

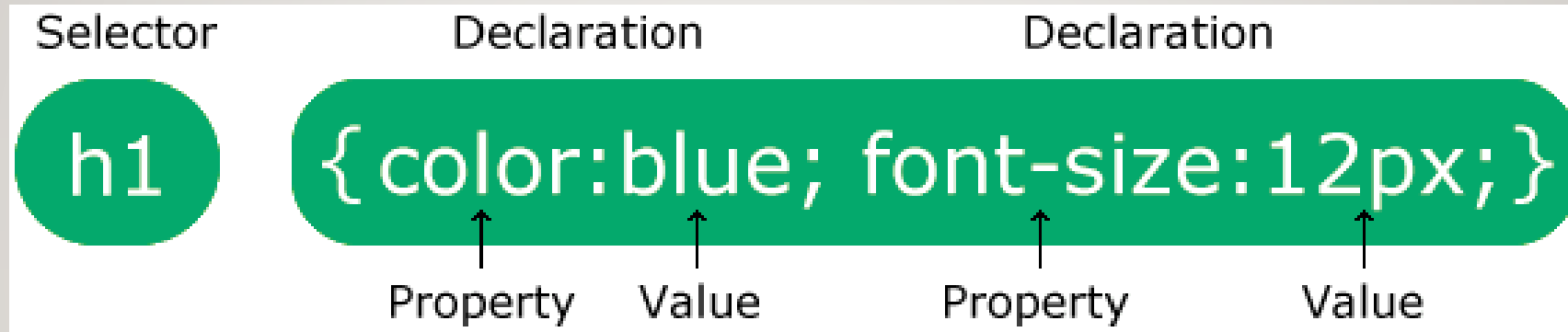
FRONTEND DEVELOPMENT

Part 2: CSS

WHAT IS CSS?

- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media
- CSS saves a lot of work. It can control the layout of multiple web pages all at once
- External stylesheets are stored in CSS files

CSS SYNTAX



- `p` is a selector in CSS (it points to the HTML element you want to style: `<p>`).
- `color` is a property, and `red` is the property value
- `text-align` is a property, and `center` is the property value

THE CSS ELEMENT SELECTOR

```
p {  
  text-align: center;  
  color: red;  
}
```

THE CSS ID SELECTOR

```
#para1 {  
    text-align: center;  
    color: red;  
}
```

THE CSS CLASS SELECTOR

```
.center {  
  text-align: center;  
  color: red;  
}
```


THREE WAYS TO INSERT CSS

There are three ways of inserting a style sheet:

- External CSS
- Internal CSS
- Inline CSS

EXTERNAL CSS

- With an external style sheet, you can change the look of an entire website by changing just one file!
- Each HTML page must include a reference to the external style sheet file inside the <link> element, inside the head section.

```
<link rel="stylesheet" href="mystyle.css">
```


INTERNAL CSS

- An internal style sheet may be used if one single HTML page has a unique style.
- The internal style is defined inside the <style> element, inside the head section.

```
<head>
<style>
body {
    background-color: linen;
}

h1 {
    color: maroon;
    margin-left: 40px;
}
</style>
</head>
```

INLINE CSS

- An inline style may be used to apply a unique style for a single element.
- To use inline styles, add the style attribute to the relevant element. The style attribute can contain any CSS property.

`<h1 style="color:blue;text-align:center;">This is a heading</h1>`

CSS COMMENTS

```
/* This is a single-line comment */
```

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

```
/* This is  
a multi-line  
comment */
```

CSS BACKGROUNDS

- background-color
- background-image
- background-repeat
- background-attachment
- background-position
- background (shorthand property)

EXAMPLES

```
h1 {  
  background-color: green;  
}
```

```
div {  
  background-color: lightblue;  
}
```

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


CSS BORDERS

- The CSS border properties allow you to specify the style, width, and color of an element's border.

https://www.w3schools.com/css/css_border.asp

CSS MARGINS

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

CSS MARGIN COLLAPSE

- Sometimes two margins collapse into a single margin.

```
h1 {  
    margin: 0 0 50px 0;  
}
```

```
h2 {  
    margin: 20px 0 0 0;  
}
```

