Akinjobi Sodiq

T: @geektutor

HTML

INTRODUCTION, EDITORS, BASIC, ELEMENTS, ATTRIBUTES

HTML

INTRODUCTION, EDITORS, BASIC, ELEMENTS, ATTRIBUTES

WHAT IS HTML?

- **HTML** is a language for **describing web pages**.

- **HTML** stands for **Hyper Text Markup Language**

- **HTML** is a markup language

- A markup language is a set of markup **tags**

- The tags **describes** document content

- **HTML documents** contain **HTML tags** and **plain text**

- **HTML documents** are also called **web pages**

HTML TAGS

HTML markup tags are usually called **HTML tags**

HTML tags are keywords (tag names) surrounded by **angle brackets** like <html>

HTML tags normally come in **pairs** like **** and ****

The first tag in a pair is **the start tag**, the second tag is **the end tag**

The end tag is written like the start tag, with a **forward slash** before the tag name

Start and end tags are also called **opening tags** and **closing tags**

<tagname> content </tagname>

HTML ELEMENTS

"HTML tags" and **"HTML elements"** are often used to describe the same thing.

But strictly speaking, an HTML element is everything between the start tag and the end tag, including the tags:

HTML Element:

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

WEB BROWSERS

The purpose of a web browser (Chrome, Internet Explorer, Firefox) is **to read HTML documents** and **display them as web pages**. The browser does not display the HTML tags, but uses the tags to **interpret** the content of the page:

HTML PAGE STRUCTURE

Below is a visualization of an HTML page structure:

```
<html>
    <body>
        <h1>This a Heading</h1>
        <p>This is a paragraph.</p>
        <p>This is another paragraph.</p>
    </body>
</html>
```

HTML VERSIONS

Version	Year
HTML	1991
HTML+	1993
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML 1.0	2000
HTML5	2012
XHTML5	2013

THE <!DOCTYPE> DECLARATION

There are many different documents on the web, and a browser can only display an HTML page 100% correctly if it knows the HTML type and version used.

The <!DOCTYPE> declaration helps the browser to display a web page correctly.

Common Declarations

HTML5

<!DOCTYPE html>

HTML 4.01

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

XHTML 1.0

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

HTML EDITORS

Writing HTML Using VSCode or Notepad

HTML can be edited by using a professional HTML editor like:

- Visual Studio Code

- Sublime Text

- TextEdit

However, for learning HTML we recommend a text editor like VSCode (PC) or TextEdit (Mac). We believe using a simple text editor is a good way to learn HTML.

HTML EDITORS

Follow the 3 steps below to create your first web page with Notepad.

Step 1: Start VS Code

To start Notepad go to:

Start

    Search

     Visual Studio Code

HTML EDITORS

Step 2: Save Your HTML

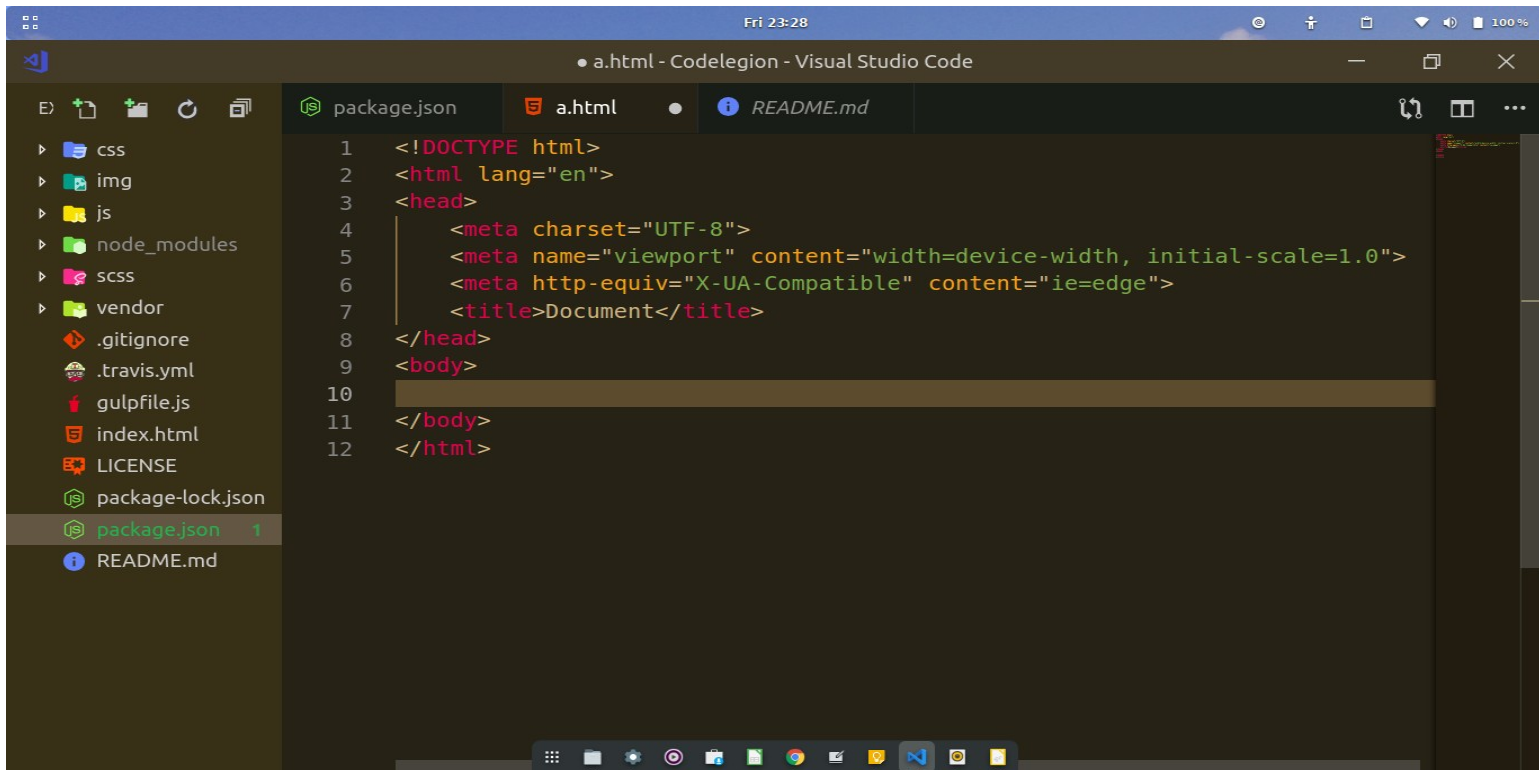Select **Save as**.. in VS Code's file menu.

