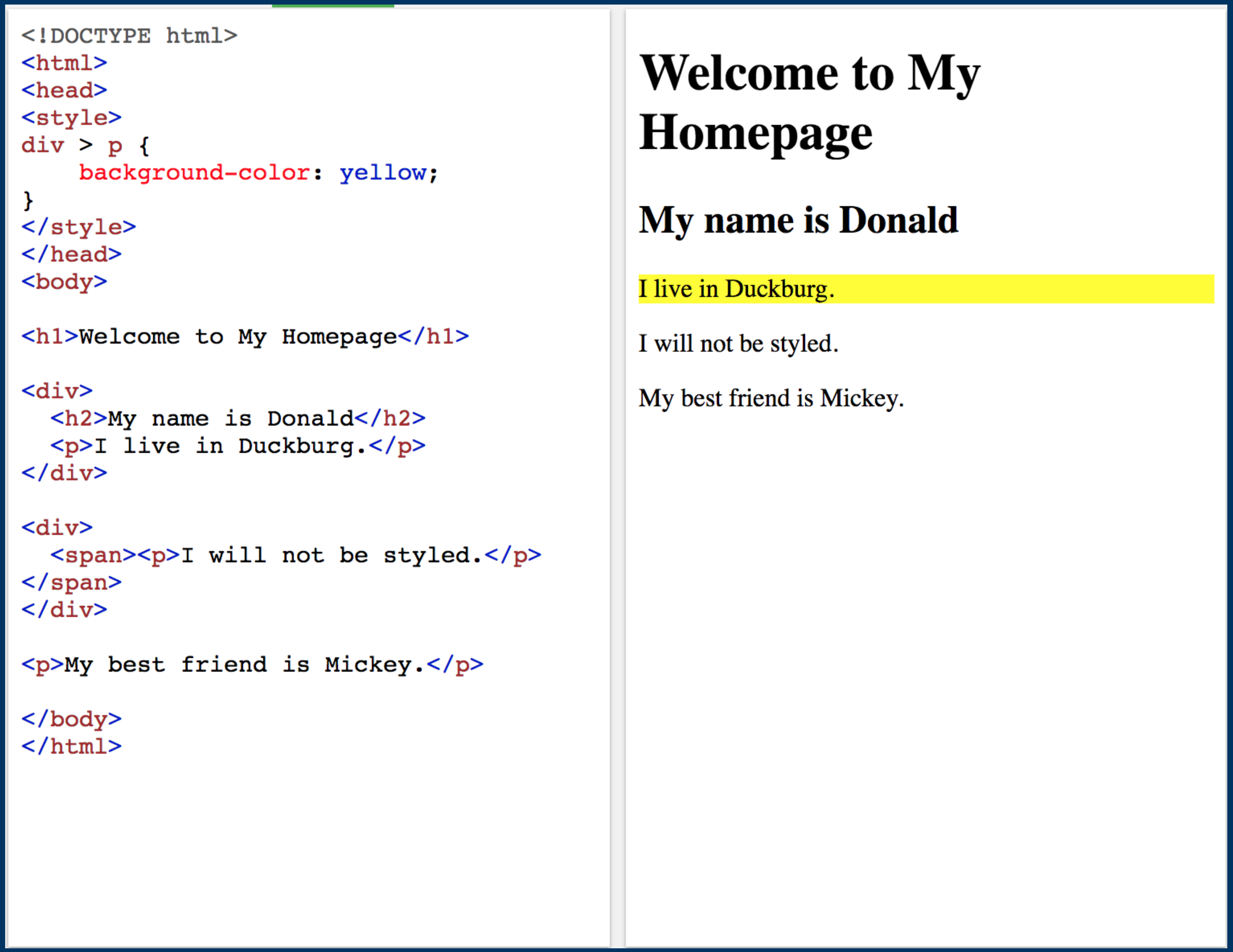
Universal `*{ }`
Targets all elements on the same page

Text `h1, h2, h3 { }`
Targets all the `<h1>` `<h2>` `<h3>` elements

Child `li>a { }`
Targets any `<a>` elements that are children of an `<li>` element (but not other `<a>` elements in the page)

Descendent `p a { }`
Targets any `<a>` elements in the `<p>` element, even if it is not a direct child)