CSS PADDING

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

EXAMPLE

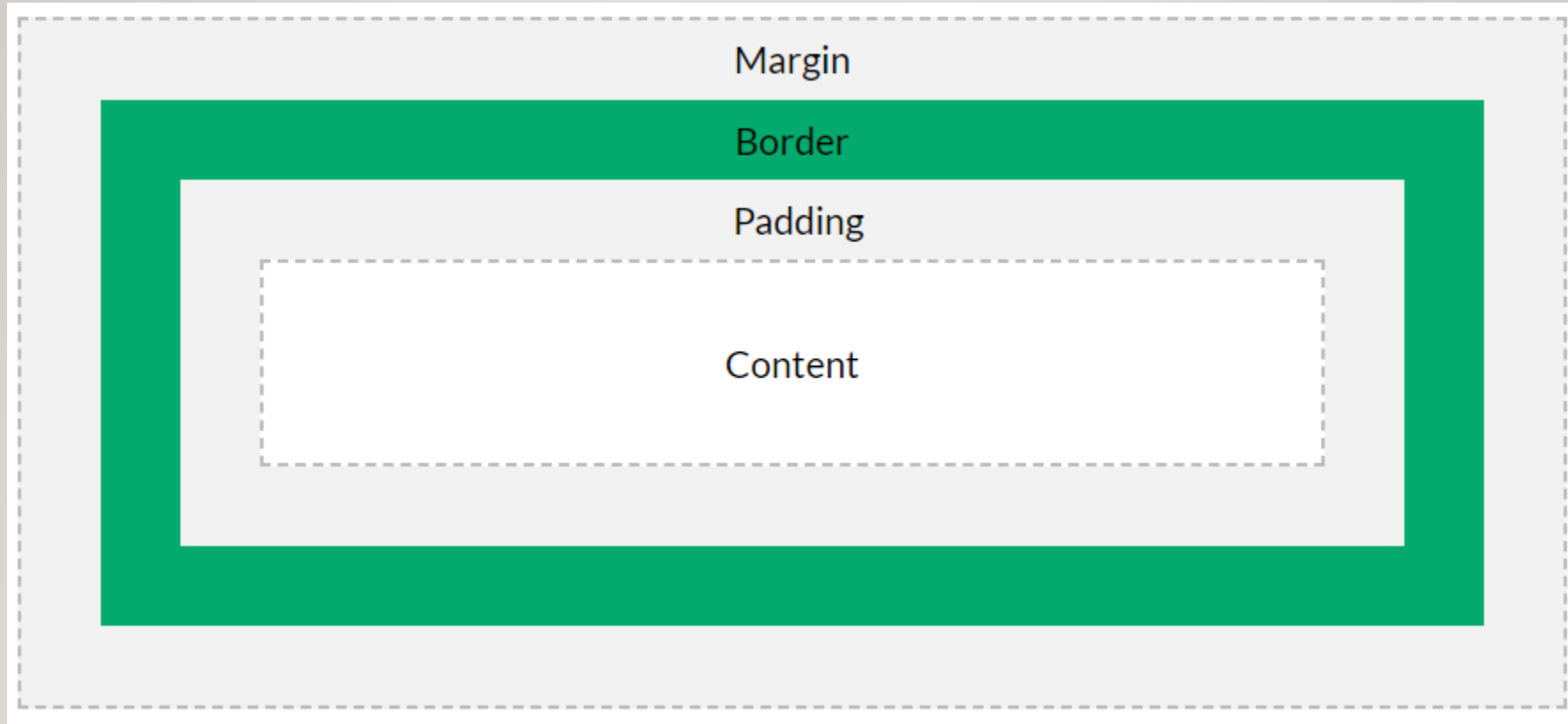
```
div {  
  padding-top: 50px;  
  padding-right: 30px;  
  padding-bottom: 50px;  
  padding-left: 80px;  
}
```

CSS HEIGHT, WIDTH AND MAX-WIDTH

- The CSS height and width properties are used to set the height and width of an element.
- The CSS max-width property is used to set the maximum width of an element.

