



جامعة المستقبل
AL MUSTAQBAL UNIVERSITY

Web Programming

Lecture 4

Cascading Style Sheets (CSS)

Part 1

By

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css

Cascading Style Sheets



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

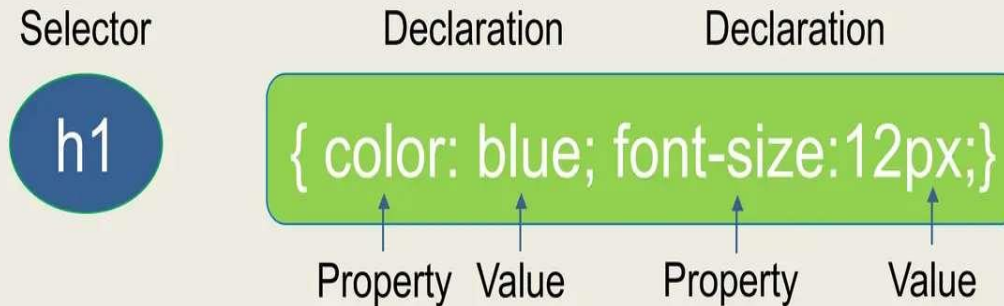
Why Use CSS?

- CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.

CSS Example

```
body {  
  background-color: lightblue;  
}  
  
h1 {  
  color: white;  
  text-align: center;  
}  
  
p {  
  font-family: verdana;  
  font-size: 20px;  
}
```

CSS Syntax



- The selector points to the HTML element you want to style.
- The declaration block contains one or more declarations separated by semicolons.
- Each declaration includes a CSS property name and a value, separated by a colon.
- Multiple CSS declarations are separated with semicolons, and declaration blocks are surrounded by curly braces.

The CSS id Selector

- The id selector uses the id attribute of an HTML element to select a specific element.
- The id of an element is unique within a page, so the id selector is used to select one unique element!
- To select an element with a specific id, write a hash (#) character, followed by the id of the element.

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

The CSS element Selector

- The element selector selects HTML elements based on the element name.

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


The CSS class Selector

- The class selector selects HTML elements with a specific class attribute.
- To select elements with a specific class, write a period (.) character, followed by the class name.

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

The CSS Universal Selector

- The universal selector (*) selects all HTML elements on the page.

```
* {  
  text-align: center;  
  color: blue;  
}
```

The CSS Grouping Selector

The grouping selector selects all the HTML elements with the same style definitions.

Look at the following CSS code (the h1, h2, and p elements have the same style definitions):

```
h1 {  
  text-align: center;  
  color: red;  
}  
h2 {  
  text-align: center;  
  color: red;  
}
```

CSS Comment

- CSS comments are not displayed in the browser, but they can help document your source code
- Comments are used to explain the code, and may help when you edit the source code at a later date.
- Comments are ignored by browsers.
- A CSS comment is placed inside the <style> element, and starts with /* and ends with */

```
/* This is a single-line comment  
*/  
p {  
  color: red;  
}
```


CSS Background Color

- Colors are specified using predefined color names, or RGB, HEX, HSL, RGBA, HSLA values.

```
<h1 style="background-color:DodgerBlue;">Hello World</h1>  
<p style="background-color:Tomato;">Lorem ipsum...</p>
```

CSS Text Color

You can set the color of text:

Hello World

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

```
<h1 style="color:Tomato;">Hello World</h1>  
<p style="color:DodgerBlue;">Lorem ipsum...</p>  
<p style="color:MediumSeaGreen;">Ut wisi enim...</p>
```

CSS Border Color

- `<h1 style="border:2px solid Tomato;">Hello World</h1>`
`<h1 style="border:2px solid DodgerBlue;">Hello World</h1>`
`<h1 style="border:2px solid Violet;">Hello World</h1>`

Hello World

Hello World

Hello World

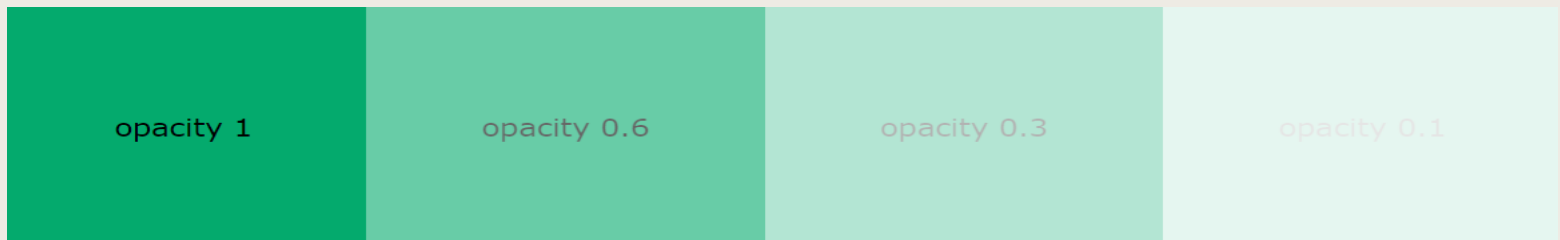
CSS background-color

- The background-color property specifies the background color of an element.

