Introduction To CSS

Justice Reskill

What is CSS?

CSS stands for Cascading Style Sheets. CSS controls the aesthetics of a web page which includes:

- Color
- Sizes
- Animations
- Showing/Hiding content
- Everything visual!

Topics In This Presentation

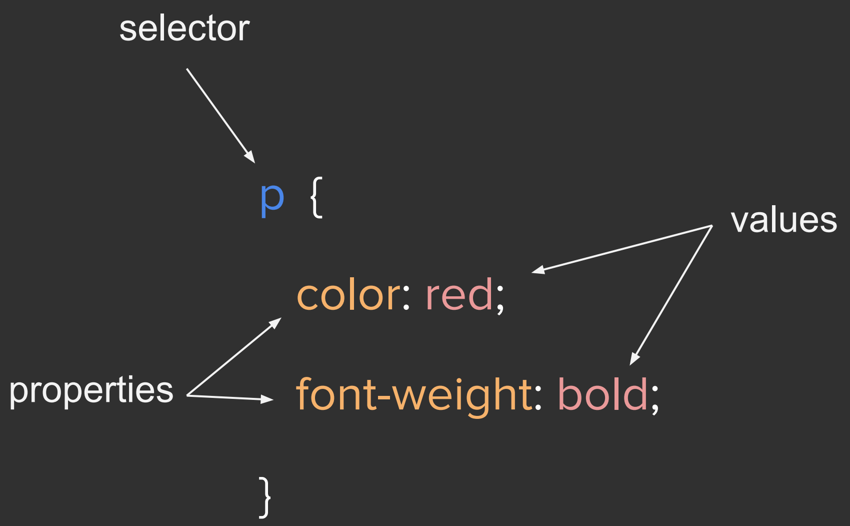
This presentation will cover CSS with:

- Inline CSS inside the HTML elements
- CSS in the header of a file
- CSS through a linked file
- Basic selectors such as color, text align, etc
- Box model

CSS Structure

1. **Selector:** A selector is the element the css results will be applied too
2. **Properties**: Properties are key values pairs on what will be affected and how in relation to the selector.

Properties go inside a selector.



```
p {

   color: red;

   font-weight: bold;

}
```

Multiple Kinds Of Selectors

1. **Element:** The first kind of selector uses the name of the element. When used, all the elements will inherit the selected properties
2. **Class Selector:** Remember the class attribute of <tag class=”text”></tag>? When defined, every tag with that class will be affected
3. **ID Selector:** Same concept as the class selector accepted for the id attribute: <tag id=”input1”></tag>. There should only be 1 id per page.

```
p {

    color: red;

}



.text {

    color: red;

}



#input1 {

    color: red;

}
```

Common Styles

There are over **250+** style properties you can choose from!
We will go over some of the most common ones.

Color

The color property changes the text color within an element.

The color can be defined as:

- Color name, ie blue
- An Hex color such as #FFFFFF
- An RBG Color

You may Google HEX and RGB colors.

Please note, in this example we use class selector.

```
.box1 {
  color: red;
}
.box2 {
  color: #FFFFFFF;
}
```

Background Color

The background-color property changes the elements background color.

The background-color can be defined as:

- Color name, ie blue
- An Hex color such as #FFFFFF
- An RBG Color

Please note, in this example we use class selector.

```
.box1 {

   background-color: red;

}

.box2  {

   background-color:: #FFFFFFF;

}
```

Text Aligns

text-align positions how the text will align.

Think of Microsoft Word or Google Docs when you align the text.

Common options are

- Left
- Right
- Center

```css
.box1 {

  text-align: left;

}

.box2 {

  text-align: center;

}
```

Font Size

font-size dictates the size of the text inside of an element.

Please note, in this example we use the element selector.

```
p {

   font-size: 20px;

}

h1 {

   font-size: 1.5em;

}
```

Font Family

font-family dictates the style of the font, like in Google Docs or Word when choosing Courier or Aria.

Please note, in this example we use the element selector.

```
p {
   font-family: “Times New Roman”;
}
h1 {
   font-family: “Helevtica”;
}
```

Display

The display property determines how an element will render on a page when compared to other elements.