CSS BOX MODEL

- In CSS, the term "box model" is used when talking about design and layout.
- The CSS box model is essentially a box that wraps around every HTML element. It consists of: margins, borders, padding, and the actual content. The image below illustrates the box model:

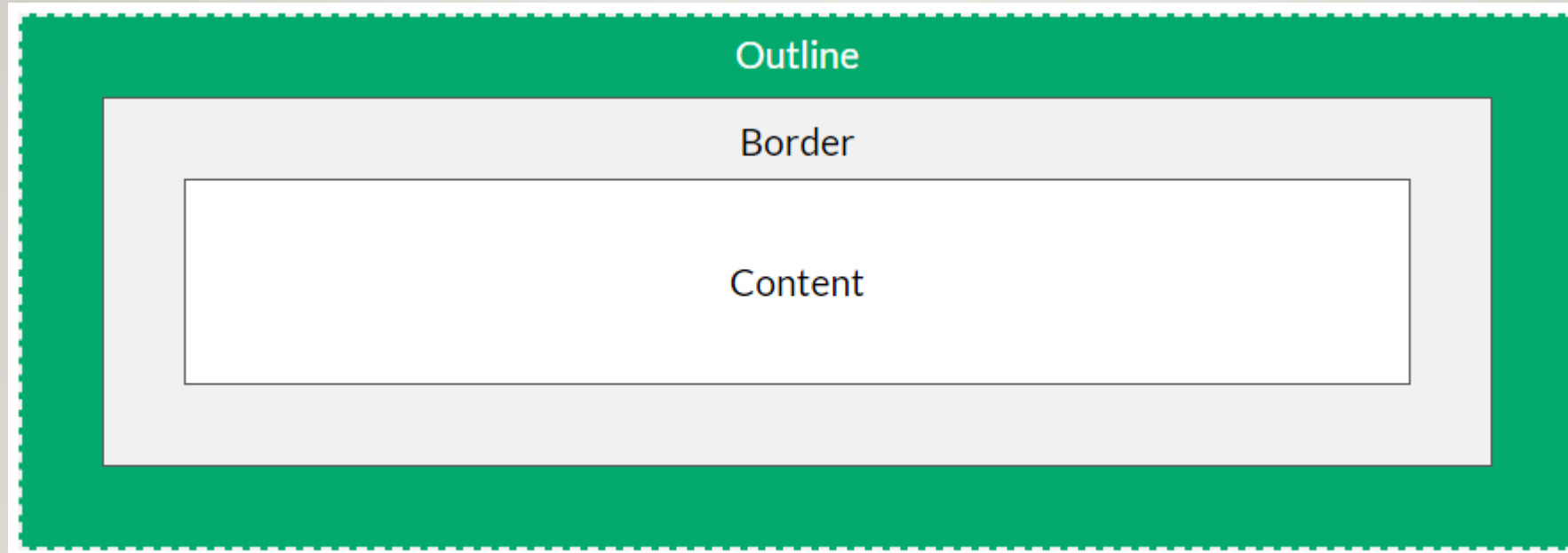


EXAMPLE

```
div {  
  width: 300px;  
  border: 15px solid green;  
  padding: 50px;  
  margin: 20px;  
}
```

CSS OUTLINE

- An outline is a line drawn outside the element's border.



OUTLINE PROPERTIES

- outline-style
- outline-color
- outline-width
- outline-offset
- outline

TEXT COLOR AND BACKGROUND

```
body {  
  background-color: lightgrey;  
  color: blue;  
}  
  
h1 {  
  background-color: black;  
  color: white;  
}  
  
div {  
  background-color: blue;  
  color: white;  
}
```


CSS TEXT ALIGNMENT

- text-align
- text-align-last
- direction
- unicode-bidi
- vertical-align

TEXT DECORATION

- text-decoration-line
- text-decoration-color
- text-decoration-style
- text-decoration-thickness
- text-decoration

