

HTML MODULE 02

CREATING & STYLING HTML PAGES

Summer 2021 – Web Development using ASP .Net Core MVC



IN-CLASS DEMO

Demonstration: Creating a Simple Contact Form

- Source/Steps
- https://github.com/MicrosoftLearning/20480-Programming-in-HTML5-with-JavaScript-and-CSS3/blob/master/Instructions/20480C_MOD01_DEMO.md



SCREENSHOTS

```
1 <!DOCTYPE HTML>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8" />
5     <title>Contact Us</title>
6   </head>
7   <body>
8
9     <h1>Contact Contoso Conferencing</h1>
10
11     <p>Contoso Conferencing Ltd.</p>
12     <p>
13       123 South Street<br />
14       Somewhere<br />
15       Over There<br />
16       <em>USA</em>
17     </p>
18     <p>
19       <a href="mailto:contact@contoso.com">
20         contact@contoso.com</a>
21     </p>
22
23     <p>
24       If you would like to contact Contoso Conferencing,
25       whether you're interested in our services or in a
26       conference we're currently organizing, don't hesitate
27       to contact us by using our enquiry form. (<strong>Bold
28       fields</strong> are required.)
29     </p>
30
31     <form method="Post" action="support.aspx">
32
33       <fieldset>
34         <legend>
35           Your Details and Enquiry
36         </legend>
37
38         <ol>
39           <li>
40             <label>
41               <strong>Name</strong><br />
42               <input type="text"
43                 name="UserName" />
44             </label>
45           </li>
46           <li>
47             <label>
48               Telephone<br />
49               <input type="text"
50                 name="Phone" />
51             </label>
52           </li>
53           <li>
54             <label>
55               Email Address<br />
56               <input type="text"
57                 name="Email" />
58             </label>
59           </li>
60           <li>
61             <label>
62               <strong>Message</strong><br />
63               <textarea name="Message"
64                 cols="30" rows="10">Add your message here
65             </textarea>
66             </label>
67           </li>
68         </ol>
69         <input type="submit" value="Send" />
70       </fieldset>
71     </form>
72   </body>
73 </html>
```

Contact Us

← → ↻ ⓘ File | L:/MSSA_HTML/Ail... ☆ ⚙ Incognito ⋮

Contact Contoso Conferencing

Contoso Conferencing Ltd.

123 South Street
Somewhere
Over There
USA

contact@contoso.com

If you would like to contact Contoso Conferencing, whether you're interested in our services or in a conference we're currently organizing, don't hesitate to contact us by using our enquiry form. (**Bold fields** are required.)

Your Details and Enquiry

1. Name


2. Telephone

3. Email Address

4. Message

Add your message here

← → ↻ 🔒 notepad-plus-plus.org/downloads/



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HOW TO ADD CSS

External CSS

- Include a reference to an external style sheet file in the `<link>` element, inside the **head** section.
- You can use one such file for the entire website!
- Preferred for consistency.

Internal CSS

- Define your CSS style inside a `<style>` element, inside the **head** section.
- Used when each page has a unique style

Inline CSS

- add a **style attribute** directly to the relevant **element**

▪ Source: https://www.w3schools.com/css/css_howto.asp

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="mystyle.css">
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

"mystyle.css"

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

h1 {
  color: navy;
  margin-left: 20px;
}
```

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

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

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

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

<h1 style="color:blue;text-align:center;">This is a heading</h1>
<p style="color:red;">This is a paragraph.</p>

</body>
</html>
```

LET'S PLAY ...

- Create a new HTML file with the contents:
 - `<!DOCTYPE HTML>`
 - `<html lang="en">`
 - `<head>`
 - `<meta charset="UTF-8" />`
 - `<title>Contact Us</title>`
 - `</head>`
 - `<body>`
 - `</body>`
 - `</html>`
- Let's add some content. Let's say we would like to add four paragraphs.
- Let's add some styling (Internal CSS)
 - Play with class
- Let's move this into an external CSS file.
- Let's quickly add a little bit of JavaScript and a button.



CASCADE AND INHERITANCE – SKIP

- Some CSS property values set on parent elements are inherited by their child elements, and some aren't.
 - When applying same HTML element can be the target of multiple CSS selectors.
 - These selectors may contain conflicting values. Which one applies?

- Main factors:

- Importance:** use **!important** to over override ALL styling rules for a given property on an element
 - Also see this [example](#)

- Specificity:**
 - The highest specificity wins (i.e. most specific gets applied last)
 - The universal selector (*) has low specificity, the ID selectors are highly specific!
 - To calculate specificity:
 - add 100 for each **ID**
 - add 10 for each **attribute**, **class** or **pseudo-class**
 - add 1 for each **element** name or **pseudo-element**

```
A: h1
B: #content h1
C: <div id="content"><h1 style="color: #ffffff">Heading</h1></div>
```

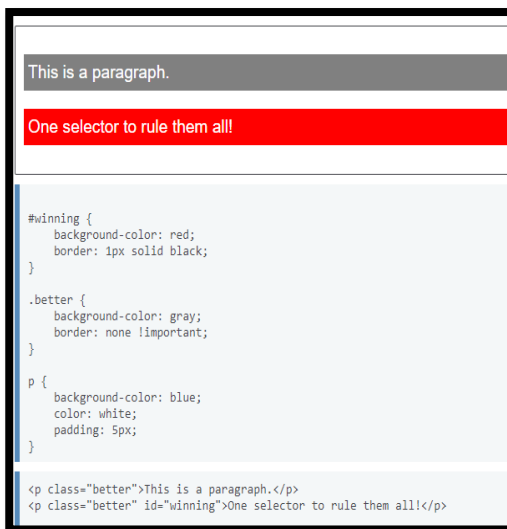
The specificity of A is 1 (one element)
The specificity of B is 101 (one ID reference and one element)
The specificity of C is 1000 (inline styling)

Since $1 < 101 < 1000$, the third rule (C) has a greater level of specificity, and therefore will be applied.

- Order:**
 - For multiple rules with same specificity, they are applied in the order they appear
 - So, the last one applied wins.

- Sources:

- https://developer.mozilla.org/en-US/docs/Learn/CSS/Building_blocks/Cascade_and_inheritance
- https://www.w3schools.com/css/css_important.asp
- https://www.w3schools.com/css/css_specificity.asp