- **none:** The element will be invisible
- **inline:** The element will stack vertically next to other elements
- **block:** The elements will stack on top of each other
- **inline-block:** The elements will take next to to each other in blocks

```
p {
   display: inline;
}
img {
   display: block;
}
#title {
   display: none;
}
```

Important Display Note

It is important to note that when the display is set to inline, if you also try to set width and height of the element, it will be ignored.

```
p {
    display : inline;
    width : 100px; //will be ignored
    height : 500px; //will be ignored
}
```

Width

width sets how wide an element is. Width can be absolute values or percentage.

Please note also, in this example we use the id selector.

```
#div1 {
  width: 500px;
}
#div2 {
  width: 50%;
}
```

Height

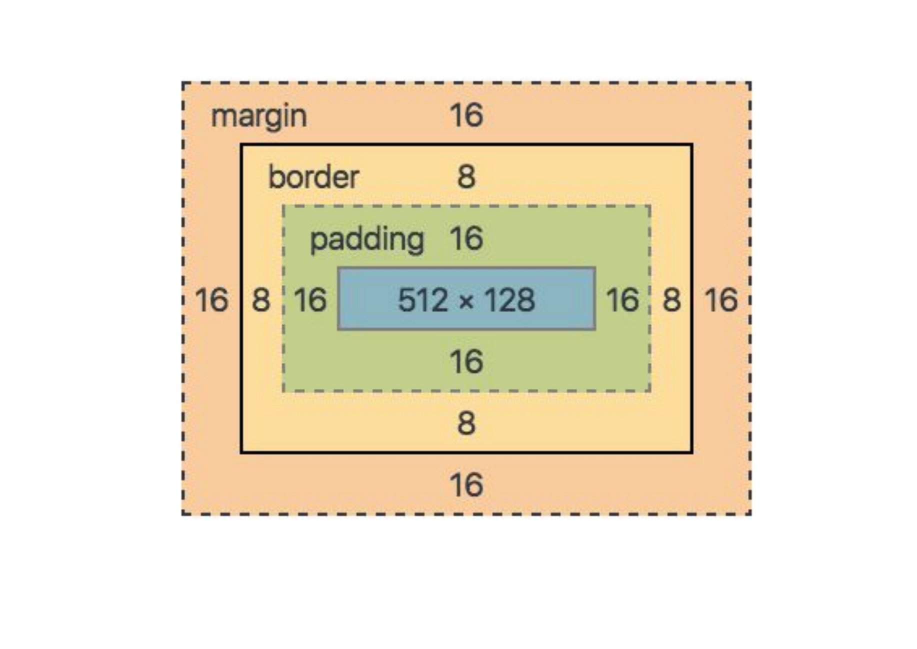
height sets how tall an element is. Height can be absolute values or percentage.

Please note also, in this example we use the id selector.

```
#div1 {

  height: 500px;

}

#div2 {

  height: 50%;

}
```

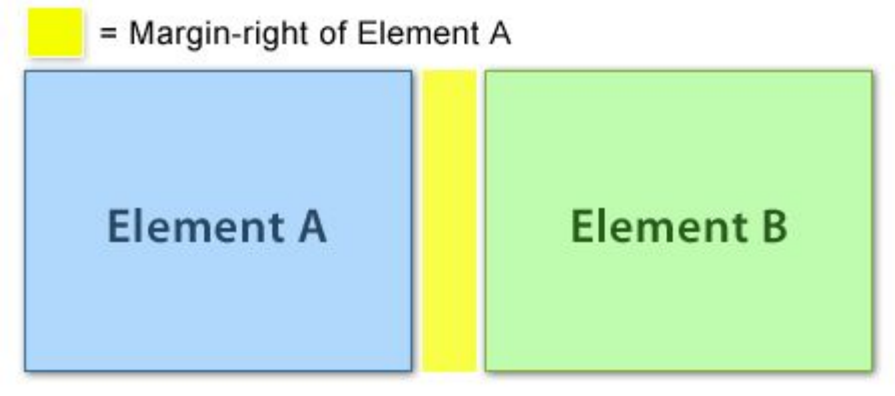
Box Model

The CSS box model is essentially a box that wraps around every HTML element. It consists of: margins, borders, padding, and the actual content.