CSS TEXT TRANSFORMATION

Value	Description
none	No capitalization. The text renders as it is. This is default
capitalize	Transforms the first character of each word to uppercase
uppercase	Transforms all characters to uppercase
lowercase	Transforms all characters to lowercase
initial	Sets this property to its default value. Read about initial
inherit	Inherits this property from its parent element. Read about inherit

CSS TEXT SPACING

- text-indent
- letter-spacing
- line-height
- word-spacing
- white-space

CSS TEXT SHADOW

```
h1 {  
  color: white;  
  text-shadow: 2px 2px 4px #000000;  
}
```

CSS FONTS

```
.p1 {  
  font-family: "Times New Roman", Times, serif;  
}
```

```
.p2 {  
  font-family: Arial, Helvetica, sans-serif;  
}
```

```
.p3 {  
  font-family: "Lucida Console", "Courier New", monospace;  
}
```


CSS GOOGLE FONTS

```
<head>
<link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Sofia">
<style>
body {
    font-family: "Sofia", sans-serif;
}
</style>
</head>
```

CSS ICONS

```
<!DOCTYPE html>
<html>
<head>
<script src="https://kit.fontawesome.com/a076d05399.js" crossorigin="anonymous"></script>
</head>
<body>

<i class="fas fa-cloud"></i>
<i class="fas fa-heart"></i>
<i class="fas fa-car"></i>
<i class="fas fa-file"></i>
<i class="fas fa-bars"></i>

</body>
</html>
```

HTML IMAGES

CSS LINKS

- a:link - a normal, unvisited link
- a:visited - a link the user has visited
- a:hover - a link when the user mouses over it
- a:active - a link the moment it is clicked

EXAMPLE

```
/* unvisited link */
a:link {
  color: red;
}

/* visited link */
a:visited {
  color: green;
}

/* mouse over link */
a:hover {
  color: hotpink;
}

/* selected link */
a:active {
  color: blue;
}
```


CSS LISTS

When using the shorthand property, the order of the property values are:

- list-style-type (if a list-style-image is specified, the value of this property will be displayed if the image for some reason cannot be displayed)
- list-style-position (specifies whether the list-item markers should appear inside or outside the content flow)
- list-style-image (specifies an image as the list item marker)

CSS TABLES

```
table {  
  border-collapse: collapse;  
  width: 100%;  
}
```

```
th, td {  
  text-align: left;  
  padding: 8px;  
}
```

```
tr:nth-child(even) {background-color: #f2f2f2;}
```

CSS LAYOUT - THE DISPLAY PROPERTY

- The display property specifies if/how an element is displayed.
- Every HTML element has a default display value depending on what type of element it is. The default display value for most elements is block or inline.

CSS LAYOUT - THE POSITION PROPERTY

- static
- relative
- fixed
- absolute
- sticky

https://www.w3schools.com/css/css_positioning.asp

CSS LAYOUT - THE Z-INDEX PROPERTY

The z-index property specifies the stack order of an element

CSS LAYOUT - OVERFLOW

- visible - Default. The overflow is not clipped. The content renders outside the element's box
- hidden - The overflow is clipped, and the rest of the content will be invisible
- scroll - The overflow is clipped, and a scrollbar is added to see the rest of the content
- auto - Similar to scroll, but it adds scrollbars only when necessary

CSS LAYOUT - FLOAT AND CLEAR

- The CSS float property specifies how an element should float.
- The CSS clear property specifies what elements can float beside the cleared element and on which side.

FLOAT PROPERTY

The float property can have one of the following values:

- left - The element floats to the left of its container
- right - The element floats to the right of its container
- none - The element does not float (will be displayed just where it occurs in the text). This is default
- inherit - The element inherits the float value of its parent

CSS LAYOUT - HORIZONTAL & VERTICAL ALIGN

https://www.w3schools.com/css/css_align.asp

CSS GRID LAYOUT MODULE

An HTML element becomes a grid container when its display property is set to grid or inline-grid.

You can adjust the gap size by using one of the following properties:

- column-gap
- row-gap
- gap

ALL CSS GRID PROPERTIES

https://www.w3schools.com/css/css_grid.asp

Thank you