IN-CLASS DEMO

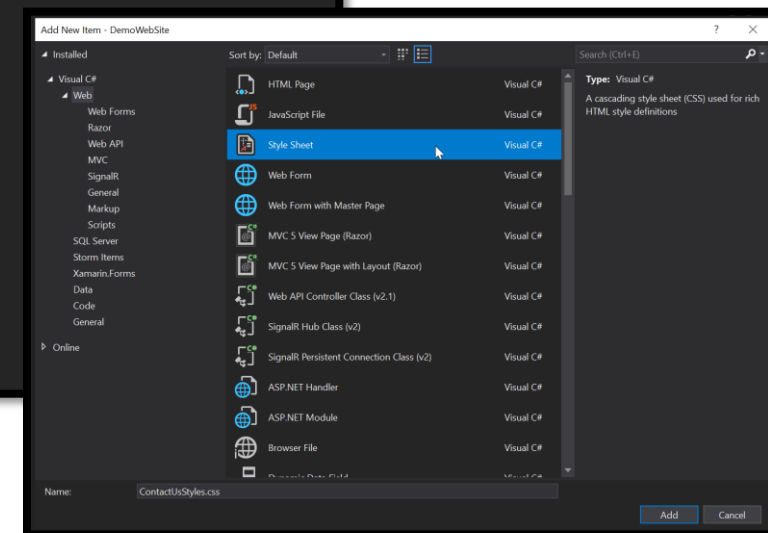
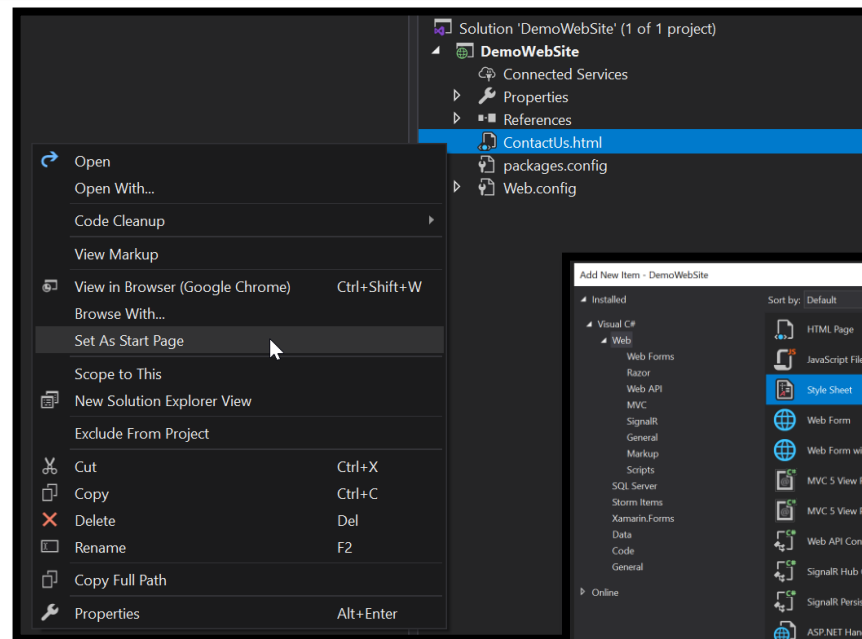
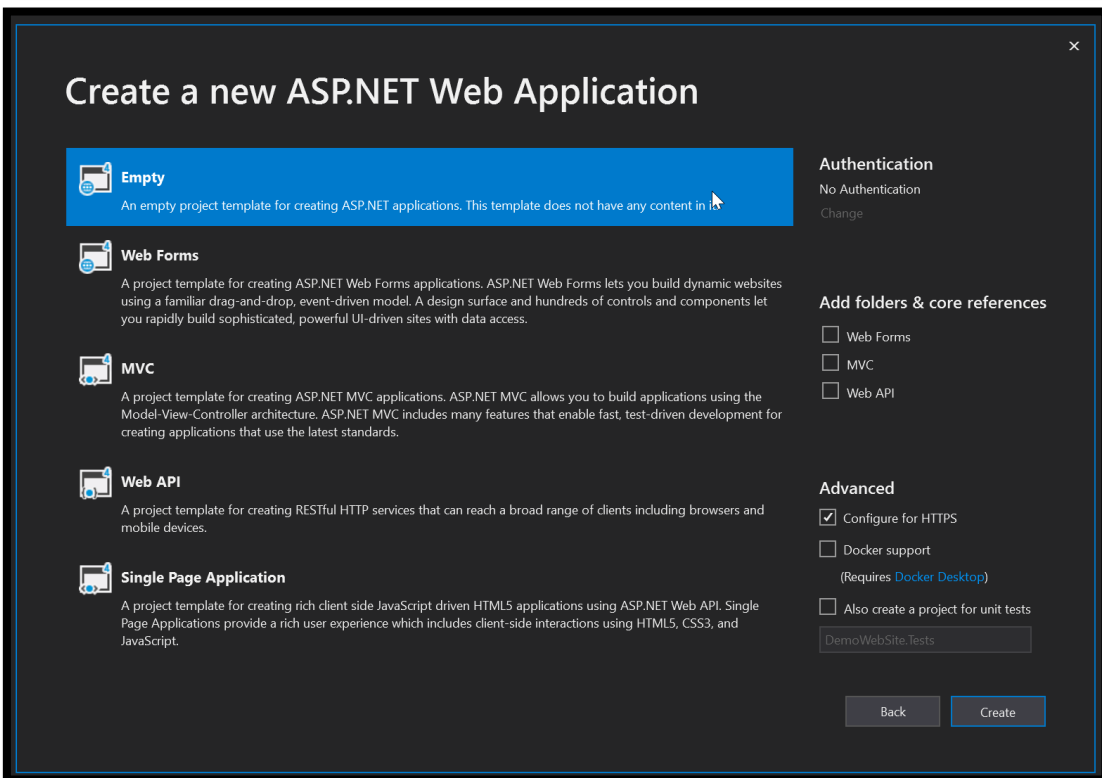
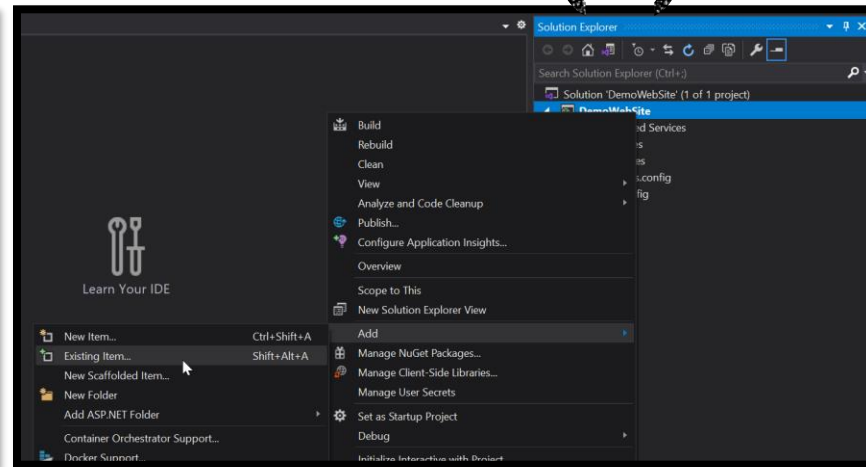
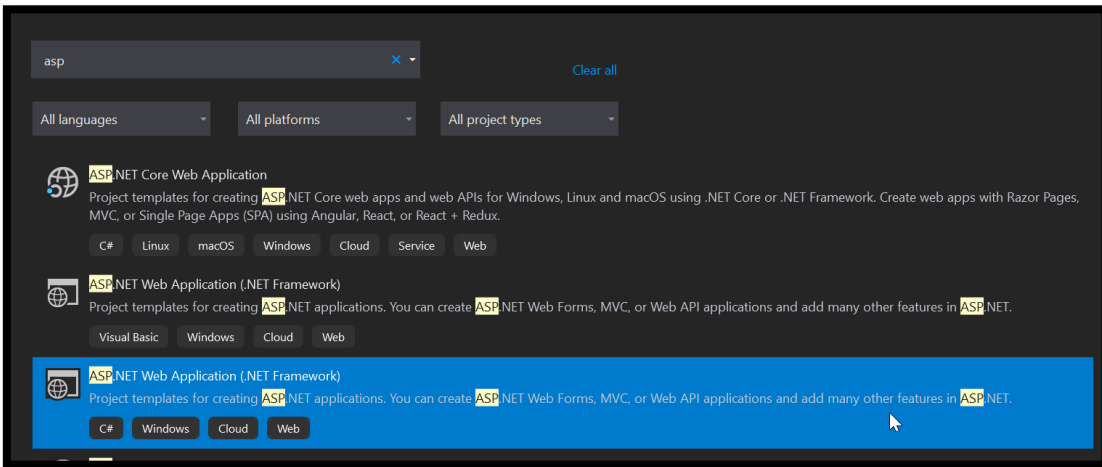
Demonstration: Creating a Website by Using Visual Studio 2017