When you save an HTML file, you can use either the .htm or the .html file extension. There is no difference, it is entirely up to you.

Save the file in a folder that is easy to remember, like DSC.

HTML EDITORS

Step 3: Edit Your HTML with VS Code

Type your HTML code into your VS Code:

HTML EDITORS

Step 4: Run the HTML in Your Browser

Start your web browser and open your html file from the **File**, **Open** menu, or just browse the folder and double-click your HTML file.

The result should look much like this:

HTML BASIC

HTML Headings

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

Example

```
<h1>This is a heading</h1>
<h2>This is a heading</h2>
<h3>This is a heading</h3>
```

HTML BASIC

HTML Paragraphs

HTML paragraphs are defined with the <p> tag.

Example

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

HTML BASIC

HTML Links

HTML links are defined with the <a> tag.

Example

`<a href="http://www.adresocial.com">This is a link</a>`

Note: The link address is specified in the href attribute.

(You will learn about attributes in a later chapter of this tutorial).

HTML BASIC

HTML Images

HTML images are defined with the <img> tag.

Example

```
<img src="w3schools.jpg" width="104" height="142">
```

Note: The filename and the size of the image are provided as attributes.

HTML ELEMENTS

HTML documents are defined by HTML elements.

An HTML element is everything from the start tag to the end tag:

Start tag *	Element content	End tag *
<p>	This is a paragraph	</p>
	This is a link	

* The start tag is often called the opening tag. The end tag is often called the closing tag.

HTML ELEMENTS

HTML Element Syntax

An HTML element starts with a **start tag** / **opening tag**

An HTML element ends with an **end tag** / **closing tag**

The element content is everything between the start and the end tag

Some HTML elements have empty content

Empty elements are closed in the start tag

Most HTML elements can have attributes

Tip: You will learn about attributes in the next chapter of this tutorial.

HTML ELEMENTS

Nested HTML Elements

Most HTML elements can be nested (can contain other HTML elements).

HTML documents consist of nested HTML elements.

HTML ELEMENTS

HTML Document Example

```
<!DOCTYPE html>
<html>
 <body>
  <p>This is my first paragraph.</p>
 </body>
</html>
```

The example above contains 3 HTML elements.

HTML ELEMENTS

Don't Forget the End Tag

Some HTML elements might display correctly even if you forget the end tag:

```
<p>This is a paragraph
<p>This is a paragraph
```

The example above works in most browsers, because the closing tag is considered optional.

Never rely on this. Many HTML elements will produce unexpected results and/or errors if you forget the end tag .

HTML ELEMENTS

Empty HTML Elements

HTML elements with no content are called empty elements.

 is an empty element without a closing tag (the <br> tag defines a line break).

Tip: In XHTML, all elements must be closed. Adding a slash inside the start tag, like <br />, is the proper way of closing empty elements in XHTML (and XML).

HTML ELEMENTS

HTML Tip: Use Lowercase Tags

HTML tags are not case sensitive: <P> means the same as <p>. Many web sites use uppercase HTML tags.

W3Schools use lowercase tags because the World Wide Web Consortium (W3C) recommends lowercase in HTML 4, and demands lowercase tags in XHTML.

HTML ATTRIBUTES

- HTML elements can have **attributes**

- Attributes provide **additional information** about an element

- Attributes are always specified in **the start tag**

- Attributes come in name/value pairs like: **name="value"**

HTML ATTRIBUTES

Attribute Example

HTML links are defined with the <a> tag. The link address is specified in the href attribute:

Example

```
<a href="http://www.adresocial.com">This is a link</a>
```

HTML ATTRIBUTES

Always Quote Attribute Values

Attribute values should always be enclosed in quotes.

Double style quotes are the most common, but single style quotes are also allowed.

Tip: In some rare situations, when the attribute value itself contains quotes, it is necessary to use single quotes: name='John "ShotGun" Nelson'

HTML ATTRIBUTES

HTML Tip: Use Lowercase Attributes

Attribute names and attribute values are case-insensitive.

However, the World Wide Web Consortium (W3C) recommends lowercase attributes/attribute values in their HTML 4 recommendation.

Newer versions of (X)HTML will demand lowercase attributes.