

INTRODUCTION TO CSS FUNDAMENTALS, RESPONSIVE WEB DESIGN, CSS ICONS

Download file and follow along!

Lecture 3, Week 3

LAST TIME

- ❑ Intro to HTML Fundamentals
- ❑ HTML Images/Forms/Tables
- ❑ Built a simple project with HTML

TODAY

- ❑ How CSS describes the elements displayed by HTML
- ❑ How HTML and CSS can help make a website look good on all devices (desktops, tablets, and phones)
- ❑ How to customize and use icons during web design

CSS

CSS stands for Cascading Style Sheets. It describes how HTML elements are to be displayed.

CSS Syntax

A CSS rule consists of a **selector** and a **declaration** block

```
h1 {font-size:32px; color:red; text-align:center;}
```

- ❑ The selector points to the HTML element to style (h1)
- ❑ The declaration block (in curly braces) contains one or more declarations separated by semicolons (;). Each declaration includes a CSS property “name” or “property” and a “value”, separated by a colon (:).

Examples

```
<style>
  p {font-size:32px; color:red; text-align:center;}
</style>
```

Or can also be reformatted as such for readability.

```
<style>
  p {
      font-size: 32px;
      color: red;
      text-align: center;
  }
</style>
```

External Style Sheet

A CSS style sheet can be stored in an external file e.g mystyle.css. The external style sheets are linked to HTML pages with <link> tags.

External file (mystyle.css)

```
body {background-color: orange; font-family:verdana}

h1 {color: white;}

p {font-size: 20px;}
```

HTML file (myhtml.html)

```
<!DOCTYPE html>
<html>
  <link rel="stylesheet" href="mystyle.css">
  <body>
    <h1>My First CSS Example</h1>
    <p>This is a paragraph.</p>
  </body>
</html>
```

Inline Style

The CSS style is added directly into the HTML elements.

```
<!DOCTYPE html>
<html>
```

```
<body>
  <p style="font-size:25px">This is a paragraph.</p>
  <p style="font-size:30px">This is a paragraph.</p>
</body>
</html>
```

Cascading Order

If different styles are specified for HTML elements, the styles will cascade into new styles with the following priority:

- Priority 1: Inline styles
- Priority 2: External and internal style sheets

Responsive Web Design

Responsive Web Design is about using HTML and CSS to automatically resize a website. Responsive Web Design is about making a website look good on all devices (desktops, tablets, and phones).

Setting The Viewport

When making responsive web pages, add the following `<meta>` element to all your web pages:

```
<meta name="viewport" content="width=device-width,initial-scale=1.0">
```

Media Queries

Media Queries play an important role in responsive web pages. With media queries you can define different styles for different browser sizes.

```
<style>
  .left, .right {
    float: left;
    width: 20%;
  }
  .main {
    float: left;
    width: 60%;
  }
  @media screen and (max-width:800px) {
    .left , .main, .right {width:100%;}
  }
</style>
```

CSS Icons

Icons come in scalable vector libraries that can be customized with CSS

Common libraries are:

- Font Awesome Icons
- Bootstrap Icons
- Google Icons

How To?

To use icons, just add a link to the icon library the `<head>` section of your HTML page:

No downloads or installations required!

To insert an icon, add the name of the icon class to any inline HTML element like `<i>` or ``.

Font Awesome Example

```
<!DOCTYPE html>
<html>
  <head>
    <link
rel="stylesheet"href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
  </head>
  <body>
    <i class="fa fa-cloud"></i>
    <i class="fa fa-heart"></i>
    <i class="fa fa-car"></i>
    <i class="fa fa-file"></i>
    <i class="fa fa-bars"></i>
  </body>
</html>
```

Bootstrap Example

```
<!DOCTYPE html>
<html>
  <head>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
  </head>
  <body>
    <i class="glyphicon glyphicon-cloud"></i>
    <i class="glyphicon glyphicon-remove"></i>
    <i class="glyphicon glyphicon-user"></i>
```

```
        <i class="glyphicon glyphicon-envelope"></i>
        <i class="glyphicon glyphicon-thumbs-up"></i>
    </body>
</html>
```

Google Example

```
<!DOCTYPE html>
<html>
    <head>
        <link rel="stylesheet"
              href="https://fonts.googleapis.com/icon?family=Material+Icons">
    </head>
    <body>
        <i class="material-icons">cloud</i>
        <i class="material-icons">favorite</i>
        <i class="material-icons">attachment</i>
        <i class="material-icons">computer</i>
        <i class="material-icons">traffic</i>
    </body>
</html>
```