Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

200
1822 - 2022

Introduction to CSS in HTML

Man Geni Addysg Uwch yng Nghymru
Where Higher Education Began in Wales

www.uwtsd.ac.uk

Today's Lecture

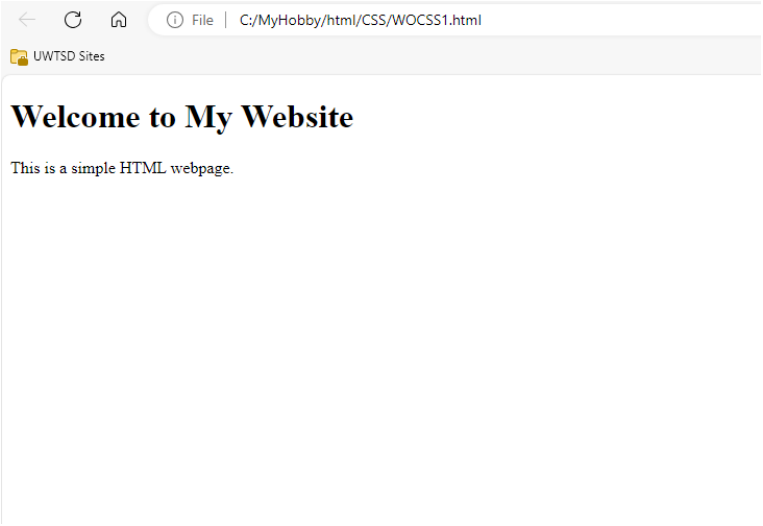
- Overview
- Introduction to CSS
- Activities

Understanding the Importance of CSS in Web Design

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Simple HTML</title>
</head>
<body>
  <h1>Welcome to My Website</h1>
  <p>This is a simple HTML webpage.</p>
</body>
</html>
```

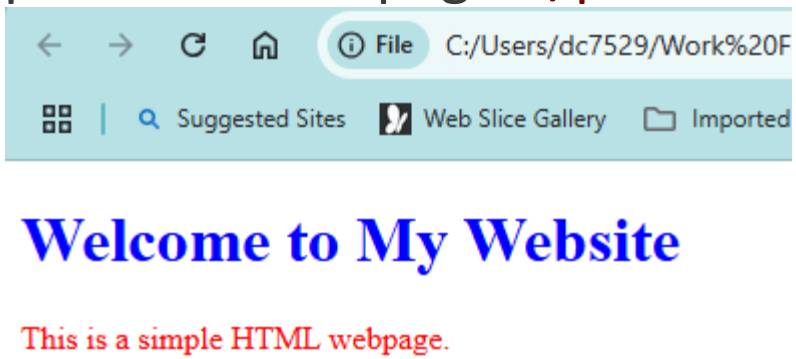
Understanding the Importance of CSS in Web Design

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport"
content="width=device-width, initial-scale=1.0">
   <title>Simple HTML</title>
</head>
<body>
   <h1>Welcome to My Website</h1>
   <p>This is a simple HTML webpage.</p>
</body>
</html>
```



Adding CSS (Structure + Style)

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Simple HTML</title>
</head>
<body>
   <h1 style="color:blue;"> Welcome to My Website</h1>
   <p style="color:red;">This is a simple HTML webpage.</p>
</body>
</html>
```



Using CSS

CSS can be added to HTML documents in 3 ways:

- **Inline** - by using the style attribute inside HTML elements
- **Internal** - by using a <style> element in the <head> section
- **External** - by using a <link> element to link to an external CSS file

Adding CSS (Structure + Style)

```
<title>Styled HTML</title>
<style>
  body {
    background-color: #f0f0f0;
    font-family: Arial, sans-serif;
    color: #333;
  }
  h1 {
    color: #007BFF;
  }
  p {
    font-size: 18px;
  }
</style>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <title>Internal CSS Example</title>
  <style>
    h1 {
      color: blue;
      font-family: Arial, sans-serif;
    }
    p {
      color: green;
      font-size: 18px;
      font-family: Verdana, sans-serif;
    }
    body {
      background-color: #f0f8ff; /* Light blue background */
    }
  </style>
</head>
<body>
  <h1>Hi, Welcome to My Website</h1>
  <p>This is a simple HTML webpage with internal CSS applied.</p>
</body>
</html>
```

External CSS

Simple.html

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Simple Website</title>
   <link rel="stylesheet" href="styles.css">
</head>
```

External CSS

Semantic layout elements

```
<body>
    <header>
        <h1>Welcome to My Website</h1>
        <nav>
            <ul>
                <li><a href="index.html">Home</a></li>
                <li><a href="about.html">About</a></li>
                <li><a href="contact.html">Contact</a></li>
            </ul>
        </nav>
    </header>
```

External CSS

Semantic layout elements

```
    <main>
    <h2>Introduction</h2>
    <p>This is a simple webpage with validated HTML
and CSS.</p>
    </main>
    <footer>
        <p>&copy; 2024 My Website</p>
    </footer>
</body>
</html>
```

HTML without linking styles.css

Welcome to My Website

- Home
- About
- Contact

Introduction

Styles.CSS

```
/* General body styling */
body {
 font-family: Arial, sans-serif;
 background-color: #f4f4f4;
 color: #333;


}
```

Styles.css

```
/* Header styling */
header {
background-color: #007BFF;
color: white;
padding: 10px;
text-align: center;

}
```

Styles.css

```
/* Navigation menu */
nav ul li {
display: inline;
margin: 0 10px;
}
nav ul li a {
color: white;
 }
```

Styles.css

```
/* Main content styling */
main {
padding: 20px;
}
/* Footer styling */
footer {
background-color: #333;
color: white;
text-align: center;
padding: 10px;
position: fixed;
bottom: 0;
width: 100%;
}
```

Picking color values

https://www.w3schools.com/colors/colors_picker.asp

Checking the colours

https://contrastchecker.com/

Welcome to My Website

Home About Contact

Introduction

This is a simple webpage with validated HTML and CSS.