Child `div>p { }`



```
<!DOCTYPE html>
<html>
<head>
<style>
div > p {
    background-color: yellow;
}
</style>
</head>
<body>

<h1>Welcome to My Homepage</h1>

<div>
  <h2>My name is Donald</h2>
  <p>I live in Duckburg.</p>
</div>

<div>
  <span><p>I will not be styled.</p>
</span>
</div>

<p>My best friend is Mickey.</p>

</body>
</html>
```

Welcome to My Homepage

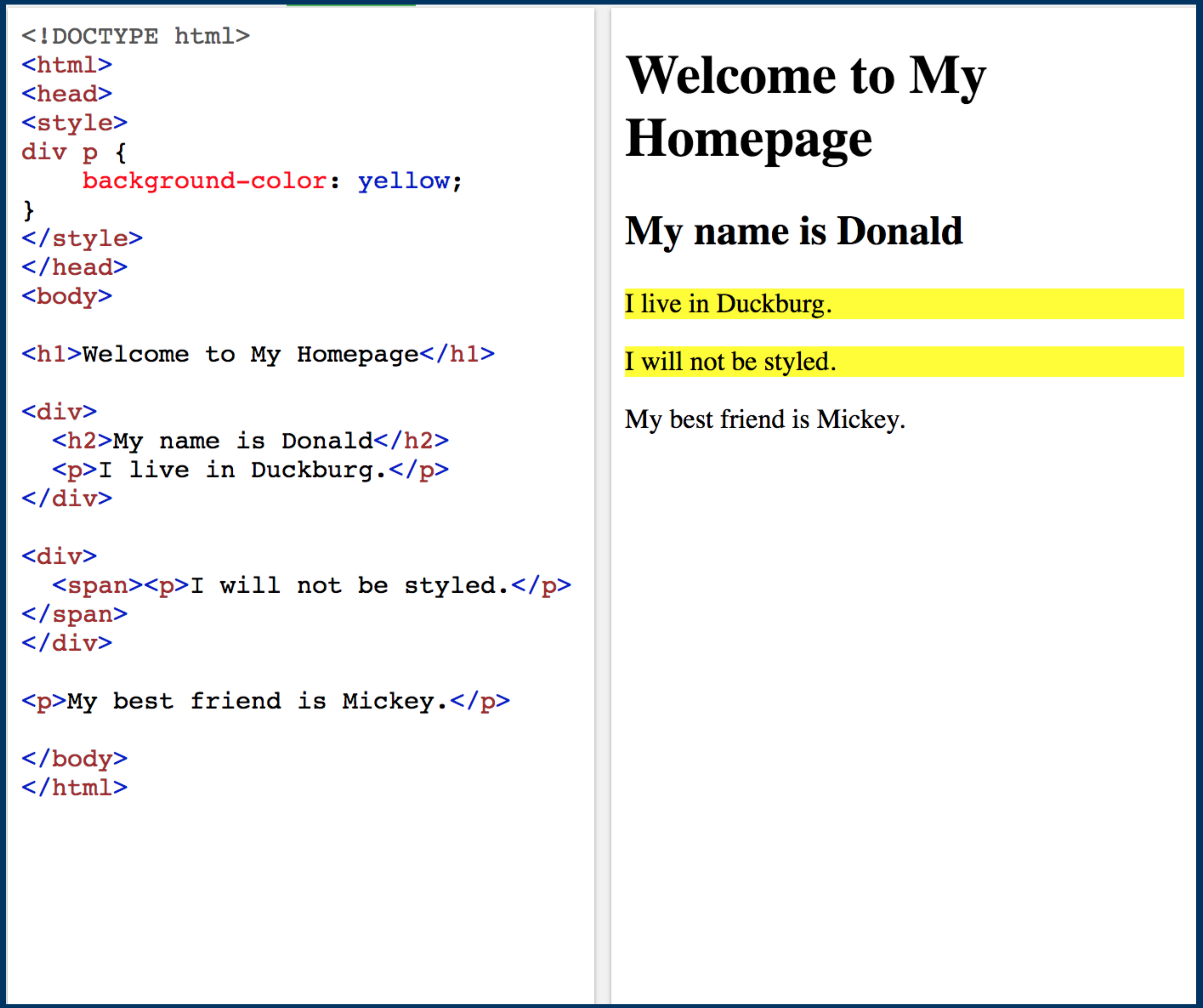
My name is Donald

I live in Duckburg.

