



HTML

Basic Text Markups

Topics

- Introduction of Basic Syntax
- Basic Text Markups
- Images
- Hypertext links
- Lists
- Tables
- Forms
- Audio
- Video
- Organization elements
- Time



Required software

- An IDE

- Visual Studio Code
- Notepad++
- Sublime
- BBEdit
- Brackets
- Check more at

https://en.wikipedia.org/wiki/Comparison_of_text_editors

- A browser

- Edge
- Opera
- Safari
- Google Chrome
- FireFox

*N.B: You do not need a Web server **yet***



Markup

- text-encoding system consisting of a set of symbols inserted in a text document to control its:
 - structure,
 - formatting, or
 - the relationship between its parts.
- Markup is often used to control the display of the document or to enrich its content to facilitate automated processing.
- A markup language is a set of rules governing what markup information may be included in a document and how it is combined with the content of the document in a way to facilitate use by humans and computer programs.



Tags/Symbols/Rules

<tagname option="value"/>

<tagname option="value">

 <tagname option="value">

 <tagname option="value"/>

 </tagname>

</tagname>



Format of HTML5 page

```
<!DOCTYPE html>
<html >
  <head ...>
    <title> ... </title>
    <meta ...>
  </head>

  <body>
    ...
  </body>
</html>
```

HTML5 tags

- <http://www.w3schools.com/>
- <https://www.tutorialrepublic.com/html-reference/html5-tags.php>
- gotapi.net
- xhtml.com



Hello World in HTML5

```
<!DOCTYPE html>
<!-- greet.html  A trivial document  -->
<html lang = "en">
  <head>
    <title> Our first document </title>
    <meta charset="utf-8"/>
  </head>
  <body>
    <p>
      Hello World with HTML!
    </p>
  </body>
</html>
```



Load into a browser



Understand what is a markup language

```
<!DOCTYPE html>
<!-- greet.html  A trivial document  -->
<html lang = "en">
  <head>
    <title> Our first document </title>
    <meta charset="utf-8">
  </head>
  <body>
    <p>
      Hello World with HTML!
    </p>
  </body>
</html>
```



With external CSS and JavaScript files

```
<!DOCTYPE html>
<!-- greet.html  A trivial document  -->
<html lang = "en">
  <head>
    <meta charset="utf-8">
    <title> Our first document </title>
    <link rel="stylesheet" href="style.css"/>
    <script src="script.js"></script>
  </head>
  <body>
  </body>
</html>
```



Basic Text Markups



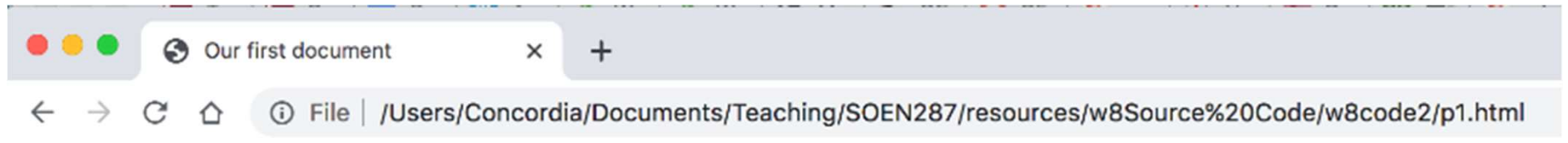
Paragraph Elements <p>

- Text is normally placed in paragraph elements
- breaks the current line and inserts a blank line

```
<!DOCTYPE html>
<!-- greet.html  A trivial document  -->
<html lang = "en" >
  <head>
    <title> Our first document </title>
  </head>
  <body>
    <p>This is a paragraph </p>
    <p> This is another one </p>
  </body>
</html>
```



Load into Browser



This is a paragraph

This is another one



Line breaks

- No closing tag!
- Breaks the current line, inserts No blank line

```
<!DOCTYPE html>
<!-- greet.html  A trivial document  -->
<html lang = "en" >
  <head> <title> Our first document </title>
</head>
<body>
  <p> This is a paragraph</p>
  <p> This is the second paragraph. <br /> We continue the second
  paragraph.</p>
</body>
</html>
```



Load into Browser



This is a paragraph

This is the second paragraph.
We continue the second paragraph.



Preserving whitespace <pre>

- The text content of an element is displayed as it is entered

<p> without using pre:

Mary

Had a

little

lamb

</p>

<p>using pre:

<pre>

Mary

Had a

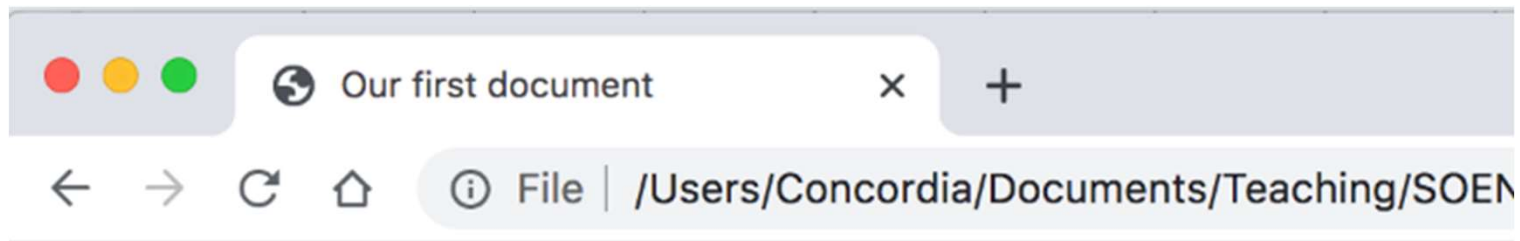
little

lamb

</pre>

</p>

Load into Browser



This is a paragraph

without using pre:

Mary Had a little lamb

using pre:

```
Mary
  Had a
    little
      lamb
```



Headings <h1> <h2> <h3> <h4> <h5> <h6>

- 1, 2, and 3 use font sizes that are larger than the default font size
- 4 uses the default size
- 5 and 6 use smaller font sizes

```
<body>
```

```
<h1> Aidan's Airplanes (h1) </h1>
```

```
<h2> The best in used airplanes (h2) </h2>
```

```
<h3> "We've got them by the hangarful" (h3)  
</h3>
```

```
<h4> We're the guys to see for a good used  
airplane (h4) </h4>
```

```
<h5> We offer great prices on great planes  
(h5) </h5>
```

```
<h6> No returns, no guarantees, no refunds,  
all sales are final (h6) </h6>
```

```
<p> the default font for text, <b> the default bold font  
for text</b></p>
```

```
</body>
```

Font styles and size

`` : bold

`<i>` : italic

``: emphasis, most browsers use italic for content

``: strong tag, most browsers use bold

`<code>`: for program code, often set in Courier

```
<p>
```

```
  <i> this is italic</i> <br/>
```

```
  <b> this is bold</b> <br>
```

```
  <em> this is em</em> <br>
```

```
  <strong> this is strong </strong> <BR>
```

```
  <code> this is code </code>
```

```
</p>
```

```
<p>
```

```
x<sub>2</sub><sup>3</sup>+y<sub>1</sub><sup>2</sup>
```

```
</p>
```

Blockquotes `<blockquote>`

- To set a block of text off from the normal flow and appearance of text
- Browsers often indent, and sometimes italicize

```
<p> Abraham Lincoln ... most famous speech was  
delivered      in Gettysburg, Pennsylvania, during  
the Civil War. This speech began with
```

```
</p>
```

```
<blockquote>
```

```
  <p>
```

```
Fourscore and <em> seven years </em> ago <i>our  
fathers</i> brought forth on this continent, a new  
nation, <b>conceived</b> <strong>in  
liberty</strong>, and dedicated to the proposition  
that all men are created equal.
```

```
  </p> ...
```

```
</blockquote>
```

How to display special characters

- can be done with CSS
- Character Entities

<i>Char.</i>	<i>Entity</i>	<i>Meaning</i>
&	&	Ampersand
<	<	Less than
>	>	Greater than
"	"	Double quote
'	'	Single quote
$\frac{1}{4}$	¼	One quarter
$\frac{1}{2}$	½	One half
$\frac{3}{4}$	¾	Three quarters
°	°	Degree
(space)	 	Non-breaking space

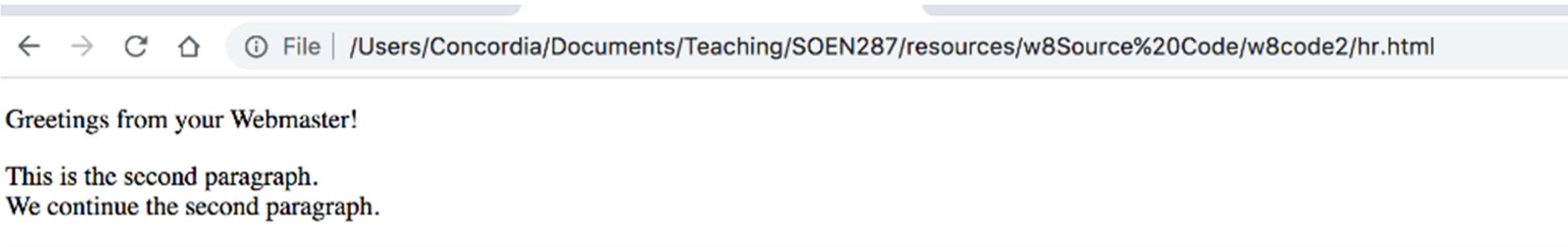


Horizontal rules <hr/>

```
<body>
  <p>
    Greetings from your Webmaster!
  </p>
  <p> This is the second paragraph.<br /> We
continue the second paragraph.</p>
  <hr />
</body>
```



Load into a browser



The `<meta>` element

(for search engines) Used to provide additional information about a document, with attributes, not content.

```
<meta name = "Title" content = "course outline">  
<meta name = "Author" content = "Yuhong Yan">  
<meta name = "Keywords" content = "cs, course, Web  
programming, HTML, javascript">
```



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