© 2024 My Website

Validate HTML

https://validator.w3.org/detailed.html

validator.w3.org/detailed.html#validate-by-input

Suggested Sites | Web Slice Gallery | Imported From IE | news | Work | Food | Travel | Food | Save with Morrisons... | Quick Access | Finance

Validate by direct input

Enter the Markup (Full Document) to validate:

```
            </ul>
        </nav>
    </header>
    <main>
        <h2>Introduction</h2>
        <p>This is a simple webpage with validated HTML and CSS.</p>
    </main>
    <footer>
        <p>© 2024 My Website</p>
    </footer>
</body>
</html>
```

More Options

- (●) **Validate Full Document**
  - Use Doctype: (detect automatically) [ ] Only if Doctype is missing
- ( ) **Validate HTML fragment**
  - Use Doctype: (●) HTML 4.01 ( ) XHTML 1.0
- (●) List Messages Sequentially ( ) Group Error Messages by Type
- [ ] Show Source [ ] Clean up Markup with HTML-Tidy
- [ ] Show Outline [ ] Validate error pages [ ] Verbose Output

Check

This validator checks the markup validity of Web documents in HTML, XHTML, SMIL, MathML, etc. If you wish to validate specific content such as RSS/Atom feeds tools available. As an alternative you can also try our non-DTD-based validator.

I ♥ VALIDATOR

The W3C validators rely on community suppor

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Validate HTML

https://validator.w3.org/detailed.html

validator.w3.org/nu/#textarea

Suggested Sites | Web Slice Gallery | Imported From IE | news | Work | Food | Travel | Food | Save with Morrisons... | Quick Access | Fin

```
        <p>This is a simple webpage with validated HTML and CSS.</p>
    </main>
    <footer>
        <p>© 2024 My Website</p>
    </footer>
</body>
</html>
```

Check

Use the Message Filtering button below to hide/show particular messages, and to see total counts of errors and warnings.

Message Filtering

Document checking completed. No errors or warnings to show.

Source

```
1. <!DOCTYPE html>↩
2. <html lang="en">↩
3. <head>↩
4.     <meta charset="UTF-8">↩
5.     <meta name="viewport" content="width=device-width, initial-scale=1.0">↩
6.     <title>Simple Website</title>↩
7.     <link rel="stylesheet" href="styles.css">↩
8. </head>↩
9. <body>↩
10.     <header>↩
11.         <h1>Welcome to My Website</h1>↩
12.         <nav>↩
13.             <ul>↩
14.                 <li><a href="index.html">Home</a></li>↩
15.                 <li><a href="about.html">About</a></li>↩
16.                 <li><a href="contact.html">Contact</a></li>↩
17.             </ul>↩
18.         </nav>↩
19.     </header>↩
20.     <main>↩
21.         <h2>Introduction</h2>↩
22.         <p>This is a simple webpage with validated HTML and CSS.</p>↩
23.     </main>↩
24.     <footer>↩
25.         <p>© 2024 My Website</p>↩
26.     </footer>↩
27. </body>↩
28. </html>
```

Used the HTML parser.

Total execution time 2 milliseconds.

About this checker • Report an issue • Version: 24.11.12

Validate CSS

https://jigsaw.w3.org/css-validator/

jigsaw.w3.org/css-validator/validator

Suggested Sites | Web Slice Gallery | Imported From IE | news | Work | Food | Travel | Food | Save with Morrisons... | Quick Access | Finance | Health | Finance | Google | Vehicle | Google Maps

Jump to: Validated CSS

W3C CSS Validator results for TextArea (CSS level 3 + SVG)

Congratulations! No Error Found.

This document validates as CSS level 3 + SVG !

To show your readers that you've taken the care to create an interoperable Web page, you may display this icon on any page that validates. Here is the XHTML you could use to add this icon to your Web page:

```
<p>
    <a href="http://jigsaw.w3.org/css-validator/check/referer">
        <img style="border:0;width:88px;height:31px"
            src="http://jigsaw.w3.org/css-validator/images/vcss"
            alt="Valid CSS!" />
    </a>
</p>
```

```
<p>
<a href="http://jigsaw.w3.org/css-validator/check/referer">
    <img style="border:0;width:88px;height:31px"
        src="http://jigsaw.w3.org/css-validator/images/vcss-blue"
        alt="Valid CSS!" />
    </a>
</p>
```

(close the img tag with > instead of /> if using HTML <= 4.01)

The W3C validators rely on community support for hosting and development.

Donate and help us build better tools for a better web.

If you like, you can download a copy of this image to keep in your local web directory, and change the XHTML fragment above to reference your local image rather than the one on this server.

If you would like to create a link to this page (i.e., this validation result) to make it easier to re-validate this page in the future or to allow others to validate your page, the URI is:

```
http://jigsaw.w3.org/css-validator/validator$link
or
http://jigsaw.w3.org/css-validator/check/referer (for HTML/XML document only)
```

Further Reading :

Part II: HTML Markup for Structure

Part III: CSS for Presentation

Robbins, J., 2018, Learning Web Design: A Beginner’s Guide to HTML, CSS, JavaScript, and Web Graphics, O'Reilly Media