



Basic HTML

SENG 4640

Software Engineering for Web Apps
Winter 2023

Sina Keshvadi

Thompson Rivers University

Review

- HTML is a plain-text, human-readable language that is used for representing content on the Web
- HTML specifies how to **structure** the data but not (necessarily) how to **display** it
- The browser chooses how to display the content

Review: HTML Tags

- **<!DOCTYPE>** specifies the version of HTML
- **<html>** root of the entire document
- **<head>** section that provides the page title, meta information, includes other files, etc.
- **<body>** the actual content



My First Web Page



Guest



/hello.html



Hello, World!

This is the most important header

This is a paragraph supporting the most important header.

This is a subheader

This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header.

Thought of the Day

Today's thought of the day: "*Don't make excuses, make improvements*"> --Tyra Banks

Additional supporting text

Today we've learned about DOCTYPE declarations, head tags, body tags, heading tags, paragraph tags, & Inline vs. Block-level containers.

Important HTML Tags: <p>

- Appears anywhere within the body to represent a paragraph of text expressing a single thought
- Usually displayed with vertical space before and after paragraph

Important HTML Tags: <p>

- Appears anywhere within the body to represent a paragraph of text expressing a single thought
- Usually displayed with vertical space before and after paragraph

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

<body>
  (all web content goes here!)
  <p> This is a paragraph within the p tag that expresses a single thought or
  idea. The paragraph should be surrounded with a vertical white space
  buffer both before and after the paragraph. </p>
</body>

</html>
```

HTML Content

- Remember, the HTML specifies the **structure** but not how the content will be **displayed**
- It is up to the browser to decide how to display the content

```
<p>  
This is some text.  
  
This is some more text.  
And here's a little bit more.  
</p>
```


HTML Content

- Remember, the HTML specifies the **structure** but not how the content will be **displayed**
- It is up to the browser to decide how to display the content

```
<p>  
This is some text.  
  
This is some more text.  
And here's a little bit more.  
</p>
```

This is some text. This is some more text. And here's a little bit more.

Important HTML Tags: <h#>

- Referred to as section heading tags
- HTML supports 6 heading tags

- h1** • <h1> used for most important titles (ex: title of entire web page)
 - h2** • <h2> used for next important subheader
 - h3** • <h3> used for next important subheader
 - h4** • <h4> used for next important subheader
 - h5** • <h5> used for next important subheader
 - h6** • <h6> used for least important subheader
- Magnitude of importance affects font size that will be displayed
 - Can be used to divide content into readable subsections
 - Browser determines font and size depending on header magnitude

Important HTML Tags: <h#>

```
<body>
  <h1>This is the most important header</h1>
  <p>This is a paragraph supporting the most important header.</p>
  <h3>This is a subheader</h3>
  <p>This is a paragraph supporting the subheader. Notice that the font
    size of the subheader is smaller than the size of the most important
    header. </p>
</body>
```

Important HTML Tags: <h#>

```
<body>
  <h1>This is the most important header</h1>
  <p>This is a paragraph supporting the most important header.</p>
  <h3>This is a subheader</h3>
  <p>This is a paragraph supporting the subheader. Notice that the font
    size of the subheader is smaller than the size of the most important
    header. </p>
</body>
```

This is the most important header

This is a paragraph supporting the most important header.

This is a subheader

This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header.

Important HTML Tags: <h#>

```
<body>
  <h1>This is the most important header</h1>
  <p>This is a paragraph supporting the most important header.</p>
  <h3>This is a subheader</h3>
  <p>This is a paragraph supporting the subheader. Notice that the font
    size of the subheader is smaller than the size of the most important
    header. </p>
</body>
```

This is the most important header

This is a paragraph supporting the most important header.

This is a subheader

This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header.

Important HTML Tags: <h#>

```
<body>
  <h1>This is the most important header</h1>
  <p>This is a paragraph supporting the most important header.</p>
  <h3>This is a subheader</h3>
  <p>This is a paragraph supporting the subheader. Notice that the font
    size of the subheader is smaller than the size of the most important
    header. </p>
</body>
```

This is the most important header

This is a paragraph supporting the most important header.

This is a subheader

This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header.

Important HTML Tags: <h#>

```
<body>
  <h1>This is the most important header</h1>
  <p>This is a paragraph supporting the most important header.</p>
  <h3>This is a subheader</h3>
  <p>This is a paragraph supporting the subheader. Notice that the font
    size of the subheader is smaller than the size of the most important
    header. </p>
</body>
```

This is the most important header

This is a paragraph supporting the most important header.

This is a subheader

This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header.

Important HTML Tags: <h#>