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

Opacity / Transparency

- The opacity property specifies the opacity/transparency of an element. It can take a value from 0.0 - 1.0. The lower value, the more transparent:
- ```
div {
 background-color: green;
 opacity: 0.3;
}
```
- An RGBA color value is specified with: `rgba(red, green, blue, alpha)`. The alpha parameter is a number between 0.0 (fully transparent) and 1.0 (fully opaque).
- ```
div {  
    background: rgba(0, 128, 0, 0.3) /* Green background with 30%  
    opacity */  
}
```



CSS Background Image

- The background-image property specifies an image to use as the background of an element.
- By default, the image is repeated so it covers the entire element.
- ```
body {
 background-image: url("paper.gif");
}
```
- The background image can also be set for specific elements, like the <p> element:
- ```
p {  
    background-image: url("paper.gif");  
}
```


CSS Background Image Repeat

CSS background-repeat

- By default, the background-image property repeats an image both horizontally and vertically.
- Some images should be repeated only horizontally or vertically, or they will look strange, like this:
- ```
body {
 background-image: url("gradient_bg.png");
}
```

# CSS background-repeat: no-repeat

---

- Showing the background image only once is also specified by the background-repeat property:
- ```
body {  
    background-image: url("img_tree.png");  
    background-repeat: no-repeat;  
}
```

CSS background-position

- The background-position property is used to specify the position of the background image.
- ```
body {
 background-image: url("img_tree.png");
 background-repeat: no-repeat;
 background-position: right top;
}
```

# CSS Background Attachment

---

- The background-attachment property specifies whether the background image should scroll or be fixed (will not scroll with the rest of the page):

## Fixed

```
body {
 background-image: url("img_tree.png");
 background-repeat: no-repeat;
 background-position: right top;
 background-attachment: fixed;
}
```

## Scroll

```
body {
 background-image: url("img_tree.png");
 background-repeat: no-repeat;
 background-position: right top;
 background-attachment: scroll;
}
```

# CSS Background Shorthand

---

CSS background - Shorthand property

All property

```
body {
 background-color: #ffffff;
 background-image: url("img_tree.png");
 background-repeat: no-repeat;
 background-position: right top;
}
```

Shorthand property

```
body {
 background: #ffffff url("img_tree.png") no-repeat right top;
}
```



# CSS Borders

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

I have borders on all sides.

I have a red bottom border.

---

I have rounded borders.

I have a blue left border.

# CSS Border Style

---

- The border-style property specifies what kind of border to display.
- The following values are allowed:
  - **dotted** - Defines a dotted border
  - **dashed** - Defines a dashed border
  - **solid** - Defines a solid border
  - **double** - Defines a double border
  - **groove** - Defines a 3D grooved border. The effect depends on the border-color value

# CSS Border Style

---

- ridge - Defines a 3D ridged border. The effect depends on the border-color value
  - inset - Defines a 3D inset border. The effect depends on the border-color value
  - outset - Defines a 3D outset border. The effect depends on the border-color value
  - none - Defines no border
  - hidden - Defines a hidden border
- 
- The border-style property can have from one to four values (for the top border, right border, bottom border, and the left border).

A dotted border.

A dashed border.

A solid border.

A double border.

A groove border. The effect depends on the border-color value.

A ridge border. The effect depends on the border-color value.

An inset border. The effect depends on the border-color value.

An outset border. The effect depends on the border-color value.

No border.

A hidden border.

# CSS Border Width

---

- The border-width property specifies the width of the four borders.
- The width can be set as a specific size (in px, pt, cm, em, etc) or by using one of the three pre-defined values: thin, medium, or thick:

```
• p.one {
 border-style: solid;
 border-width: 5px;
}
```

```
p.two {
 border-style: solid;
 border-width: medium;
}
```

```
p.three {
 border-style: dotted;
 border-width: 2px;
}
```

```
p.four {
 border-style: dotted;
 border-width: thick;
}
```



# CSS Border Width Example

5px border-width

medium border-width

2px border-width

thick border-width

# CSS Border Color

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- The border-color property is used to set the color of the four borders.
- The color can be set by:
  - name - specify a color name, like "red"
  - HEX - specify a HEX value, like "#ff0000"
  - RGB - specify a RGB value, like "rgb(255,0,0)"
  - HSL - specify a HSL value, like "hsl(0, 100%, 50%)"
  - transparent

# Example

---

- ```
p.one {  
  border-style: solid;  
  border-color: red;  
}
```



```
p.two {  
  border-style: solid;  
  border-color: green;  
}
```



```
p.three {  
  border-style: dotted;  
  border-color: blue;  
}
```