- **Source/Steps**

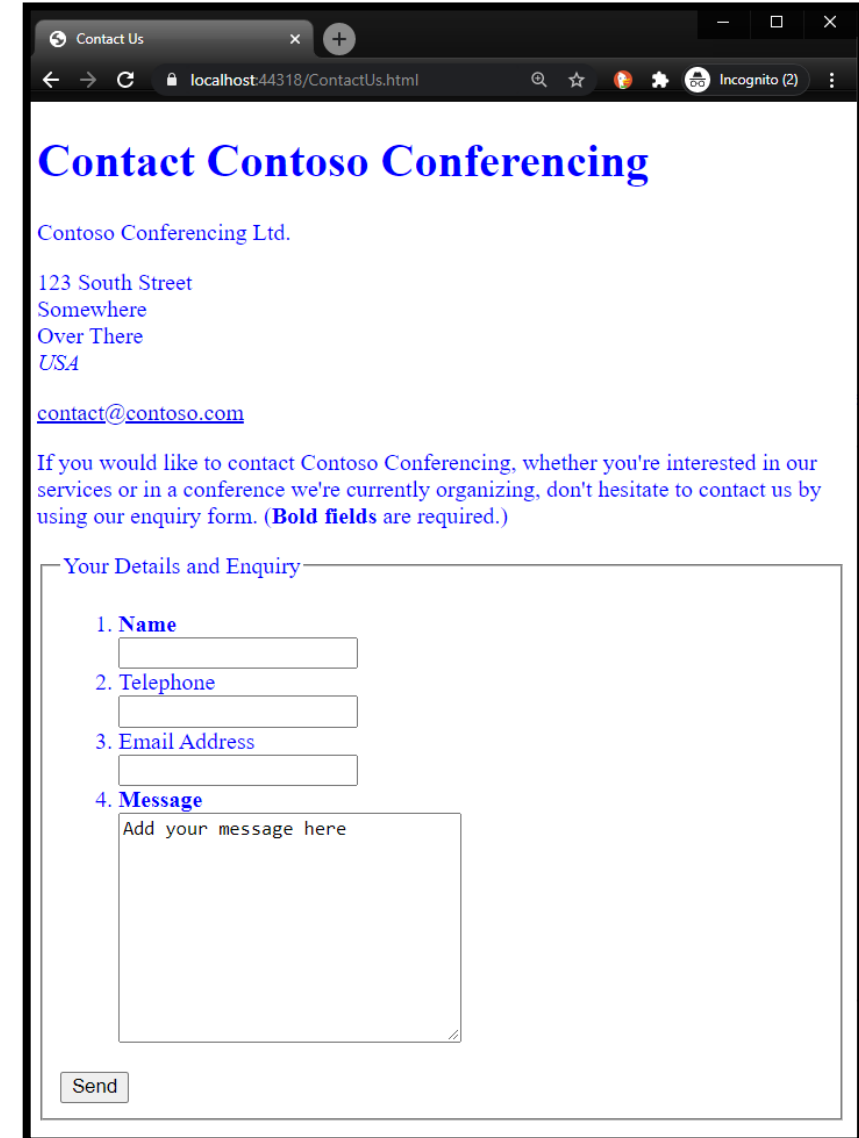
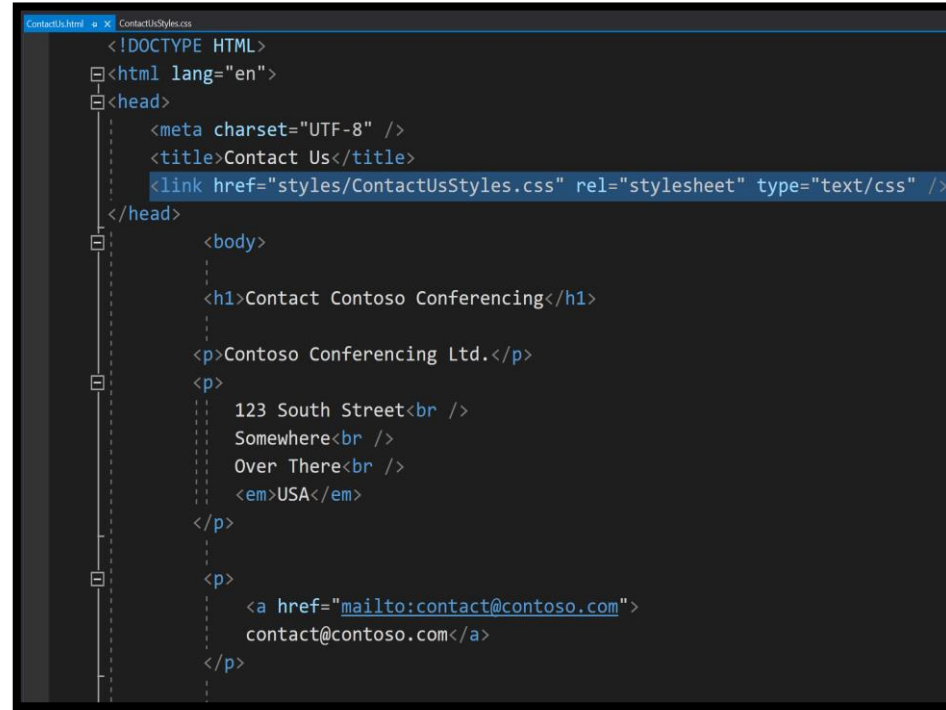
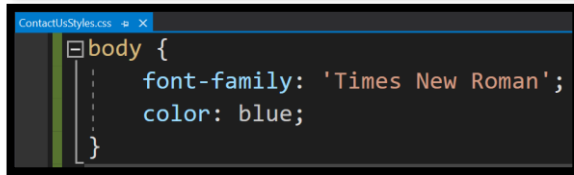
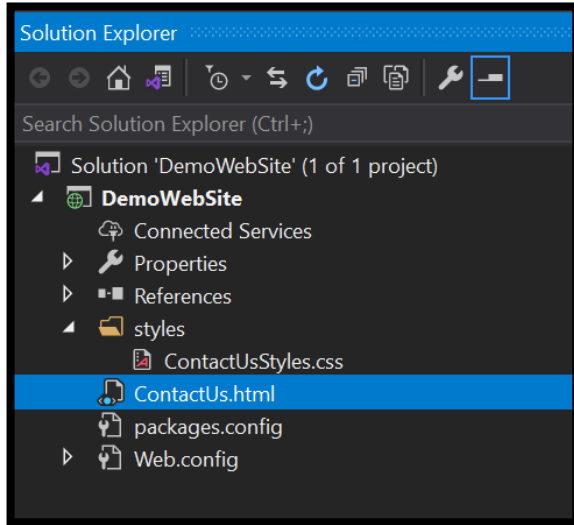
- https://github.com/MicrosoftLearning/20480-Programming-in-HTML5-with-JavaScript-and-CSS3/blob/master/Instructions/20480C_MOD01_DEMO.md#lesson-3-creating-a-web-application-by-using-visual-studio-2017



SCREENSHOTS (1)



SCREENSHOTS (2)



IN-CLASS DEMO – IF TIME

Demonstration: Exploring the Contoso Conference Application

- Source/Steps

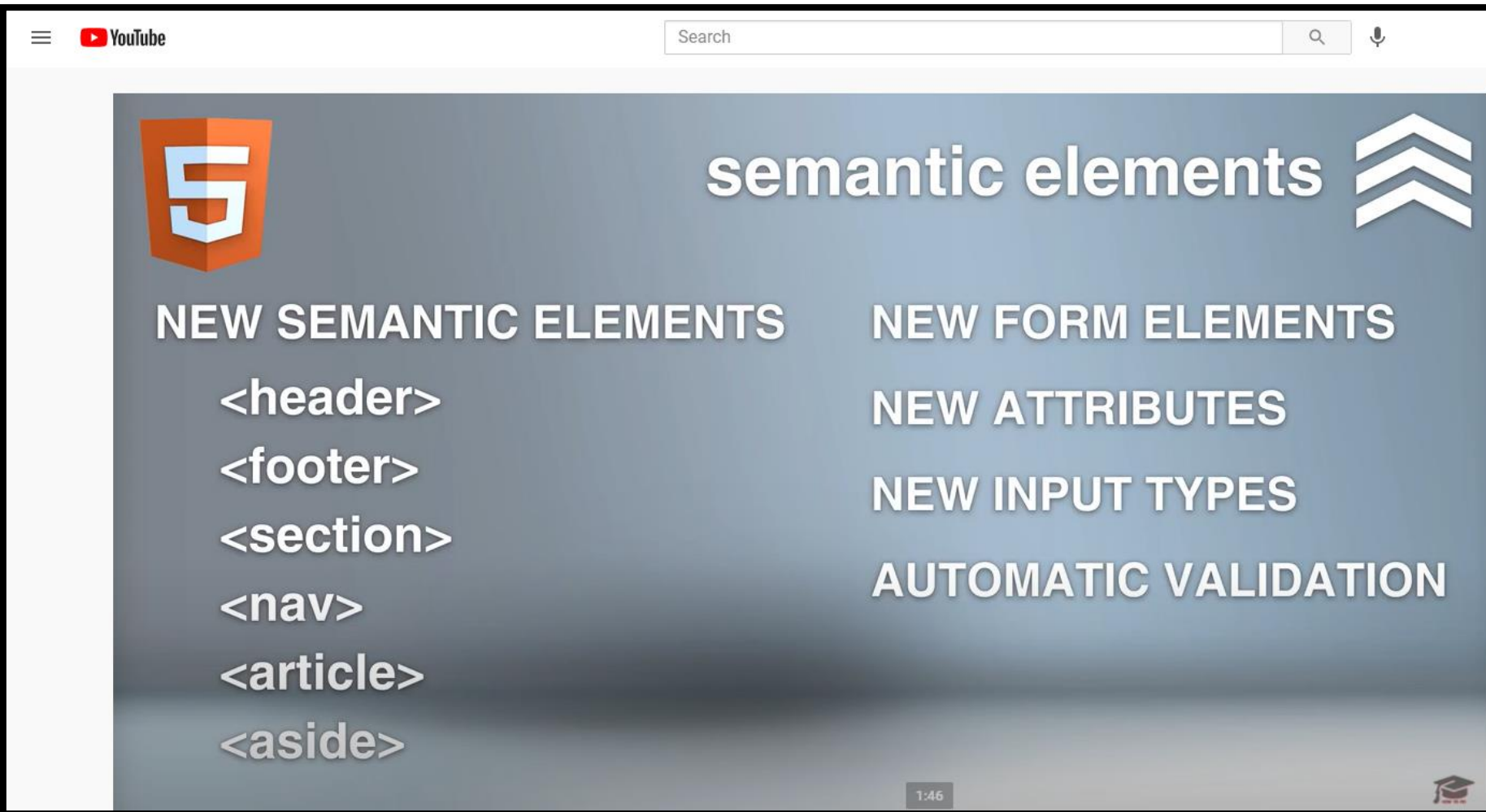
- https://github.com/MicrosoftLearning/20480-Programming-in-HTML5-with-JavaScript-and-CSS3/blob/master/Instructions/20480C_MOD01_DEMO.md#demonstration-exploring-the-contoso-conference-application



MODULE 2 STARTS HERE



WHAT IS HTML5?



- Source: <https://www.youtube.com/watch?v=um3DRKIN3-8>
- See also (old but nice): <https://www.youtube.com/watch?v=mzPxo7Y6JyA>

HTML[5] - LIVING STANDARD (SKIP)

- Here is a resource that you can use:
 - <https://html.spec.whatwg.org/print.pdf>



The screenshot shows the homepage of the HTML Living Standard website. The URL in the browser's address bar is html.spec.whatwg.org. The main heading is "HTML" in large green letters, followed by "Living Standard — Last Updated 17 March 2021" in green. Below this, there are two rows of buttons. The first row includes: "One-Page Version" (linking to [html.spec.whatwg.org](https://html.spec.whatwg.org/html.spec.whatwg.org)), "Multipage Version" (linking to [/multipage](https://html.spec.whatwg.org/multipage)), "Developer Version" (linking to [/dev](https://html.spec.whatwg.org/dev)), "PDF Version" (linking to [/print.pdf](https://html.spec.whatwg.org/print.pdf)), "Translations" (linking to Japanese and Simplified Chinese), "FAQ" (linking to the FAQ on GitHub), and "Join us on IRC" (linking to #whatwg on Freenode). The second row includes: "Contribute on GitHub" (linking to the whatwg/html repository), "Commits" (linking to commits on GitHub), "Snapshot" (linking to the snapshot as of this commit), "Twitter Updates" (linking to @htmlstandard), "Open Issues" (linking to issues filed on GitHub), "Open an Issue" (linking to whatwg.org/newbug), "Tests" (linking to web-platform-tests/html/), and "Issues for Tests" (linking to ongoing work). Below the buttons, there is a "Table of contents" section with a list of links: 1 Introduction, 2 Common infrastructure, 3 Semantics, structure, and APIs of HTML documents, 4 The elements of HTML, 5 Microdata, 6 User interaction, 7 Loading web pages, 8 Web application APIs, 9 Communication, 10 Web workers, 11 Worklets, 12 Web storage, 13 The HTML syntax, 14 The XML syntax, 15 Rendering, 16 Obsolete features, 17 IANA considerations, Index, References, Acknowledgments, and Intellectual property rights.