```
<body>
  <h1>This is the most important header</h1>
  <p>This is a paragraph supporting the most important header.</p>
  <h3>This is a subheader</h3>
  <p>This is a paragraph supporting the subheader. Notice that the font
    size of the subheader is smaller than the size of the most important
    header. </p>
</body>
```

This is the most important header

This is a paragraph supporting the most important header.

This is a subheader

This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header.

Important HTML Tags: <h#>

```
<body>
  <h1>This is the most important header</h1>
  <p>This is a paragraph supporting the most important header.</p>
  <h3>This is a subheader</h3>
  <p>This is a paragraph supporting the subheader. Notice that the font
    size of the subheader is smaller than the size of the most important
    header. </p>
</body>
```

This is the most important header

This is a paragraph supporting the most important header.

This is a subheader

This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header.

Important HTML Tags: `` and `<i>`

- `` indicates that the text should be **bold**
- `<i>` indicates that the text should be *italicized*
- Similar tags are `` and ``, respectively, which are meant to demonstrate that the text is “important”

Important HTML Tags: `<hr>` and `
`

- Both tags used to mark a break in content
 - `<hr>` Represents a more serious shift in content, visually separates content by inserting a visible line between preceding and subsequent content
 - `
` Represents a single line break, inserts a blank line

Important HTML Tags

- Both tags used to mark a break in content
 - `<hr>` Represents a more serious shift in content, visually separates content by inserting a visible line between preceding and subsequent content
 - `
` Represents a single line break, inserts a blank line

```
<p> This is a paragraph
about how your browser works.
</p>
<hr>
<p> This is a paragraph about how
to set up your environment to
begin creating HTML documents.
</p>
<br>
<p> This is a paragraph about
important HTML tags that you
should know. </p>
```

Important HTML Tags: `<hr>` and `
`

- Both tags used to mark a break in content
 - `<hr>` Represents a more serious shift in content, visually separates content by inserting a visible line between preceding and subsequent content
 - `
` Represents a single line break, inserts a blank line

```
<p> This is a paragraph  
about how your browser works.  
</p>  
<hr>  
<p> This is a paragraph about how  
to set up your environment to  
begin creating HTML documents.  
</p>  
<br>  
<p> This is a paragraph about  
important HTML tags that you  
should know. </p>
```

This is a paragraph about how your browser works.

This is a paragraph about how to set up your environment to begin creating HTML documents.

This is a paragraph about important HTML tags that you should know.

Important HTML Tags: `<hr>` and `
`

- Both tags used to mark a break in content
 - `<hr>` Represents a more serious shift in content, visually separates content by inserting a visible line between preceding and subsequent content
 - `
` Represents a single line break, inserts a blank line

```
<p> This is a paragraph  
about how your browser works.  
</p>  
<hr>  
<p> This is a paragraph about how  
to set up your environment to  
begin creating HTML documents.  
</p>  
<br>  
<p> This is a paragraph about  
important HTML tags that you  
should know. </p>
```

This is a paragraph about how your browser works.

This is a paragraph about how to set up your environment to begin creating HTML documents.

This is a paragraph about important HTML tags that you should know.

Important HTML Tags: `<hr>` and `
`

- Both tags used to mark a break in content
 - `<hr>` Represents a more serious shift in content, visually separates content by inserting a visible line between preceding and subsequent content
 - `
` Represents a single line break, inserts a blank line

```
<p> This is a paragraph  
about how your browser works.  
</p>  
<hr>  
<p> This is a paragraph about how  
to set up your environment to  
begin creating HTML documents.  
</p>  
<br>  
<p> This is a paragraph about  
important HTML tags that you  
should know. </p>
```

This is a paragraph about how your browser works.

This is a paragraph about how to set up your environment to begin creating HTML documents.

This is a paragraph about important HTML tags that you should know.

Important HTML Tags: <div>

- Provides additional structure to web page
- Block-level container for organized content
- Often used for:
 - Page headers/footers
 - Menu or Navigation bar
 - Photo galleries
 - Ads or outside media