I will not be styled.

My best friend is Mickey.

Descendent `div p { }`



```
<!DOCTYPE html>
<html>
<head>
<style>
div p {
    background-color: yellow;
}
</style>
</head>
<body>

<h1>Welcome to My Homepage</h1>

<div>
  <h2>My name is Donald</h2>
  <p>I live in Duckburg.</p>
</div>

<div>
  <span><p>I will not be styled.</p>
</span>
</div>

<p>My best friend is Mickey.</p>

</body>
</html>
```

Welcome to My Homepage

My name is Donald

I live in Duckburg.

I will not be styled.

My best friend is Mickey.

Naming Elements with an ID or Class

To have more control over your css you can name your HTML elements with an ID or Class. Identifiers (ID) are unique names given to an element. A class can be used to name more than one element.

Name your `<div>` with an ID or class within the opening tag of the element:

```
<div id=“sidebar”> </div>

<div class=“left-column”> </div>
```

In your CSS document, ID selectors begin with a hashtag, and class selectors begin with a period:

ID

```
html  <div id=“sidebar”>  </div>
css   #sidebar { float: left; }
```

Class

```
html  <div class=“left-column”>  </div>
css   .left-column { float: left; }
```

Color

RGB	`h1 { color: rgb(140,200,238); }`
RGBa	`h1 { color: rgba(140,200,238,0.5); }`
Color	`h1 { color: red; }`
HEX	`h1 { color: #ff3344; }`

font-family

The font-family property allows you to specify a typeface.

```
p { font-family: Georgia, Times, serif; }
```

You can specify a list of fonts separated by commas so that if the user does not have your first choice typeface installed, the browser can try to use an alternative font from the list.

Google Fonts

For more type options, go to fonts.google.com.

Click on the font family you wish to use. Then click on Select This Font. A panel should popup, copy/paste the first line of code into the <head> of your HTML document. It should look like this:

```
<link href=”https://fonts.googleapis.com/
css?family=Roboto” rel=”stylesheet”>
```

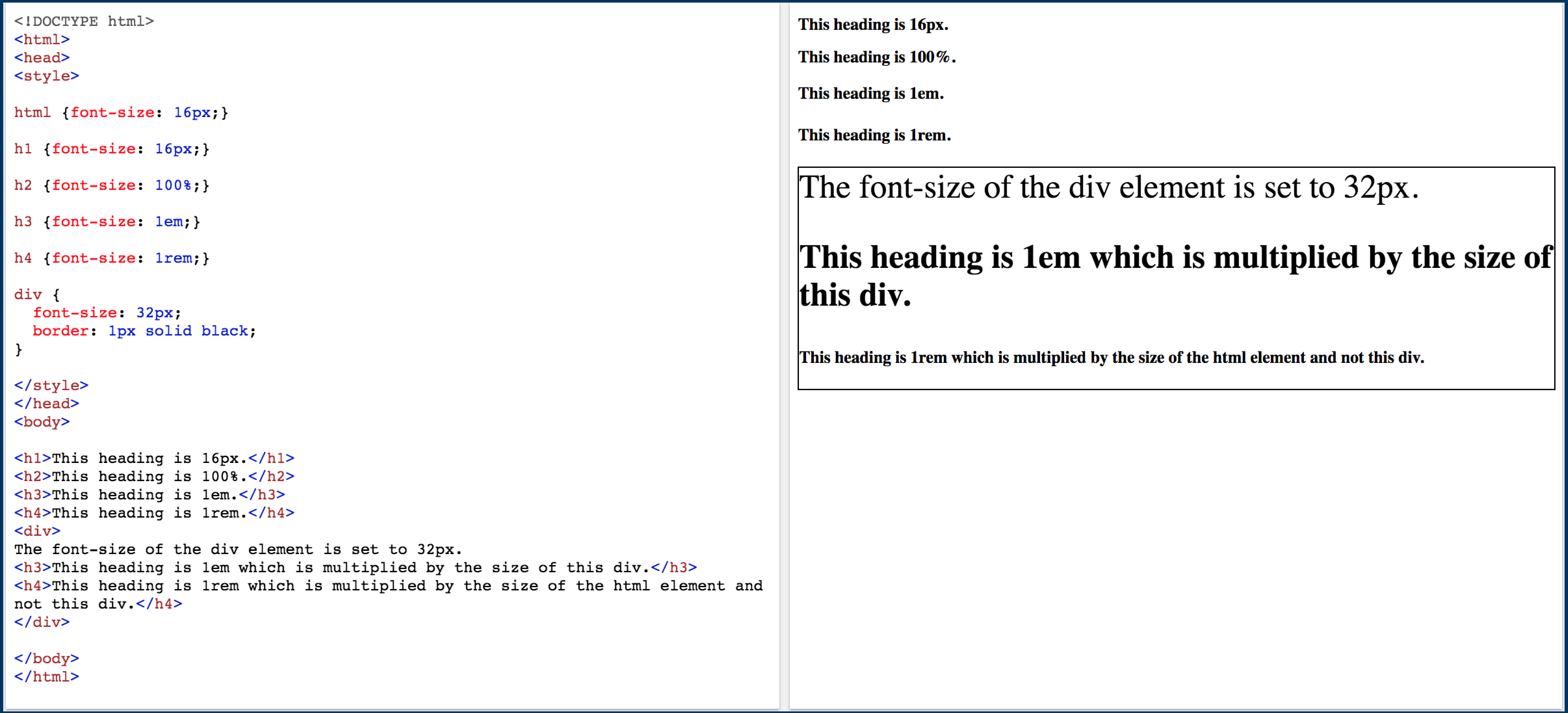
Then copy the provided CSS from the same Google popup panel and paste it into your external CSS document. This will be your font-family for whatever HTML element you wish to style. Here is an example:

```
body { font-family: ‘Roboto’, sans-serif;}
```