- Source: <https://html.spec.whatwg.org/>

HTML5 – CHEAT SHEET (SKIP)

See also

- <https://websitesetup.org/html5-cheat-sheet/>

HTML 5 HTML 4 LIST OF EVENT ATTRIBUTES SUPPORTED IN BOTH HTML 5 AND HTML 4			
Onabort	ABORT EVENT	Onmouseout	MOUSE CURSOR EXITED EVENT
Onbeforeunload	BEFORE UNLOAD EVENT	Onmouseover	MOUSE CURSOR ENTERED EVENT
Onclick	MOUSE CLICKED EVENT	Onmouseup	MOUSE BUTTON RELEASED EVENT
Ondblclick	MOUSE DOUBLE-CLICKED EVENT	Onmove	MOVE EVENT
Ongesturechange	GESTURE CHANGE EVENT	Onorientationchange	DEVICE ORIENTATION CHANGED EVENT
Ongestureend	END OF GESTURE EVENT	Onpaste	PASTE EVENT
Ongesturestart	START OF GESTURE EVENT	Onresize	RESIZE EVENT
Onkeydown	KEY PRESSED DOWN EVENT	Ontouchcancel	TOUCH CANCELED EVENT
Onkeypress	KEY PRESSED EVENT	Ontouchend	TOUCH ENDED EVENT
Onkeyup	KEY RELEASED EVENT	Ontouchmove	TOUCH MOVE EVENT
Onmousedown	MOUSE BUTTON PRESSED DOWN EVENT	Ontouchstart	TOUCH STARTED EVENT
Onmousemove	MOUSE MOVED EVENT		

TAG (# to I)	INFO	AVAILABLE IN	
<!-- -->	COMMENT	HTML5	HTML4
<!DOCTYPE>	DOCUMENT TYPE	HTML5	HTML4
<a>	HYPERLINK	HTML5	HTML4
<abbr>	ABBREVIATION	HTML5	HTML4
<acronym>	ACRONYM		HTML4
<address>	ADDRESS ELEMENT	HTML5	HTML4
<applet>	APPLET		HTML4
<area>	AREA INSIDE AN IMAGE MAP	HTML5	HTML4
<article>	ARTICLE	HTML5	
<aside>	OUTSIDE THE MAIN FLOW OF THE NARRATIVE	HTML5	
<audio>	SOUND CONTENT	HTML5	
	BOLD TEXT	HTML5	HTML4
<base>	BASE URL FOR ALL THE PAGE LINKS	HTML5	HTML4
<basefont>	BASE FONT FOR THE DOCUMENT		HTML4
<bb>	INVOKED USER AGENT COM-	HTML5	
<bdo>	DIRECTION OF TEXT DISPLAY	HTML5	HTML4
<big>	BIG TEXT		HTML4
<blockquote>	LONG QUOTATION	HTML5	HTML4
<body>	BODY ELEMENT	HTML5	HTML4
 	INSERTS A SINGLE LINE BREAK	HTML5	HTML4
<button>	PUSH BUTTON	HTML5	HTML4
<canvas>	GRAPHIC AREA	HTML5	
<caption>	TABLE CAPTION	HTML5	HTML4
<center>	CENTERED TEXT		HTML4

TAG (I to Z)	INFO	AVAILABLE IN	
<input>	INPUT FIELD	HTML5	HTML4
<ins>	INSERTED TEXT	HTML5	HTML4
<isindex>	SINGLE-LINE INPUT FIELD		HTML4
<kbd>	KEYBOARD TEXT	HTML5	HTML4
<label>	LABEL FOR A FORM CONTROL	HTML5	HTML4
<legend>	FIELDSET TITLE	HTML5	HTML4
	LIST ITEM	HTML5	HTML4
<link>	RESOURCE REFERENCE	HTML5	HTML4
<mark>	MARKED TEXT	HTML5	
<map>	IMAGE MAP	HTML5	HTML4
<menu>	MENU LIST	HTML5	HTML4
<meta>	META INFORMATION	HTML5	HTML4
<meter>	MEASUREMENT WITHIN A PREDE- FINED RANGE	HTML5	
<nav>	NAVIGATION LINKS	HTML5	
<noframes>	NOFRAME SECTION		HTML4
<noscript>	NOSCRIPT SECTION	HTML5	HTML4
<object>	EMBEDDED OBJECT	HTML5	HTML4
	ORDERED LIST	HTML5	HTML4
<optgroup>	OPTION GROUP	HTML5	HTML4
<option>	OPTION IN A DROP-DOWN LIST	HTML5	HTML4
<output>	SOME TYPES OF OUTPUT	HTML5	
<p>	PARAGRAPH	HTML5	HTML4
<param>	PARAMETER FOR AN OBJECT	HTML5	HTML4
<pre>	PREFORMATTED TEXT	HTML5	HTML4

- Source: <https://www.wpkube.com/html5-cheat-sheet/>

■ Source:

- <https://websitesetup.org/html5-cheat-sheet/>



HTML5 Tag Cheat Sheet

Created by WebsiteSetup.org

Legend:

<html5> - New tags in HTML5

<deprecated> - Deprecated tags

attr2 / attr2 - Tag attributes

<!-- -->

Defines a comment

<!DOCTYPE>

Defines the document type

<a>

Defines a hyperlink
href, hreflang, media, ping, rel, target, type

<abbr>

Defines an abbreviation

<acronym>

Used to define an embedded acronym

<address>

Defines an address element

<applet>

Used to define an embedded applet

<area>

Defines an area inside an image map
alt, coords, href, hreflang, media, ping, rel, shape, target, type

<article>

Defines an article
cite, pubdate

<aside>

Defines content aside from the page content

<audio>

Defines sound content
autoplay, controls, src

Defines bold text

<base>

Defines a base URL for all the links in a page
href, target

<basefont>

Used to define a default font-color, font-size, or font-family for all the document

<bdo>

Defines the direction of text display
dir

<big>

Used to make text bigger

<blockquote>

Defines a long quotation
cite

<body>

Defines a body element

**
**

Inserts a single line break

<button>

Defines a push button
autofocus, disabled, form, formaction, formenctype, formmethod, formnovalidate, formtarget, name, type, value

<canvas>

Defines graphics
height, width

<caption>

Defines a table caption

<center>

Used to center align text and content

<cite>

Defines a citation

<code>

Defines computer code text
autobuffer, autoplay, controls, src

<col>

Defines attributes for table columns

<colgroup>

Defines groups of table columns
span

<command>

Defines a command button
checked, disabled, icon, label, radiogroup, type

<datalist>

Defines a dropdown list

<dd>

Defines a definition description

Defines deleted text
cite, datetime

<details>

Defines details of an element
open

<dialog>

Defines a dialog (conversation)

<dfn>

Defines a definition term

<dir>

Used to define a directory list

<div>

Defines a section in a document

<dl>

Defines a definition list

<dt>

Defines a definition term

Defines emphasized text

<embed>

Defines external interactive content or plugin
height, src, type, width

<fieldset>

Defines a fieldset
disabled, form, name

<figure>

Defines a group of media content, and their caption

Used to define font face, font size, and font color of text

<footer>

Defines a footer for a section or page

<form>

Defines a form
accept-charset, action, autocomplete, enctype, method, name, novalidate, target

<frame>

Used to define one particular window within a framework

<frameset>

Used to define a frameset, which organized multiple windows

<h1> to <h6>

Defines header 1 to header 6

<head>

Defines information about the document

<header>

Defines a header for a section or page

<hgroup>

Defines information about a section in a document

<hr>

Defines a horizontal rule

<html>

Defines an html document
manifest, xmlns

<i>

Defines italic text

<iframe>

Defines an inline sub window
height, name, sandbox, seamless, src, width

Defines an image
alt, src, height, ismap, usemap, width

<input>

Defines an input field

<ins>

Defines inserted text
cite, datetime

<keygen>

Used to define a generated key in a form

<kbd>

Defines keyboard text

<label>

Defines an inline sub window
for, form

<legend>

Defines a title in a fieldset

Defines a list item
value

<link>

Defines a resource reference
href, hreflang, media, rel, sizes, type

<map>

Defines an image map
name

<mark>

Defines marked text

<menu>

Defines a menu list
label, type

<meta>

Defines meta information
charset, content, http-equiv, name

<meter>

Defines measurement within a predefined range
high, low, max, min, optimum, value

