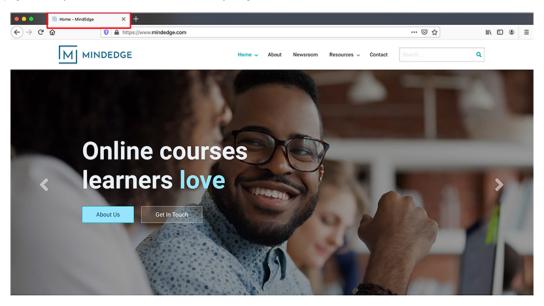
Basic HTML Document Structure

The structure of webpages is described by HyperText Markup Language (HTML). HTML is different from page layout for print because, while the print designer most likely knows the finished size of the document, and which is the same for all copies, the web designer does not know the medium or size of equipment that the reader has — Is it a Windows or Macintosh computer? Android, iOS, or Windows tablet or smartphone? What size monitor? What size browser window? HTML code allows all pages to be accessible for every reader's equipment and settings.

Unlike a word processing document, in which authors are free to structure content in whatever manner they see fit, the structure of an **HTML document** is governed by the HTML Specification and pre-defined syntax rules.

HTML documents are created with an opening and closing html tag, which is analogous to a piece of paper in print. The area of the page visible to users is enclosed within the opening and closing <body> tags, analogous to the finished size of a print document. The head> contains mostly tags that are invisible to the user, except for the title tag, which you'll see on the browser's front end as you can below indicated by the red rectangle surrounding Home – MindEdge in the browser window tab. A webpage can only have one head>, and one <body> tag.



Example HTML Document

The following illustrates the syntax of an HTML document.

```
<!DOCTYPE html>
<html>
<head>
    <title>This is the page title</title>
    <meta charset="utf-8">
    </head>

<body>
    Content here is visible to site visitors
</body>
</html>
```

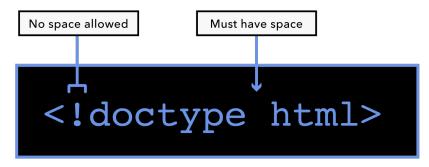
Now that we have an understanding of the overall syntax structure of an HTML document, let's break down each component.

Doctype Declaration: <!DOCTYPE html>

All HTML documents start with a declaration, known as the doctype for short. The <!DOCTYPE> declaration is not an HTML tag; it is an instruction to the Web browser about what version of HTML the page is written in. In HTML5, the only purpose of the

DOCTYPE is to activate full standards mode in the browser. This all came about when Web standards went into effect at W3C. Up until then, HTML pages were typically written in two versions, one for Netscape and one for Internet Explorer. When standards were introduced, Web browsers couldn't just start using them, since it would break most of the existing sites on the Web. So, browsers introduced two modes to treat standards-compliant sites differently from old legacy sites. The alternate mode for legacy sites is known as "quirks" mode.

The W3C provides document type declarations, or DTDs, for all HTML versions. The doctype tag is illustrated below:

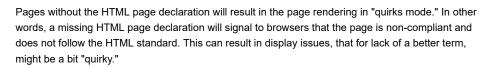


At least one space is required between "doctype" and HTML. The doctype declaration itself can be any case— upper, lower, or a mix. For example, each of the following declaration types is valid:

```
1 <!DOCTYPE HTML>
2 --or--
3 <!DOCTYPE html>
4 --or--
5 <!DOCTYPE Html>
```

HTML doctype Declaration

Always use the simple HTML doctype declaration.





The HTML Tag: <HTML>

The <html> tag is placed immediately after the doctype declaration and signals that the content that follows is written in HTML code

The html element is called the **root element** because it serves as a container for all of the remaining elements within an HTML document.

The Head Tag: <head>

The <head> tag is a container for all head elements. These can include a title for the document, scripts, styles, meta information, and more.

- the page <title> tag— is the only one of these tags that is required. This tag defines the webpage name and will appear at the top of the browser window or tab.
- Script tags enclose scripts or references to scripts, while style tags surround page or external styles.

An HTML page can only have one <head> tag.

The Meta Tag: <meta>

Meta tags contain items that define for browsers how to display or reload page content, what encoding the document was written in, or identifying keywords for search engines. In other words, the content placed within these tags is where information about the document is stored. Notice that the <meta> tag is a self-closing tag.