font-size

There are several ways to specify the size of a font.
The default font-size of the browser or <html> element is 16px.

pixels	**px**	this is an absolute unit. the rest are relative
percentages	**%**	relative to parent element
ems	**em**	relative to the font-size of the element
rems	**rem**	relative to font-size of the root element, a.k.a the <html> element



```
<!DOCTYPE html>
<html>
<head>
<style>

html {font-size: 16px;}

h1 {font-size: 16px;}

h2 {font-size: 100%;}

h3 {font-size: 1em;}

h4 {font-size: 1rem;}

div {
  font-size: 32px;
  border: 1px solid black;
}

</style>
</head>
<body>

<h1>This heading is 16px.</h1>
<h2>This heading is 100%.</h2>
<h3>This heading is 1em.</h3>
<h4>This heading is 1rem.</h4>
<div>
The font-size of the div element is set to 32px.
<h3>This heading is 1em which is multiplied by the size of this div.</h3>
<h4>This heading is 1rem which is multiplied by the size of the html element and
not this div.</h4>
</div>

</body>
</html>
```

This heading is 16px.

This heading is 100%.

This heading is 1em.

This heading is 1rem.

The font-size of the div element is set to 32px.

This heading is 1em which is multiplied by the size of this div.

This heading is 1rem which is multiplied by the size of the html element and not this div.

Formatting Link States

normal, unvisited link	`a:link { color: red; }`
link the user has visited	`a:visited { color: orange; }`
link when the user mouses over it	`a:hover { color:yellow; }`
link the moment it is clicked	`a:active { color: purple; }`