<nav>

Defines navigation links

<noframes>

Used to display text for browsers that do not handle frames

<noscript>

Defines a noscript section

<object>

Defines an embedded object
data, form, height, name, type, usemap, width

Defines an ordered list
reversed, start

<optgroup>

Defines an option group
label, disabled

<option>

Defines an option in a drop-down list
disabled, label, selected, value

<output>

Defines some types of output
for, form, name

<p>

Defines a paragraph

<param>

Defines a parameter for an object
name, value

<pre>

Defines preformatted text

<progress>

Defines progress of a task of any kind
max, value

<q>

Defines a short quotation
cite

<rp>

Used in ruby annotations to define what to show browsers that do not support the ruby element

<rt>

Defines explanation to ruby annotations

<ruby>

Defines ruby annotations

<s>

Defines a strikethrough text

<strike>

Used to find a strikethrough text

<samp>

Defines sample computer code

<script>

Defines a definition list
async, type, charset, defer, src

<section>

Defines a section
cite

<select>

Defines a selectable list
autofocus, disabled, form, multiple, name, size

<small>

Defines small text

<source>

Defines media resources
media, src, type

Defines a section in a document

Defines strong text

<style>

Defines a style definition
type, media, scoped

<sub>, <sup>

Defines a sub/super-scripted text

<table>

Defines a table
summary

<tbody>

Defines a table body
summary

<td>

Defines a table cell
colspan, headers, rowspan

<textarea>

Defines a text area
autofocus, cols, disabled, form, maxlength, name, placeholder, readonly, required, rows, wrap

<tfoot>, <thead>

Defines a table footer / head

<th>

Defines a table header
colspan, headers, rowspan, scope

<time>

Defines a date/time
datetime

<title>

Defines the document title

<tr>

Defines a table row
datetime

<tt>

Used to define teletype text

<u>

Defines a non-textual annotation

Defines an unordered list

<var>

Defines a variable

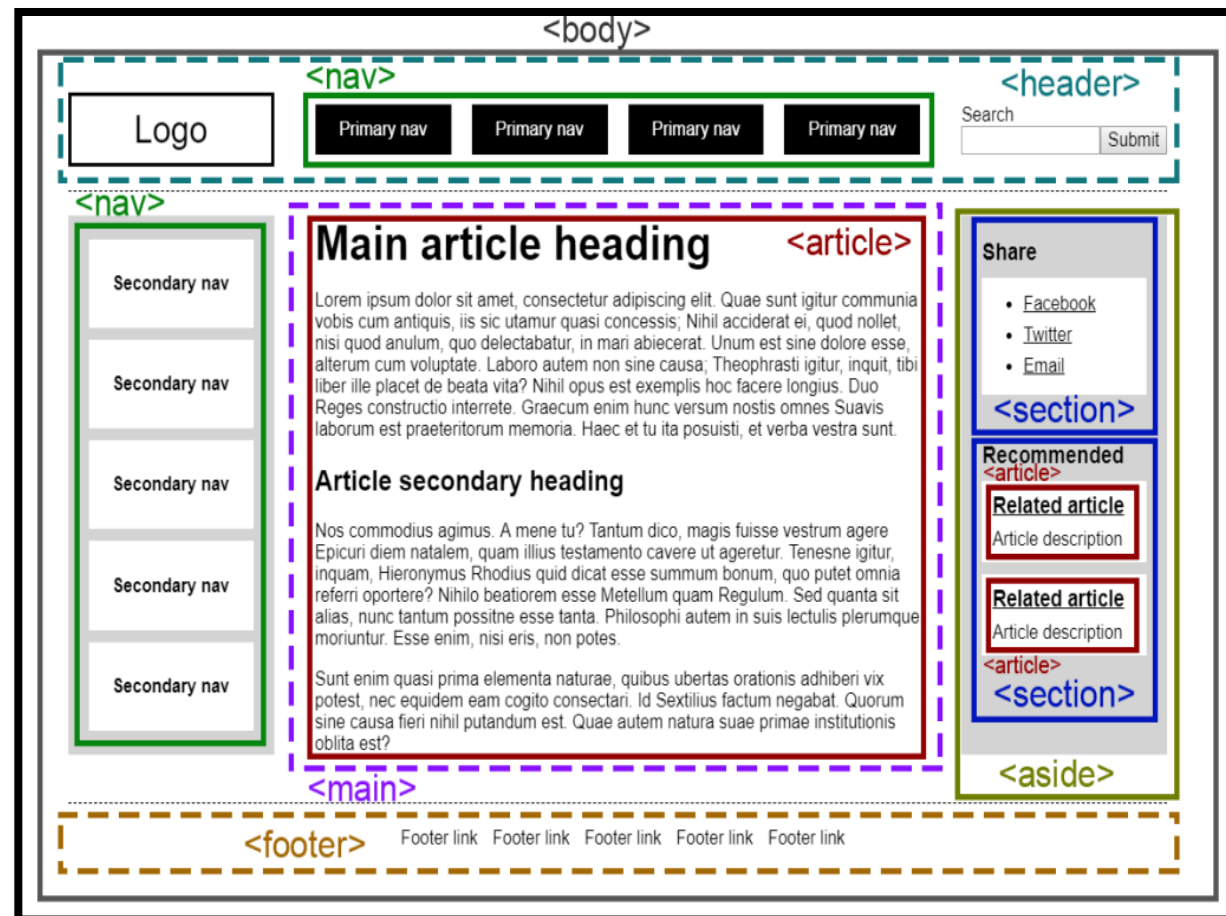
<video>

Defines a video
autoplay, controls, height, loop, src, width

HTML5 - DOCUMENT STRUCTURE

- **<nav>** – defines a set of **navigation links**. It's only intended for major site navigations (not intended to be used for every link!)
 - See an example: https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_nav
- **<aside>** – used for content that is only **somewhat related** (or not related at all) to the main content. It is often placed as a sidebar.
 - See an example: https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_aside
- **<article>** – used for content that is **self-contained** (i.e. it can be distributed on its own). Examples: forum post, blog post, news...
 - See an example: https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_article
- **<section>** – used for **sections** of the document.
 - See an example: https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_section
- **<footer>** - **footer** for a document or section. May be used for author, contact info, sitemap, etc.
 - See an example: https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_footer_css
- **<header>** - is a **container for introductory content** (including navigational links)
 - See an example: https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_header
- **<main>** - contains the **main content of a page**.
 - Repeated content across pages (such as logos, and nav links) should not be included here.
 - See an example: https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_main_css

- Sources:
 - <https://css-tricks.com/how-to-section-your-html/>
 - https://www.w3schools.com/tags/tag_article.asp
 - https://www.w3schools.com/tags/tag_aside.asp
 - https://www.w3schools.com/tags/tag_section.asp
 - https://www.w3schools.com/tags/tag_nav.asp
 - https://www.w3schools.com/tags/tag_header.asp



IF TIME – F12 – DEV TOOLS

https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_main_css

The screenshot displays a web browser window with the URL `https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_main_css`. The browser's address bar shows the page title "w3schools.com/tags/tryit.asp?filename=tryhtml5_main_css". The main content area displays a web page titled "The main element - Styled with CSS" with the subtitle "Most Popular Browsers". The page content includes a list of browsers: Google Chrome, Mozilla Firefox, and Microsoft Edge, each with a description. A tooltip for the "article.browser" element shows its dimensions as 515 x 83.

The browser's developer tools are open, showing the "Elements" panel on the left, the "Console" panel in the middle, and the "Styles" panel on the right. The "Elements" panel shows the DOM tree with the following structure:

```
<html>
  <head>
    <style>...</style>
  </head>
  <body contenteditable="false">
    <h1>The main element - Styled with CSS</h1>
    <main>
      <h2>Most Popular Browsers</h2>
      <p>Chrome, Firefox, and Edge are the most used browsers today.</p>
      <article class="browser">...</article>
      <article class="browser">...</article>
      <article class="browser">...</article>
    </main>
  </body>
</html>
```

The "Styles" panel shows the following CSS rules:

```
element.style {
}
.browser {
  background: white;
}
main > h1, p, .browser {
  margin: 10px;
  padding: 5px;
}
article {
  display: block;
}
```

The "Console" panel shows the following message:

```
... ewrapper iframe#iframeResult html body main article.browser ...
```

The "Styles" panel also includes a visual representation of the box model for the selected element, showing the margin, border, padding, and content area with their respective dimensions.

DEV TOOLS – ON YOUR OWN

<https://www.youtube.com/watch?v=x4q86IjJFag>

The screenshot displays a YouTube video player showing a web browser window. The browser window has a tab titled "Bootstrap 4 Starter Pack" and a URL bar showing "file:///C:/Users/brad/Sandbox/mizuxe/index.html". The web page features a green header with the "Mizuxe" logo and navigation links: "Home", "About", "Meet The Authors", and "Contact". The main content area has a blue background with the text "Hello World" and a "Read More" link. To the right is a "one poster moc kup" graphic. At the bottom, there are input fields for "Enter Name" and "Enter Email", and a "Subscribe" button. The Chrome Developer Tools are open on the right side, showing the "Elements" panel. A dropdown menu is visible, listing background colors: "bg-success", "bg-info", "bg-white", "bg-warning", "bg-dark", "bg-light", "bg-danger", "bg-transparent", "bg-secondary", "bg-primary", and "bg-success". The "bg-success" option is selected. The video player controls at the bottom show the video is at 12:32 / 51:19. The video title is "Google Chrome Developer Tools Crash Course", and it has 391,741 views and was uploaded on Sep 28, 2017. The video has 7.5K likes and 103 comments.