```
<div>  
  <h3> Thought of the Day </h3>  
  <p>Today's thought of the day: "Don't  
    make excuses, make improvements"  
    -Tyra Banks</p>  
  <p>Additional supporting text</p>  
</div>
```


Important HTML Tags: ``

- Inline container for organized content
- Similar to `div` but different in the following ways;
 - Block-level elements (`div`) are designed to contain larger chunks of content designed to stand alone as a unit; always starts with a new line
 - Inline elements (`span`) designed to contain smaller pieces of content, usually within a larger block of content; does not start with new line

```
<p>Today we've learned about  
  <span>DOCTYPE declarations</span>,  
  <span>head tags</span>,  
  <span> body tags</span>,  
  <span>heading tags</span>,  
  <span>paragraph tags</span>, and  
  <span>Inline vs. Block-level  
    containers</span>.  
</p>
```

Important HTML Tags: `<!--` *Comments*



- Text in the HTML that will not be rendered in the browser
- Often used for:
 - Explaining the HTML to or leaving notes for other programmers
 - Temporarily removing HTML content

```
<!-- This is a listing of some important people -->  
<br>Eliana  
<br>Swapneel  
<!-- <br>Chris -->  
<br>Lydia
```

HTML Symbols & Special Characters

HTML Entity	Appearance
 	Non-breaking space; allows for extra white space between words

HTML Symbols & Special Characters

HTML Entity	Appearance
<code>&nbsp;</code>	Non-breaking space; allows for extra white space between words
<code>&lt;</code>	<
<code>&gt;</code>	>

HTML Symbols & Special Characters

HTML Entity	Appearance
<code>&nbsp;</code>	Non-breaking space; allows for extra white space between words
<code>&lt;</code>	<
<code>&gt;</code>	>
<code>&amp;</code>	&

HTML Symbols & Special Characters

HTML Entity	Appearance
 	Non-breaking space; allows for extra white space between words
<	<
>	>
&	&
©	©
®	®

Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3> Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"></em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>Inline vs. Block-level containers</span>.
  </p>
</body>
</html>
```

Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3> Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"></em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>Inline vs. Block-level containers</span>.</p>
  </body>
</html>
```


Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3>Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"></em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>Inline vs. Block-level containers</span>.</p>
  </body>
</html>
```

Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3>Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"></em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>Inline vs. Block-level containers</span>.</p>
  </body>
</html>
```

Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3>Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"</em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>Inline vs. Block-level containers</span>.
  </p>
</body>
</html>
```

Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3> Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"></em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>Inline vs. Block-level containers</span>.</p>
  </body>
</html>
```

Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3> Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"></em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>Inline vs. Block-level containers</span>.
  </p>
</body>
</html>
```

Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3>Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"></em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>Inline vs. Block-level containers</span>.
  </p>
</body>
</html>
```

Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is
      smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3> Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"></em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>
      body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>
      Inline vs. Block-level containers</span>.
    </p>
  </body>
</html>
```

Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3>Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"></em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>Inline vs. Block-level containers</span>.</p>
  </body>
</html>
```


Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3> Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"></em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>Inline vs. Block-level containers</span>.
  </p>
</body>
</html>
```

Putting It All Together

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Web Page 2.0</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="description" content="Learning about the most important web tags in html.">
    <meta name="keywords" content="html, web development">
  </head>
  <body>
    <h1>This is the most important header</h1>
    <p>This is a paragraph supporting the most important header.</p>
    <h3>This is a subheader</h3>
    <p>This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header. </p>
    <hr>
    <div>
      <h3> Thought of the Day </h3>
      <p>Today's thought of the day: <em>"Don't make excuses, make improvements"></em>
      --Tyra Banks</p>
      <p>Additional supporting text</p>
    </div>
    <hr>
    <p>Today we've learned about <span>DOCTYPE declarations</span>, <span>head tags</span>, <span>body tags</span>, <span>heading tags</span>, <span>paragraph tags</span>, & <span>Inline vs. Block-level containers</span>.
  </p>
</body>
</html>
```

This is the most important header

This is a paragraph supporting the most important header.

This is a subheader

This is a paragraph supporting the subheader. Notice that the font size of the subheader is smaller than the size of the most important header.

Thought of the Day

Today's thought of the day: "*Don't make excuses, make improvements*"> --Tyra Banks

Additional supporting text

Today we've learned about DOCTYPE declarations, head tags, body tags, heading tags, paragraph tags, & Inline vs. Block-level containers.

Summary

- HTML is a plain-text, human-readable language that is used for representing content on the Web
- HTML specifies how to **structure** the data but not (necessarily) how to **display** it
- HTML uses **tags** to provide the structure