Margin

margin is the space between two elements.



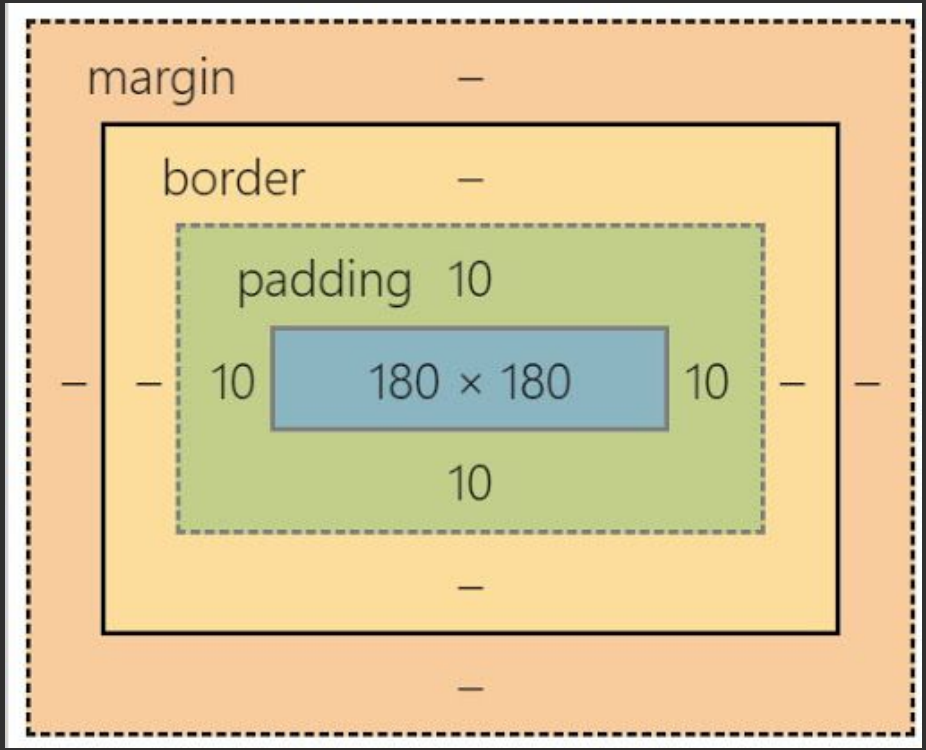
Margin

margin can be added to the top, bottom, left, and right of a container.

```
div {

    margin-top: 50px;

    margin-bottom: 50px;

    margin-left: 50px;

    margin-right: 50px;

}
```

Padding

padding is the space inside of an element. Padding separates the content inside from in the inner edges of an element.



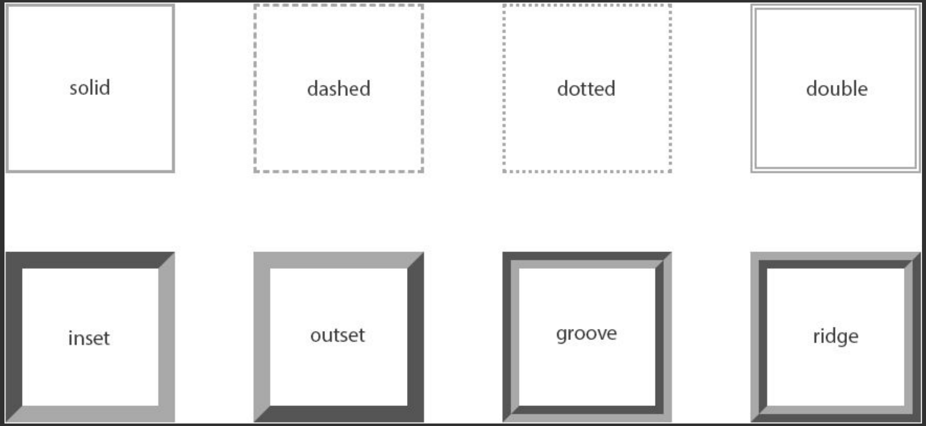
Padding

padding can be added to the top, bottom, left, and right of a container.

```
div {
  padding-top: 50px;
  padding-bottom: 50px;
  padding-left: 50px;
  padding-right: 50px;
}
```

Borders

borders is the border line that surrounds an element. Notice the different border styles we can use.