DEV TOOLS – ON YOUR OWN

<https://www.youtube.com/watch?v=VYyQv0CSZOE>

youtube.com/watch?v=VYyQv0CSZOE

Search

Chrome File Edit View History Bookmarks People Tab Window Help

Not Secure | tourdevtools.glitch.me/20190915/css/prototyping.html#highlight

Prototyping CSS

Highlight all elements

1. Hover over a declaration to see other elements affected

Hovering over box model properties like margin and padding highlights all elements affected by the declaration. Introduced in March 2019 (Chrome 74).

P.S. **Shift** + **Up** to increment by 10.

- Don't change my margin-left!
- Change my margin-left!
- Don't change my margin-left!

Previous Next

10:51 / 29:04

Build better sites faster with Chrome DevTools

93,606 views • Aug 23, 2019

780 14 SHARE SAVE

Elements Console Sources Network Performance

```
<p>...</p>
<style>...</style>
<ul id="highlightmargin">
  <li>Don't change my margin-left!</li>
  ...
  <li>Change my margin-left!</li> == $0
  <li>Don't change my margin-left!</li>
</ul>
</section>
<section id="pseudo" class="hidden"> </section>
```

html body main section#highlight ul#highlightmargin li

Styles Event Listeners DOM Breakpoints Properties Accessibility

Filter :hov .cls +

```
element.style {
}

#highlightmargin li {
  margin-left: 10px;
}

li {
  margin-bottom: 5px;
}

* {
  box-sizing: border-box;
}

li {
  display: list-item;
  text-align: -webkit-match-parent;
}
```

prototyping.html:62

padding - 259 x 19

show all

ing box

DEV TOOLS – ON YOUR OWN

Source:

<https://www.youtube.com/watch?v=HGQji-QpHhg>

See also:

<https://developers.google.com/web/tools/chrome-devtools>

Quick Demo:

<https://www.microsoft.com/en-us/>

The screenshot shows a YouTube video player with the URL `youtube.com/watch?v=HGQji-QpHhg`. The video title is "Understanding Developer Tools - 1 Minute JavaScript". The video player shows a webpage with the "IMMUTABLE" library loaded. The Chrome DevTools Network tab is open, showing a list of resources. The resources include the immutable.js script and various CSS and font files.

Status	Method	Domain	File	Initiator	Type	Transferred	Size
200	GET	immutable-js.github...	/immutable-js/	BrowserTabChild.jsm:92 (document)	html	16.71 KB	152.54 KB
200	GET	code.cdn.mozilla.net	fira.css	stylesheet	css	7.69 KB	7.21 KB
200	GET	immutable-js.github...	bundle.css	stylesheet	css	3.80 KB	8.54 KB
200	GET	cdn.jsdelivr.net	react-with-addons.min.js	script	js	36.58 KB	137.02 KB
200	GET	immutable-js.github...	bundle.js	script	js	17.46 KB	105.61 KB
200	GET	immutable-js.github...	immutable.js	script	js	33.63 KB	162.59 KB
200	GET	embed.runkit.com	/	script	js	27.02 KB	92.47 KB
200	GET	img.youtube.com	0.jpg	img	jpeg	19.43 KB	18.92 KB
200	GET	code.cdn.mozilla.net	FiraSans-Bold.woff	font	font-woff	86.56 KB	85.90 KB
200	GET	code.cdn.mozilla.net	FiraSans-Regular.woff	font	font-woff	81.85 KB	81.19 KB
200	GET	code.cdn.mozilla.net	FiraMono-Regular.woff	font	font-woff	65.22 KB	64.56 KB
200	GET	code.cdn.mozilla.net	FiraSans-Italic.woff	font	font-woff	86.84 KB	86.18 KB
200	GET	code.cdn.mozilla.net	FiraSans-Light.woff	font	font		

OTHER ELEMENTS

- Use the **mark** element to **highlight text**.

- Example (source: https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_mark):
<p>We love the <mark>Evergreen</mark> state.</p>

We love the Evergreen state.

- Use the **small** element to define **smaller text**.

- <p>We love the <small>Evergreen</small> state.</p>
- Useful for side comments.

We love the Evergreen state.

- Use the **figure** element to mark up a **photo/video** in a document, and the **figcaption** element to define a **caption** for it.

- See here and example: https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_figure
- <figure>
-
- <figcaption>Fig.1 – Washington, the Evergreen State </figcaption>
- </figure>



- Sources:

- <https://www.w3schools.com/tags/default.asp>
- https://www.w3schools.com/tags/tag_mark.asp
- https://www.w3schools.com/tags/tag_small.asp
- https://www.w3schools.com/tags/tag_figure.asp
- https://www.w3schools.com/tags/tag_figcaption.asp



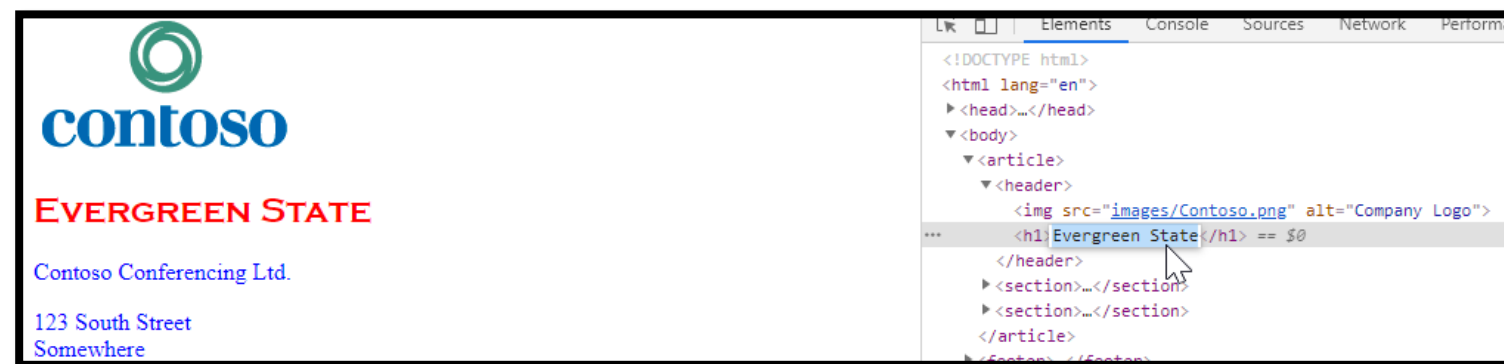
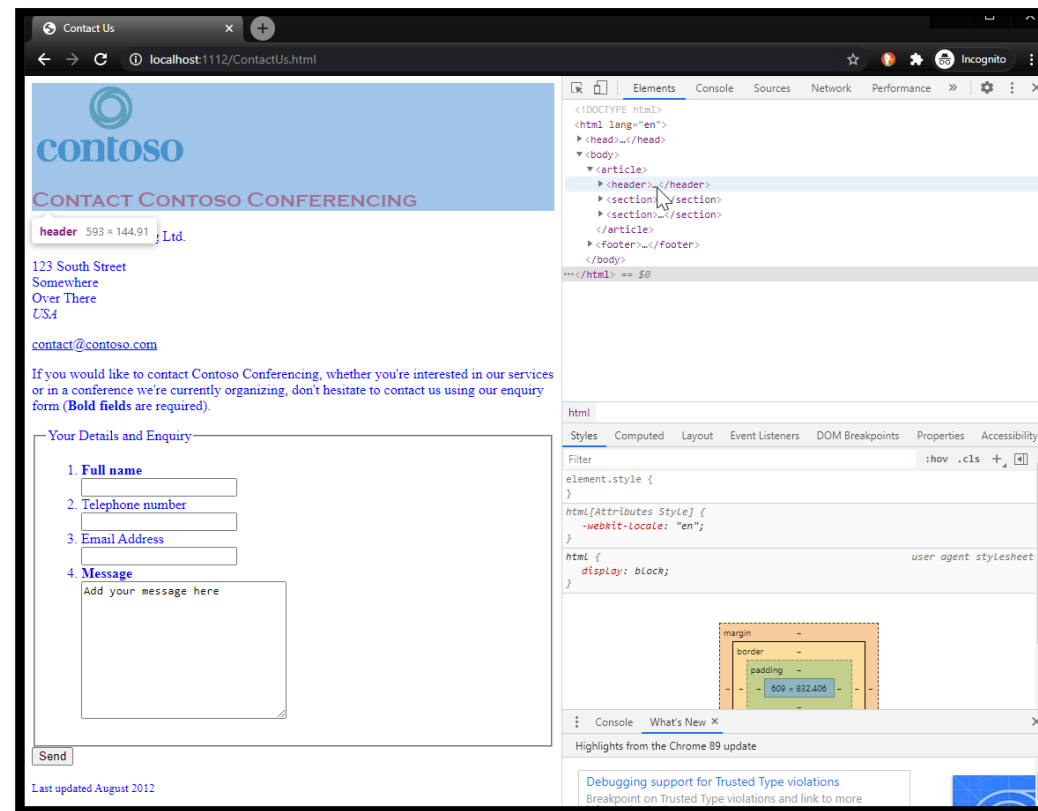
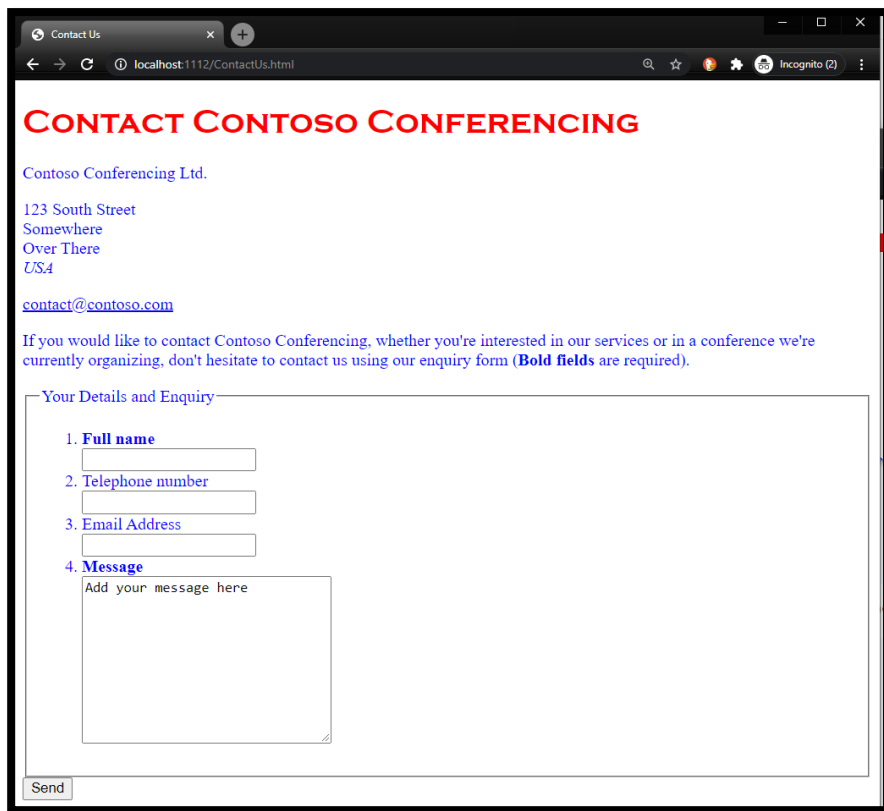
IN-CLASS DEMO