The meta tag is often used to define the specific character encoding that is used in the document, such as **meta charset="utf-8">**. The "u" in utf-8 stands for 'unicode,' which is an international character-encoding standard used for representing text for computer processing. In the example on this page **meta** charset="utf-8"> is the most commonly used character set on the Internet. There are other unicode encoding formats; however, those go beyond the scope of this course.

The Body Tag: <body>

The <body> tag surrounds all the content— text, tables, forms, images, videos, etc.— on the page that is visible on the front end in a Web browser.

The closing <body> tag is immediately followed by the closing </html> tag. No other tags are permitted to be placed between these two tags. Doing so would render the code to be invalid.

Similar to the <head> tag, each page can only have one <body> tag.

Video Commentary: More on Meta Tags

00:03 / 00:03

View the Transcript

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Exercise: Create an HTML Document

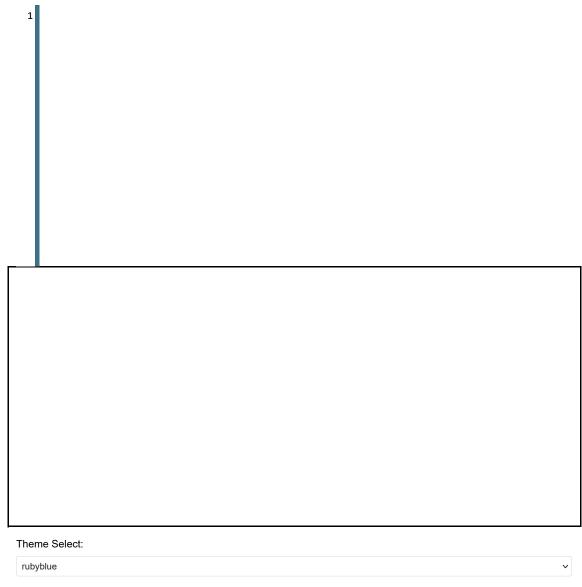
Let's create your first HTML document. For this document:

- Add the DOCTYPE declaration
- Entitle the document "My first HTML Document"
- Specify the character encoding (charset="utf-8")
- Define the body of the document and identify where page content is placed by placing the following sentence "This is where page content is placed" between the appropriate tags.

Instructions

Type in the code for your answer into the source code window of the code tool below. When you have completed entering your code, click on the 'run code block' button to see how the code renders in a browser window.

Run Code Save Export Reset



Click the following tab to check your answer.

Check your Answer

The correct code syntax is as follows:

```
<!doctype html>
<html>
  <head>
  <meta charset="utf-8">
  <title>My first HTML Document</title>
  </head>
  <body>
      This is where page content is placed
  </body>
  </html>
```

The following screenshot shows the correct code syntax and how the code renders in the browser window.

Run Code block

index.html

1 <!doctype html>

This is where page content is placed

```
2 <html>
3 <head>
4 <meta charset="utf-8">
5 <title>My first HTML
   Document</title>
6 </head>
7 <body>
8 This is where page content is placed
9 </body>
10 </html>
```

Review Checkpoint

To test your understanding of the content presented in this assignment, please click on the Questions icon below. If you have trouble answering any of the questions presented here, you are always free to return to this or any assignment to re-read the material.



1. True or False?

An HTML document can have more than one <body> tag.

a. True

Incorrect. Try again.

b. False

Correct. This is a false statement. An HTML document may only contain one <body> tag.

2. Which of the following is the correct syntax for the declaration of an html document?

a. <DOCTYPE html>

Incorrect. Try again.

b. <!DOCTYPE html>

 ${\it Correct. The correct syntax for the declaration of an html document is \verb|<|DOCTYPE|| html|>|. There should|| the correct syntax for the declaration of an html document is \verb|<|DOCTYPE|| html|>|. There should|| the correct syntax for the declaration of an html document is \verb|<|DOCTYPE|| html|>|. There should|| the correct syntax for the declaration of an html document is \verb|<|DOCTYPE|| html|>|. There should|| the correct syntax for the declaration of an html document is \verb|<|DOCTYPE|| html|>|. There should|| the correct syntax for the declaration of an html document is \verb|<|DOCTYPE|| html|>|. There should|| the correct syntax for the declaration of an html document is \verb|<|DOCTYPE|| html|>|. There should|| the correct syntax for the declaration of an html document is \verb|<|DOCTYPE|| html|>|. There should|| the correct syntax for the correct s$

be no spa	ce between	the exclamation	point and DOCTYPE.

c. <!DOCTYPE_html>

Incorrect. Try again.

d. <! DOCTYPE html>

Incorrect. Try again.

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