Border

The border has 3 properties that are used to define it:

- Width
- Style
- Color

Similar to padding and margin, each side of the border can be styled differently.

```
div {
  border-width: 5px;
  border-style: solid;
  border-color: blue;
}
```

HTML Inline CSS

CSS can be placed inline html with the style attribute.

```
<tag style=”property:value”>
</tag>


<tag style=”property1:value1;property2:value2;
”>
</tag>
```

HTML Inline CSS Example

Notice how we define the color and font-size. HTML that is styled inline will take the highest precedence.

This means if we have css defined in the head and inline html, the inline html will over override the css in the head.

```
<h1 style=”color:red”>
        Hello World
</h1>


<p style=”font-size: 20px ”>
</p>
```

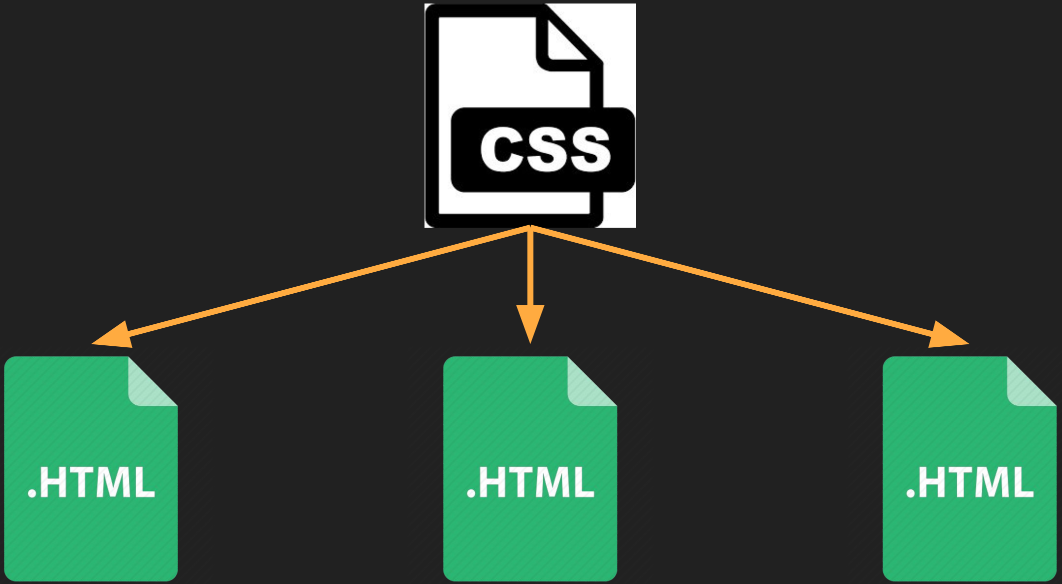
HTML Inline Header

CSS can be placed inside html with the style attribute

```
<!DOCTYPE html>
<html>
  <head>
    // CSS Tag Here
    <style>
        p {
            color : red;
        }
    </style>
  </head>
  <body>
    // website goes here
  </body>
</html>
```

Centralizing Our CSS

If there are multiple pages that use the same css, we would have to copy the CSS on every page which is inefficient. To solve this, we can add CSS from an external file into our html that can be read by all the pages.



Linking Stylesheet

To link a css stylesheet, in the head of your html, use the link attribute and the path to css file.

```
<!DOCTYPE html>
<html>
   <head>
      <link rel=”stylesheet” href=”/path/to/style.css” />
   </head>
   <body>
      // website goes here
   </body>
</html>
```

Linking Multiple Stylesheets

You can link as many stylesheets as you want in the head of the file.

```
<!DOCTYPE html>
<html>
  <head>
     <link rel=”stylesheet” href=”/path/to/style1.css” />
     <link rel=”stylesheet” href=”/path/to/style2.css” />
     <link rel=”stylesheet” href=”/path/to/style3.css” />
     <link rel=”stylesheet” href=”/path/to/style4.css” />
  </head>
  <body>
     // website goes here
  </body>
</html>
```