Demonstration: Creating an HTML5 Page

- Source/Steps
 - https://github.com/MicrosoftLearning/20480-Programming-in-HTML5-with-JavaScript-and-CSS3/blob/master/Instructions/20480C_MOD02_DEMO.md#lesson-1-creating-an-html5-page



SCREENSHOTS



CSS – TEXT COLOR

- CSS **Syntax**:

- **selector** {property1:value1; property2:value2;}
- use a **CSS selector** to **select HTML element(s)** you want to style.

- The **color** property can be used to set the **color of text**.

One can specify the color using (test it):

- a **color name** - like "green"
- a HEX value - like "#008000"
- an RGB value - like "rgb(0, 128, 0)"

- Color Picker: https://www.w3schools.com/colors/colors_picker.asp

- The **background-color** property can be used to set the **background color of text**.

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

This is heading 1


This is heading 1

This is heading 1

This is heading 1

```
<!DOCTYPE html>  
<html>  
<head>  
<style>  
h1 {  
  color: green;  
}  
  
h2 {  
  color: #112233;  
}  
  
h3 {  
  color: rgb(20,122,203);  
}  
</style>  
</head>  
<body>  
  
<h1>This is heading 1</h1>  
<h2>This is heading 1</h2>  
<h3>This is heading 1</h3>  
  
</body>  
</html>
```

Pick a Color:



Or Enter a Color:

Or Use HTML5:

Selected Color:

Black Text

Shadow

White Text

Shadow

Green
#008000
rgb(0, 128, 0)
hsl(120, 100%, 25%)

- Source: https://www.w3schools.com/css/css_text.asp



CSS – TEXT ALIGNMENT

- The **text-align** property can be used to set the **horizontal alignment of a text**.
 - Test it!
- The **vertical-align** property can be used to set the **vertical alignment of an element**.
 - Test it!
- On your own, check out the **direction** and **unicode-bidi** properties.
 - Test it!

```
h1 {  
  text-align: center;  
}  
  
h2 {  
  text-align: left;  
}  
  
h3 {  
  text-align: right;  
}
```

```
img.top {  
  vertical-align: top;  
}  
  
img.middle {  
  vertical-align: middle;  
}  
  
img.bottom {  
  vertical-align: bottom;  
}
```

This is the default text direction.

.noitcerid txet tfel-ot-thgir si sihT

- Source: https://www.w3schools.com/css/css_text_align.asp



CSS – TEXT DECORATION & TRANSFORMATION

- The **text-decoration** property can be used to set/remove decorations (underline, overline, line-through) for text
 - [Test it!](#)
- The **text-transformation** property can be used to change the entire text to lowercase/uppercase/capitalize
 - [Test it!](#)
- Sources:
 - https://www.w3schools.com/css/css_text_decoration.asp
 - https://www.w3schools.com/css/css_text_transformation.asp

```
h1 {  
  text-decoration: overline;  
}  
  
h2 {  
  text-decoration: line-through;  
}  
  
h3 {  
  text-decoration: underline;  
}  
  
h4 {  
  text-decoration: none;  
}
```

This is heading 1

~~This is heading 2~~

This is heading 3

This is heading 3

```
h1 {  
  text-transform: uppercase;  
}  
  
h2 {  
  text-transform: lowercase;  
}  
  
h3 {  
  text-transform: capitalize;  
}
```

THIS IS HEADING 1

this is heading 2

This Is Heading 3



CSS – TEXT SPACING

- The **text-indent** property can be used to set the indentation of the first line of a text.
 - [Test it!](#)
- The **letter-spacing** property can be used to specify the space between characters in a text.
 - [Test it!](#)
- The **line-height** property can be used to specify the space between lines.
 - [Test it!](#)
- The **word-spacing** property can be used to set the space between words.
 - [Test it!](#)
- On your own, check the **white-space** property (used for wrapping ...)

```
p {  
  text-indent: 70px;  
}
```

In my younger and more vulnerable years my mind ever since. 'Whenever you feel like criticizing the world haven't had the advantages that you've had

```
h1 {  
  letter-spacing: 5px;  
}  
  
h2 {  
  letter-spacing: -5px;  
}
```

This is heading 1

This heading2

```
p.small {  
  line-height: 0.5;  
}  
  
p.big {  
  line-height: 2.2;  
}
```

This is a paragraph with a smaller line-height.
This is a paragraph with a smaller line-height.

This is a paragraph with a bigger line-height.

This is a paragraph with a bigger line-height.

```
h1 {  
  word-spacing: 10px;  
}  
  
h2 {  
  word-spacing: -10px;  
}
```

This is heading 1

This heading2



- Source: https://www.w3schools.com/css/css_text_spacing.asp

CSS - FONTS

- The **font-family** property can be used to choose a font for your text.
 - This property should contain several font names as "fallback". Start with the font you want, then add fallback fonts, separated by commas.
 - End with a generic family
 - Font names containing more than one word must be enclosed in quotation marks
 - Test it!

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

- The **font-style** property can be used to specify italic text.
 - Test it!

```
p {  
  font-style: italic;  
}
```

- The **font-weight** property can be used to specify the weight of a text.
 - Test it!

```
p.thick {  
  font-weight: bold;  
}
```

- The **font-size** property can be used to specify the size of a text.
 - 1em is equal to the current font size.
 - 1vw = 1% of viewport width
 - Test it!

- Sources and suggested readings:
 - https://www.w3schools.com/css/css_font.asp
 - https://www.w3schools.com/css/css_font_websafe.asp
 - https://www.w3schools.com/css/css_font_style.asp
 - https://www.w3schools.com/css/css_font_size.asp

```
.c1 {  
  font-size: 100%;  
}  
  
.c2 {  
  font-size: 40px;  
}  
  
.c3 {  
  font-size: 2em;  
}  
  
.c4 {  
  font-size: 10vw;  
}
```

This is class 1

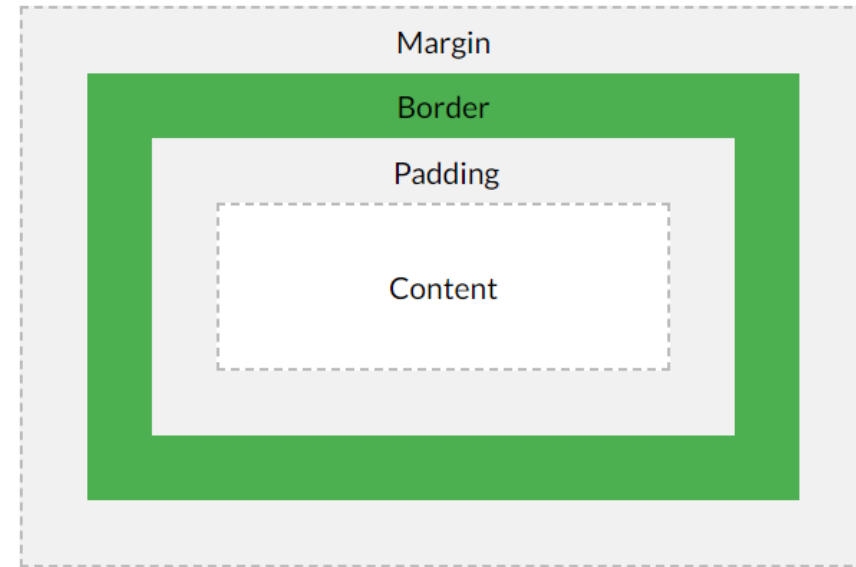
This is class 2

This is class 3

This is class 4

CSS – BOX MODEL

- Each HTML element is considered a box.
- It consists of the following:
 - **Content** – this is where text/images appear
 - **Padding** – a transparent area around the **content**.
 - **Border** – an area that goes around the **padding**
 - **Margin** – a transparent area outside the **border**.

