

HTML

From Scratch

HTML Lesson 1

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HTML Introduction

HTML is the standard markup language for creating Web pages.

What is HTML?

- HTML stands for Hyper Text Markup Language
 - HTML is the standard markup language for creating Web pages
 - HTML describes the structure of a Web page
 - HTML consists of a series of elements
 - HTML elements tell the browser how to display the content
 - HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "[this is a link](#)", etc.
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A Simple HTML Document

Example

Example Explained

<!DOCTYPE html>	<!DOCTYPE html> declaration defines that this document is an HTML5 document
<html>	<html> the root element of an HTML page
<head>	<head> contains meta information about the HTML page
<title>Page Title</title>	<title> title for the HTML page (which is shown in the browser's title bar or in the page's tab)
</head>	
<body>	<body> defines the document's body, and is a container for all the visible contents , such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
<h1>My First Heading</h1>	<h1> defines a large heading
<p>My first paragraph.</p>	<p> defines a paragraph=
</body>	
</html>	

What is an HTML Element?

An HTML **element** is defined by a start tag, some content, and an end tag:

```
<tagname> Content goes here... </tagname>
```

The HTML **element** is everything from the start tag to the end tag:

```
<h1>My First Heading</h1>
<p>My first paragraph.</p>
```

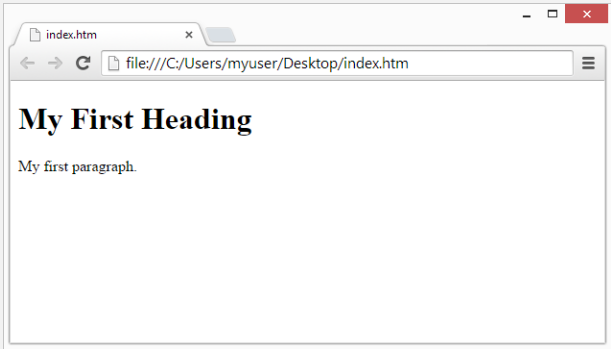
Start tag	Element content	End tag
<h1>	My First Heading	</h1>
<p>	My first paragraph.	</p>
 	none	none

Note: Some HTML elements have no content (like the
 element). These elements are called empty elements. Empty elements do not have an end tag!

Web Browsers

The purpose of a web browser (Chrome, Edge, Firefox, Safari) is to read HTML documents and display them correctly.

A browser does not display the HTML tags, but uses them to determine how to display the document:



HTML Page Structure

Below is a visualization of an HTML page structure:

```
<html>
<head>
<title>Page title</title>
</head>
<body>
  <h1>This is a heading</h1>
  <p>This is a paragraph.</p>
  <p>This is another paragraph.</p>
</body>
</html>
```

Note: The content inside the <body> section (the white area above) will be displayed in a browser. The content inside the <title> element will be shown in the browser's title bar or in the page's tab.

HTML History

Since the early days of the World Wide Web, there have been many versions of HTML:

Year	Version	Year	Version
1989	Tim Berners-Lee invented www	2008	WHATWG HTML5 First Public Draft
1991	Tim Berners-Lee invented HTML	2012	WHATWG HTML5 Living Standard
1993	Dave Raggett drafted HTML+	2014	W3C Recommendation: HTML5
1995	HTML Working Group defined HTML 2.0	2016	W3C Candidate Recommendation: HTML 5.1
1997	W3C Recommendation: HTML 3.2	2017	W3C Recommendation: HTML5.1 2nd Edition
1999	W3C Recommendation: HTML 4.01	2017	W3C Recommendation: HTML5.2
2000	W3C Recommendation: XHTML 1.0		

This tutorial follows the latest HTML5 standard.

HTML Editors

A simple text editor is all you need to learn HTML.

Learn HTML Using Notepad or TextEdit

- Web pages can be created and modified by using professional HTML editors.
- However, for learning HTML we recommend a simple text editor like Notepad (PC) or TextEdit (Mac).
- We believe that using a simple text editor is a good way to learn HTML.

Follow the steps below to create your first web page with Notepad or TextEdit.

Step 1: Open Notepad (PC)

Windows 8 or later:

Open the **Start Screen** (the window symbol at the bottom left on your screen). Type **Notepad**.

Windows 7 or earlier:

Open **Start > Programs > Accessories > Notepad**

OR

Open TextEdit (Mac)

Open **Finder > Applications > TextEdit**

Also change some preferences to get the application to save files correctly. In **Preferences > Format > choose "Plain Text"**

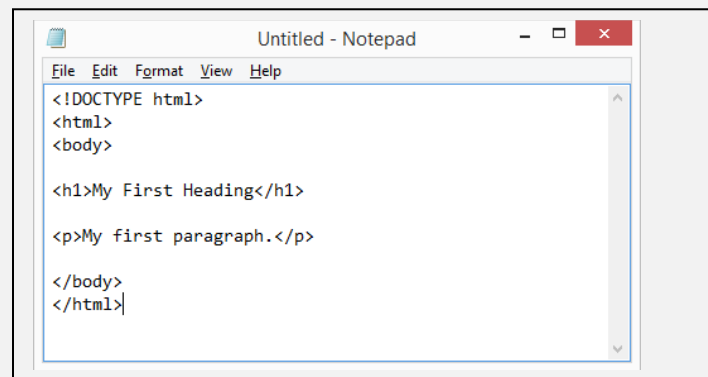
Then under "Open and Save", check the box that says "Display HTML files as HTML code instead of formatted text".

