

The image features the text "CSS" in a black, sans-serif font, centered on a light gray background. The text is flanked by two large, black, L-shaped brackets. The bracket on the left is positioned in the upper-left corner, with its vertical line extending downwards and its horizontal line extending to the right. The bracket on the right is positioned in the lower-right corner, with its horizontal line extending to the left and its vertical line extending upwards. These brackets frame the central text "CSS".

CSS

# CSS

- Cascading style sheets allows one to control the display of elements by specifying their properties.
- Can use the style attributes directly in the HTML.

# HTML With Style (Inline)

```
<!DOCTYPE html>
<html>
  <head>
    <title style="color:blue;" >
      Friends Page</title>
    </head>
  <body>
    <h1 style="font-family:Times; color:deeppink" >
      Justin</h1>
    <p style="font-size:20;font-family:Courier;" >
      Justin is my best friend.
      We both like rock and roll.
    </p>
  </body>
</html>
```

# Styles

- “CSS attribute:CSS value”;
- Attributes include
  - *background-color*
  - *color*
  - *font-family*
  - *font-size*
  - *text-align*
- List of 140 named colors [The List](#)
- RGB
  - *Example rgb(10, 255, 30)*
- RGB in hex
  - *Example #FFAA79*

# HTML With Style (Internal)

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      h1 {color:orange;}
      p  {background-color:red;
          font-family:Times;}
    </style>

    <title>
      Friends Page</title>
    </head>
    <body>
      <h1 style="color:deeppink" >
        Justin</h1>
      <p>
        Justin is my best friend.
        We both like rock and roll.
```

Use for h1 headings

Use for just this one

# The Internal

- Use `<style>` element {CSS property: CSS value;} in the head.

Styles are applied to all of that kind of element. Inline styles will override the general.

# The Problem

- While we can specify the style directly in the HTML elements a web site is not a single page. How do we maintain consistent style across multiple pages.
- The Answer: Specify the styles in a shared external file.

# HTML With Style (External)

```
<!DOCTYPE html>
<html>
  <head>
    <link rel="stylesheet" href="styles.css">
    <title> Friends Page</title>
  </head>
  <body>
    <h1> Justin</h1>
    <p>
      Justin is my best friend.
      We both like rock and roll.
    </p>
  </body>
</html>
```



# A CSS file

```
h1 {color:orange;  
}
```

A CSS comment

```
/* Comments in CSS can also be  
inside <style> elements in HTML*/  
p {background-color: red;  
  font-family: Times;  
  border: 5px solid blue;  
  padding: 10px;  
}
```

Selector	Attribute	Value
----------	-----------	-------

Values only need quoting if they contain spaces

# CSS – is not HTML

- Use `<link>` in the head to access the stylesheet resource.
- `<link rel="stylesheet" href="resource location">`
- Rel is the relation (what kind of resource it is) and there are others that we can pull in like icons.
- Href can be local or remote.

# CSS – Selectors

- Element selector – Apply to elements with the given tag.
- Id selector – Apply to the element with the id property. Use # in CSS.
- Class selector – Apply to elements with class property. Use . In CSS. Can combine with tag.