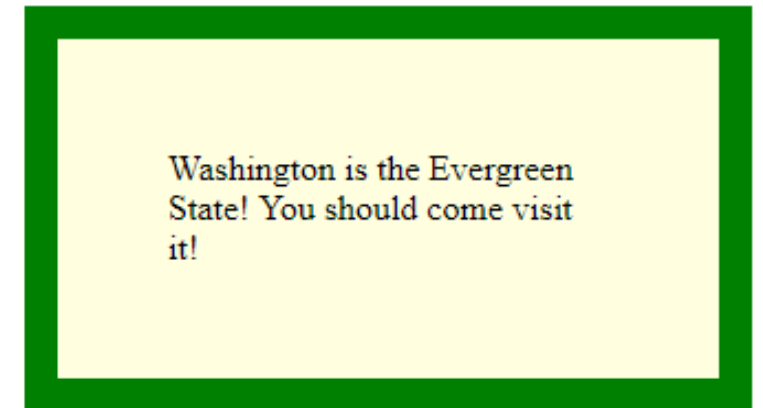


- Example

- **Important:** When you set the **width** and **height** properties of an element with CSS, you only set the width and height of the **content** area!

```
p {  
  background-color: lightyellow;  
  width: 200px;  
  border: 15px solid green;  
  padding: 50px;  
  margin: 20px;  
}
```

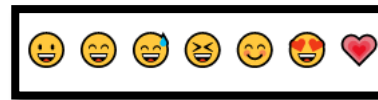
Text before.



Text after.

- Source: https://www.w3schools.com/css/css_boxmodel.asp

ON YOUR OWN ...



- You may want to also check:
- https://www.w3schools.com/css/css_font_google.asp
- https://www.w3schools.com/css/css_font_shorthand.asp
- https://www.w3schools.com/css/css_text_shadow.asp
- https://www.w3schools.com/css/css_image_transparency.asp
 - Check out opacity, hover, rgba, text in a transparent box, ...
- https://www.w3schools.com/css/css_background.asp
 - https://www.w3schools.com/css/css_background_attachment.asp
 - https://www.w3schools.com/css/css_background_repeat.asp
 - https://www.w3schools.com/css/css_background_image.asp
- https://www.w3schools.com/html/html_emojis.asp
- <https://www.w3schools.com/tags/default.asp>

IN-CLASS DEMO

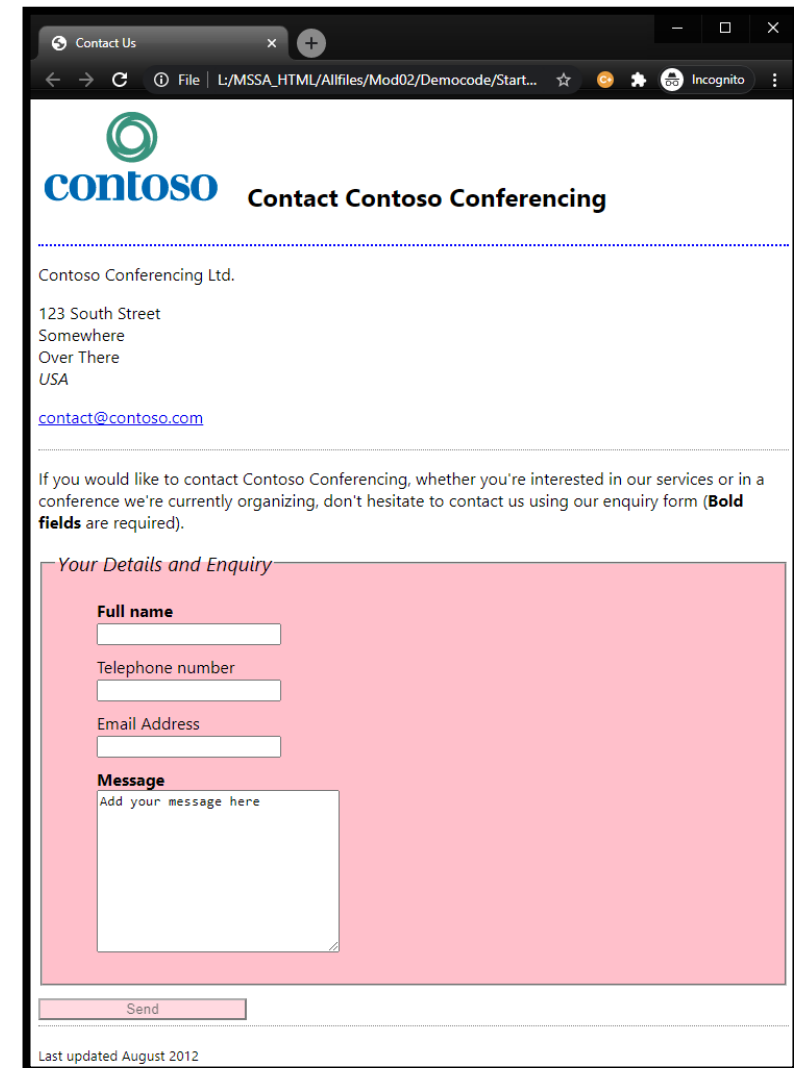
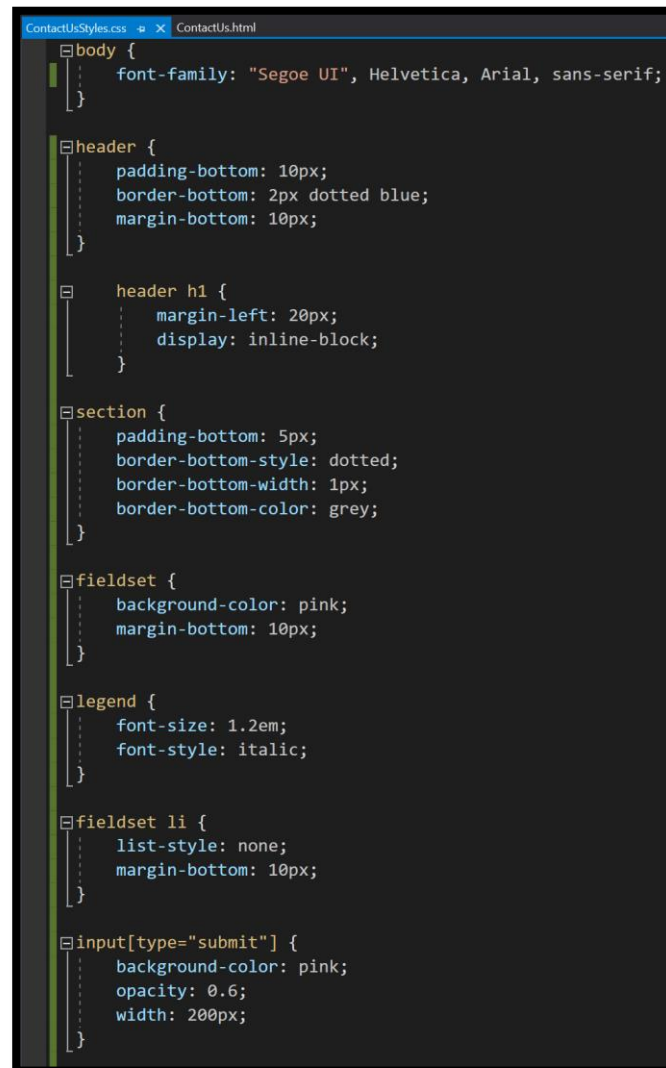
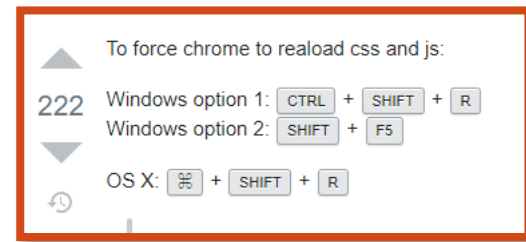
Demonstration: Styling an HTML5 Page

- Source/Steps
 - https://github.com/MicrosoftLearning/20480-Programming-in-HTML5-with-JavaScript-and-CSS3/blob/master/Instructions/20480C_MOD02_DEMO.md#lesson-2-styling-an-html5-page



SCREENSHOTS

<https://www.w3schools.com/tags/default.asp>



LAB/HOMEWORK:

CREATING AND STYLING HTML5 PAGES

■ **Module 02**

- Exercise 1: Creating HTML5 Pages
- Exercise 2: Styling HTML pages

- You will find the **high-level** steps on the following page:

https://github.com/MicrosoftLearning/20480-Programming-in-HTML5-with-JavaScript-and-CSS3/blob/master/Instructions/20480C_MOD02_LAB_MANUAL.md

- You will find the **detailed** steps on the following page:

https://github.com/MicrosoftLearning/20480-Programming-in-HTML5-with-JavaScript-and-CSS3/blob/master/Instructions/20480C_MOD02_LAK.md

- For your homework submit one zipped folder with your complete solution.