Then open a new document to place the code.

Step 2: Write Some HTML

Write or copy the following HTML code into Notepad:

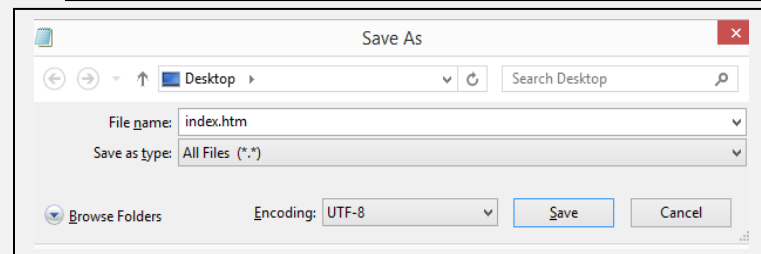
```
<!DOCTYPE html>
<html>
<body>
<h1>My First Heading</h1>
<p>My first paragraph.</p>
</body>
</html>
```



Step 3: Save the HTML Page

Save the file on your computer. Select **File > Save as** in the Notepad menu.

Name the file **"index.htm"** and set the encoding to **UTF-8** (which is the preferred encoding for HTML files).



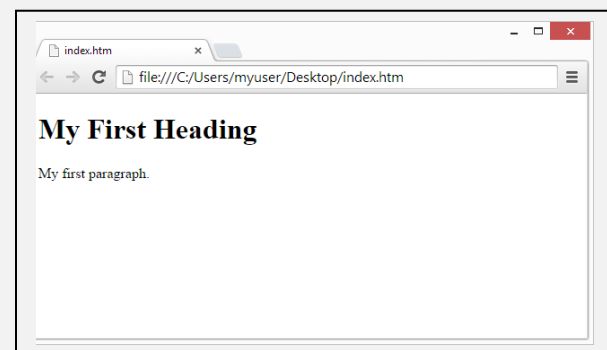
Tip: You can use either .htm or .html as file extension. There is no difference; it is up to you.

Step 4: View the HTML Page in Your Browser

Open the saved HTML file in your favorite browser (double click on the file, or right-click - and choose "Open with").

The result will look much like this: ➡

It is the perfect tool when you want to test code fast. It also has color coding and the ability to save and share code with others.



HTML Basic Examples

In this chapter we will show some basic HTML examples.

Don't worry if we use tags you have not learned about yet.

HTML Documents

All HTML documents must start with a document type declaration: `<!DOCTYPE html>`.

The HTML document itself begins with `<html>` and ends with `</html>`.

The visible part of the HTML document is between `<body>` and `</body>`.

Example

```
<!DOCTYPE html>
<html>
<body>
<h1>My First Heading</h1>
<p>My first paragraph.</p>
</body>
</html>
```

The `<!DOCTYPE>` Declaration

- represents the document type, and helps browsers to display web pages correctly.
- It must only appear once, at the top of the page (before any HTML tags).
- is not case sensitive.
- for HTML5 is: `<!DOCTYPE html>`

HTML Headings

HTML headings are defined with the `<h1>` to `<h6>` tags.

`<h1>` defines the most important heading. `<h6>` defines the least important heading:

Example

```
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
```

HTML Paragraphs

HTML paragraphs are defined with the `<p>` tag:

Example

```
<p>This is a paragraph.</p>
<p>This is another paragraph.</p>
```

HTML Links

HTML links are defined with the `<a>` tag:

Example

```
<a href="https://www.scholar.com">This is a link</a>
```

The link's destination is specified in the `href` attribute.

Attributes are used to provide additional information about HTML elements.

You will learn more about attributes in a later chapter.

HTML Images

HTML images are defined with the `` tag. The source file (`src`), alternative text (`alt`), `width`, and `height` are provided as attributes:

Example

```

```

How to View HTML Source

Have you ever seen a Web page and wondered "Hey! How did they do that?"

View HTML Source Code:

Right-click in an HTML page and select "View Page Source" (in Chrome) or "View Source" (in Edge), or similar in other browsers. This will open a window containing the HTML source code of the page.

Inspect an HTML Element:

Right-click on an element (or a blank area), and choose "Inspect" or "Inspect Element" to see what elements are made up of (you will see both the HTML and the CSS). You can also edit the HTML or CSS on-the-fly in the Elements or Styles panel that opens.