```
/* h1 elements */
h1 {color:orange;}
/* element where id="last" */
#last {color:red;}
/* elements where class="code" */
.code {color:red;}
/* p elements where class="code" */
p.code {color: green;}
```

# CSS – Selectors

- Multiple classes. In HTML element use attribute class with all classes separated by spaces.
  - *class="class1 class2 ..."*
- Universal selector – Use \* as the selector in CSS.
- Selector group – comma separated.

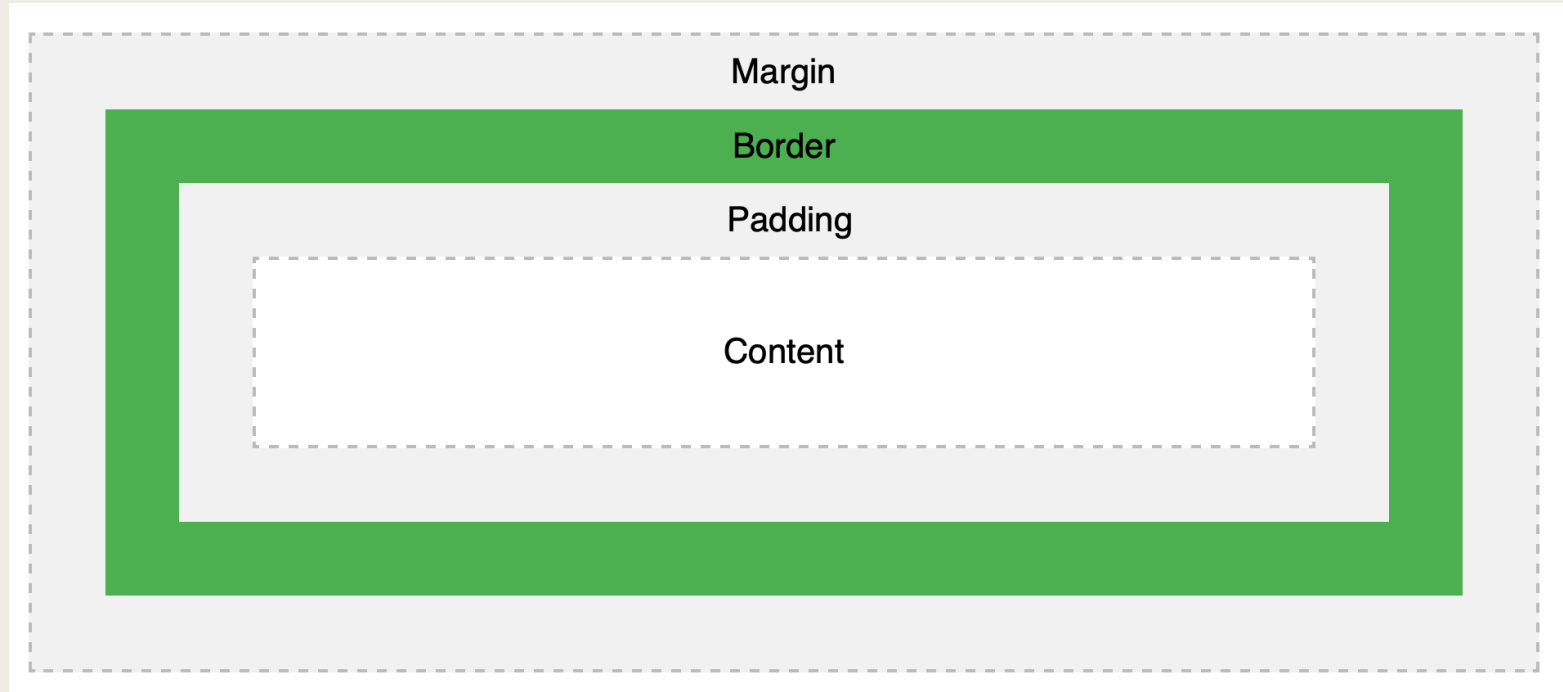
```
/* Universal */  
* {font-size:14;}
```

```
/* Used for both p/h2 */  
p, h2 {font-size:12;  
color:red}
```

# CSS – Some more attributes

- background-image
  - *Example: background-image:url("my.jpg")*

# CSS – Box model



# CSS – Some more attributes

- border – an edge on the element listing up to four. If four, then: top right bottom left
  - *Example: border: dashed dotted solid none*
- margin – spacing around the element outside the border. Again, can specify for each edge.
  - *Example: margin: 100px 13em 15pt 10%*
- padding – Space added inside the border. Shrinks the content.

# CSS – Some more attributes

- border-top-style
  - *An individual border. All four can be used.*
- margin-top – An individual margin.
  - *Example: border: dashed dotted solid none*
- padding-top – An individual padding.



# CSS – Fonts



Which is most readable?

# Gettysburg Address

## (Arial - Sans Serif)

Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

But, in a larger sense, we can not dedicate -- we can not consecrate -- we can not hallow -- this ground. The brave men, living and dead, who struggled here, have consecrated it, far above our poor power to add or detract. The world will little note, nor long remember what we say here, but it can never forget what they did here. It is for us the living, rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us -- that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion -- that we here highly resolve that these dead shall not have died in vain -- that this nation, under God, shall have a new birth of freedom -- and that government of the people, by the people, for the people, shall not perish from the earth.

# Gettysburg Address

## (Garamond – Serif)

Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

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# CSS – Lists

# CSS – Tables

# CSS – Navigation Bars

# References

- [W3 Schools HTML](#) A good place to explore HTML. Has examples and quizzes.
- Design Links
  - [Website Structures](#)
  - [Information Architecture](#)
  - [Good and Bad UX design](#)
- Good books on design
  - Norman
  - Nielson