CSS Border Sides

- CSS Border - Individual Sides
- From the examples on the previous pages, you have seen that it is possible to specify a different border for each side.
- In CSS, there are also properties for specifying each of the borders (top, right, bottom, and left):
- ```
p {
 border-top-style: dotted;
 border-right-style: solid;
 border-bottom-style: dotted;
 border-left-style: solid;
}
```

Different Border Styles

## So, here is how it works:

---

- If the border-style property has four values:

**border-style: dotted solid double dashed;**

- top border is dotted
- right border is solid
- bottom border is double
- left border is dashed

- If the border-style property has three values:

- **border-style: dotted solid double;**

- top border is dotted
- right and left borders are solid
- bottom border is double



If the border-style property has two values:

---

**border-style: dotted solid;**

- top and bottom borders are dotted
- right and left borders are solid

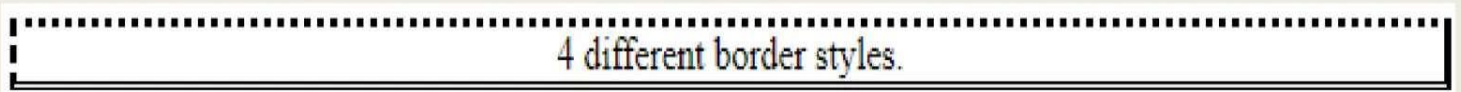
If the border-style property has one value:

**border-style: dotted;**

- all four borders are dotted

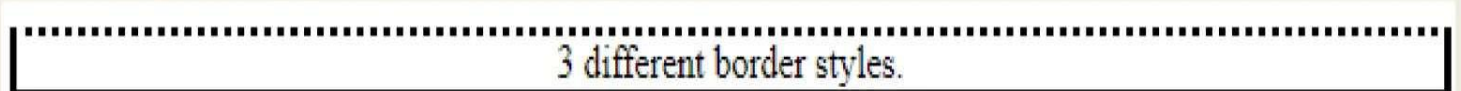
# Example of all that 4 Borders

- ```
p {  
  border-style: dotted solid double dashed;  
}
```



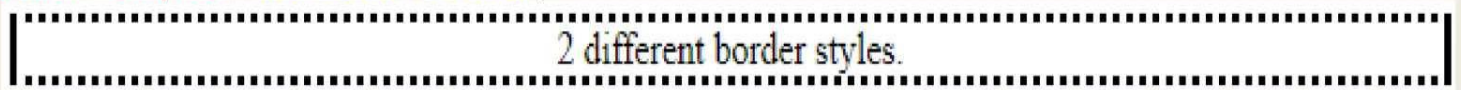
/* Three values */

- ```
p {
 border-style: dotted solid double;
}
```



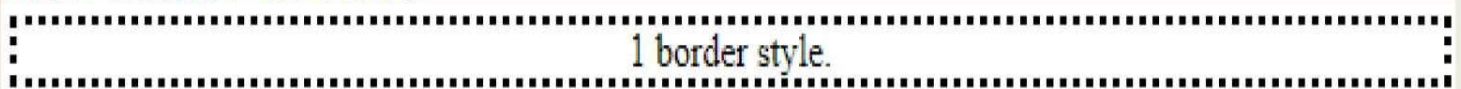
/\* Two values \*/

- ```
p {  
  border-style: dotted solid;  
}
```



/* One value */

- ```
p {
 border-style: dotted;
}
```



# CSS Shorthand Border Property

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- CSS Border - Shorthand Property
- Like you saw in the previous page, there are many properties to consider when dealing with borders.
- To shorten the code, it is also possible to specify all the individual border properties in one property.
- The border property is a shorthand property for the following individual border properties:

Example:

- border-width
- border-style (required)
- border-color

```
p {
 border: 5px solid red;
}
```

Some text

# Left Border

---

- ```
p {  
  border-left: 6px solid red;  
}
```



Some text

Bottom Border

```
p {  
  border-bottom: 6px solid red;  
}
```



Some text

CSS Rounded Borders

- The border-radius property is used to add rounded borders to an element

```
p.normal {  
  border: 2px solid red;  
  padding: 5px;  
}
```

Normal border

```
p.round1 {  
  border: 2px solid red;  
  border-radius: 5px;  
  padding: 5px;  
}
```

Round border

```
p.round2 {  
  border: 2px solid red;  
  border-radius: 8px;  
  padding: 5px;  
}
```

Rounder border

```
p.round3 {  
  border: 2px solid red;  
  border-radius: 12px;  
  padding: 5px;}
```

Roudest border



ANY QUESTIONS?

SLIDE



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Quiz questions

- 1) What is tag creates the largest heading in HTML?
- 2) What is tag is used to make text bold?
- 3) How is a comment inserted in an HTML document?