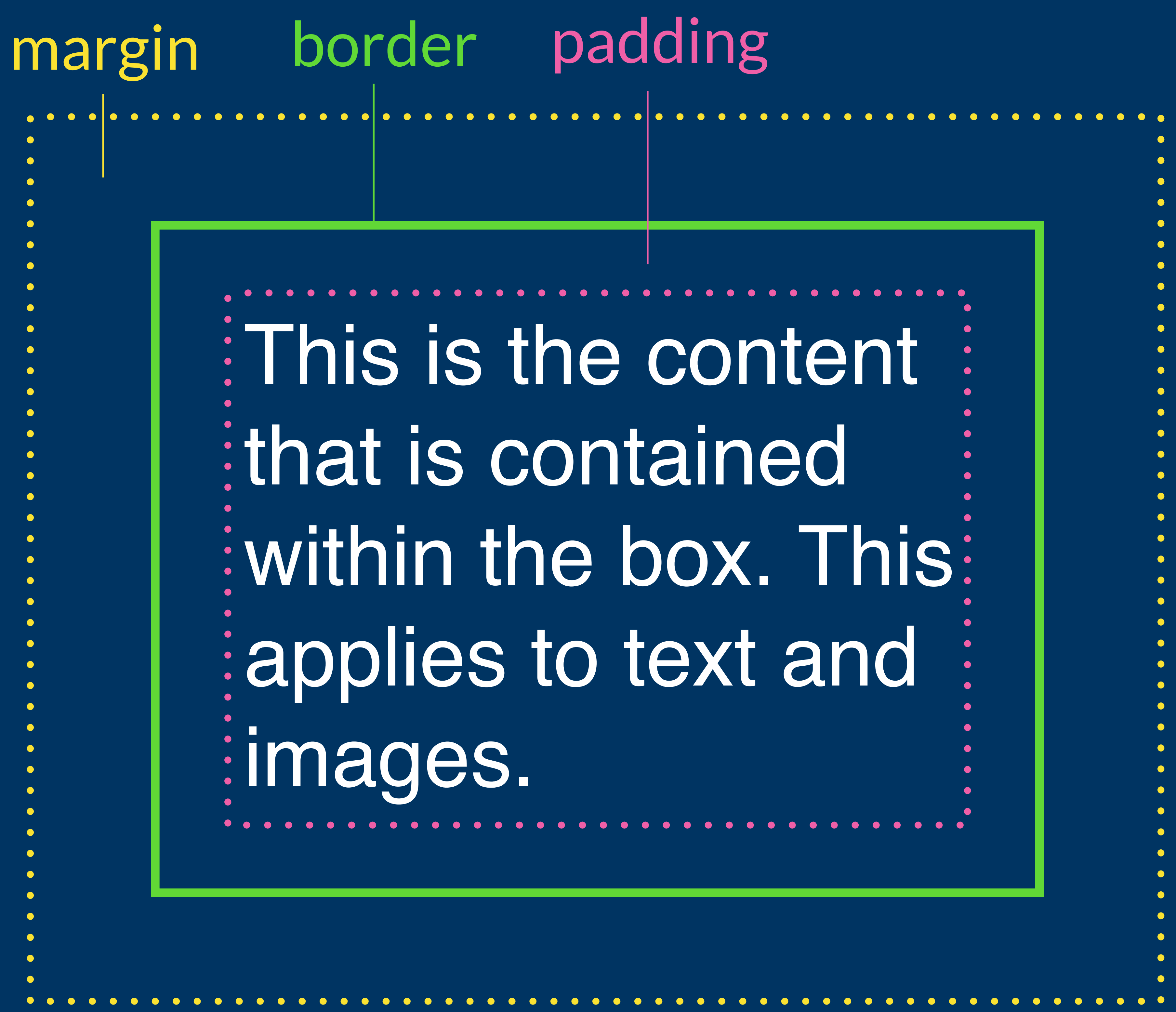
Note: Must be in this order!

Text Properties

- color
- font-family
- font-size
- font-weight
- font-style
- text-transform
- text-decoration
- text-align
- text-indent
- text-shadow
- line-height
- letter-spacing
- word-spacing
- vertical-align

Box Model

When setting heights and widths for an element in CSS you must take into account accurate measurements for all your boxes' properties (i.e. padding, margins, etc).



This is the content that is contained within the box. This applies to text and images.

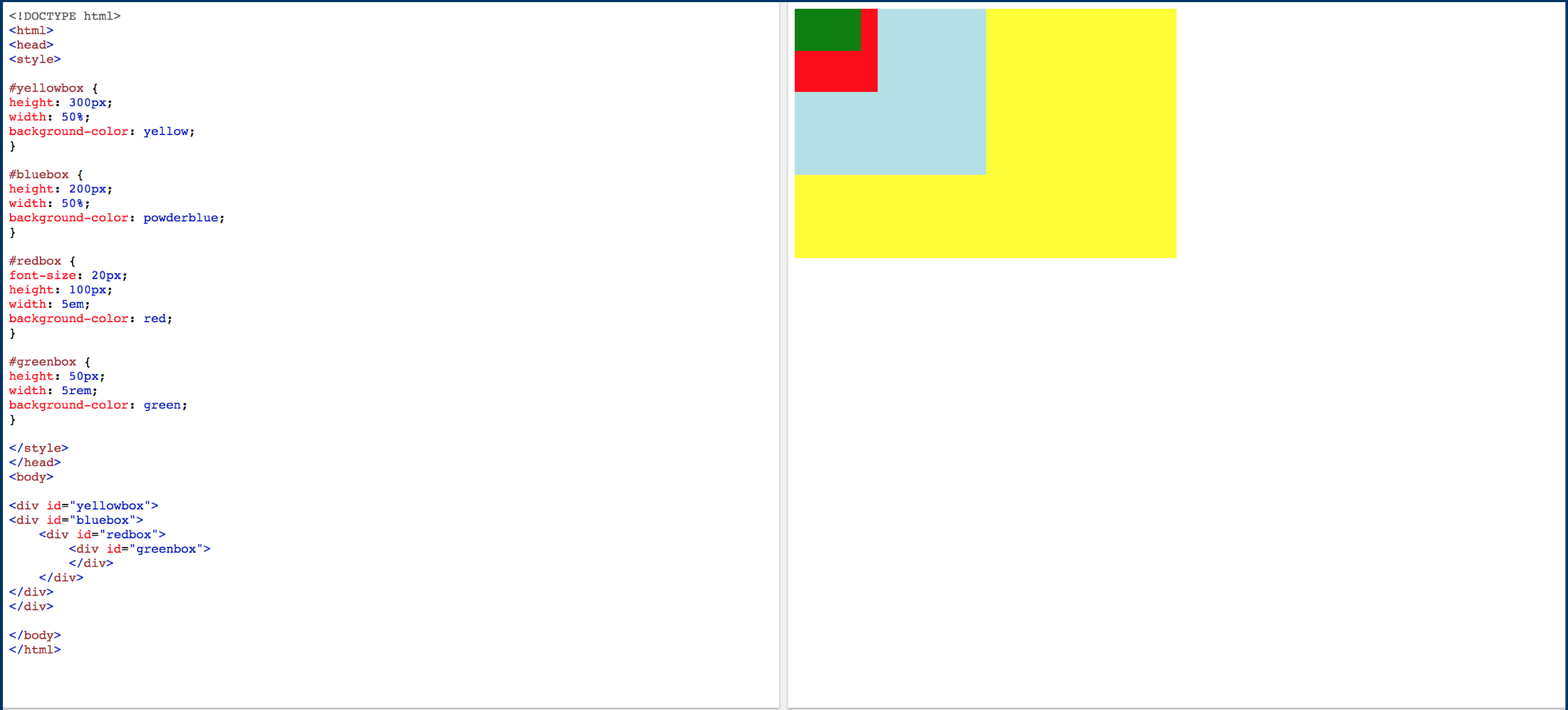
```
.column {
    width: 300px;
    padding: 10px;
    margin: 20px;
    border: 5px solid green;
}
```

Total Width of Box= 370px

Box Dimensions

When using **percentages**, the size of the box is relative to the size of the browser window, or if the box is encased within another box, it is a percentage of the size of the containing box.

When using **ems**, the size of the box is based on the the size of the text that it sits inside of.



```
<!DOCTYPE html>
<html>
<head>
<style>

#yellowbox {
height: 300px;
width: 50%;
background-color: yellow;
}

#bluebox {
height: 200px;
width: 50%;
background-color: powderblue;
}

#redbox {
font-size: 20px;
height: 100px;
width: 5em;
background-color: red;
}

#greenbox {
height: 50px;
width: 5rem;
background-color: green;
}

</style>
</head>
<body>

<div id="yellowbox">
<div id="bluebox">
    <div id="redbox">
        <div id="greenbox">
        </div>
    </div>
</div>
</div>

</body>
</html>
```

border properties

border

border-top

border-right

border-bottom

border-left

border-size

border-style

border-height

border-width

border-style must be defined for the border to appear:

dotted
dashed
solid
double
groove
ridge
inset
outset
none
hidden

You can also use shorthand for the different properties.

```
border: 5px solid red;
```

margin and padding properties

margin
margin-top
margin-right
margin-bottom
margin-left

padding
padding-top
padding-right
padding-bottom
padding-left

You can also use shorthand for the different properties.

```
margin: 25px 50px 75px 100px;
```