

# HTML Introduction

# What is HTML?

- HTML is the standard markup language for creating Web pages.
  - HTML stands for **Hyper Text Markup Language**
  - HTML describes the structure of Web pages using markup
  - HTML elements are the building blocks of HTML pages
  - HTML elements are represented by tags
  - HTML tags label pieces of content such as "heading", "paragraph", "table", and so on
  - Browsers do not display the HTML tags, but use them to render the content of the page

# A Simple HTML Document

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

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

</body>
</html>
```



**My First Heading**

My first paragraph.

# Example Explained

- The `<!DOCTYPE html>` declaration defines this document to be HTML5
- The `<html>` element is the root element of an HTML page
- The `<head>` element contains meta information about the document
- The `<title>` element specifies a title for the document
- The `<body>` element contains the visible page content
- The `<h1>` element defines a large heading
- The `<p>` element defines a paragraph

# HTML Tags

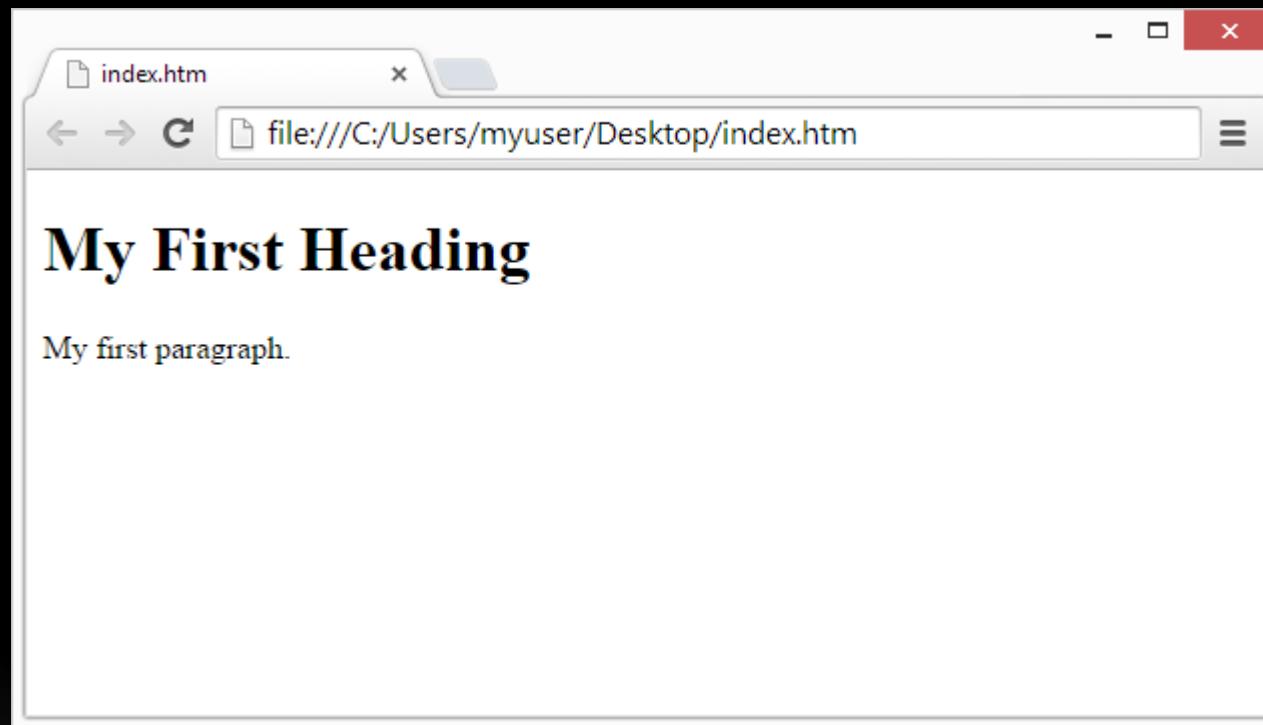
- HTML tags are element names surrounded by angle brackets:

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

- HTML tags normally come **in pairs** like **<p>** and **</p>**
- 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, but with a **forward slash** inserted before the tag name
- The start tag is also called the **opening tag**, and the end tag the **closing tag**.

# Web Browsers

- The purpose of a web browser (Chrome, IE, Firefox, Safari) is to read HTML documents and display them.
- The browser does not display the HTML tags, but uses them to determine how to display the document:



# HTML Page Structure

- A visualization of an HTML page structure
- Only the content inside the <body> section (the white area above) is displayed in a browser.

```
<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>
```

# The <!DOCTYPE> Declaration

- 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).
- The <!DOCTYPE> declaration is not case sensitive.
- The <!DOCTYPE> declaration for HTML5 is:

```
<!DOCTYPE html>
```

- Common DOCTYPE Declarations
  - [https://www.w3schools.com/tags/tag\\_doctype.asp](https://www.w3schools.com/tags/tag_doctype.asp)

# HTML Editor

# Write 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 using a simple text editor is a good way to learn HTML.
- Follow the four steps below to create your first web page with Notepad or TextEdit.

# Step 1: Open Notepad (PC)

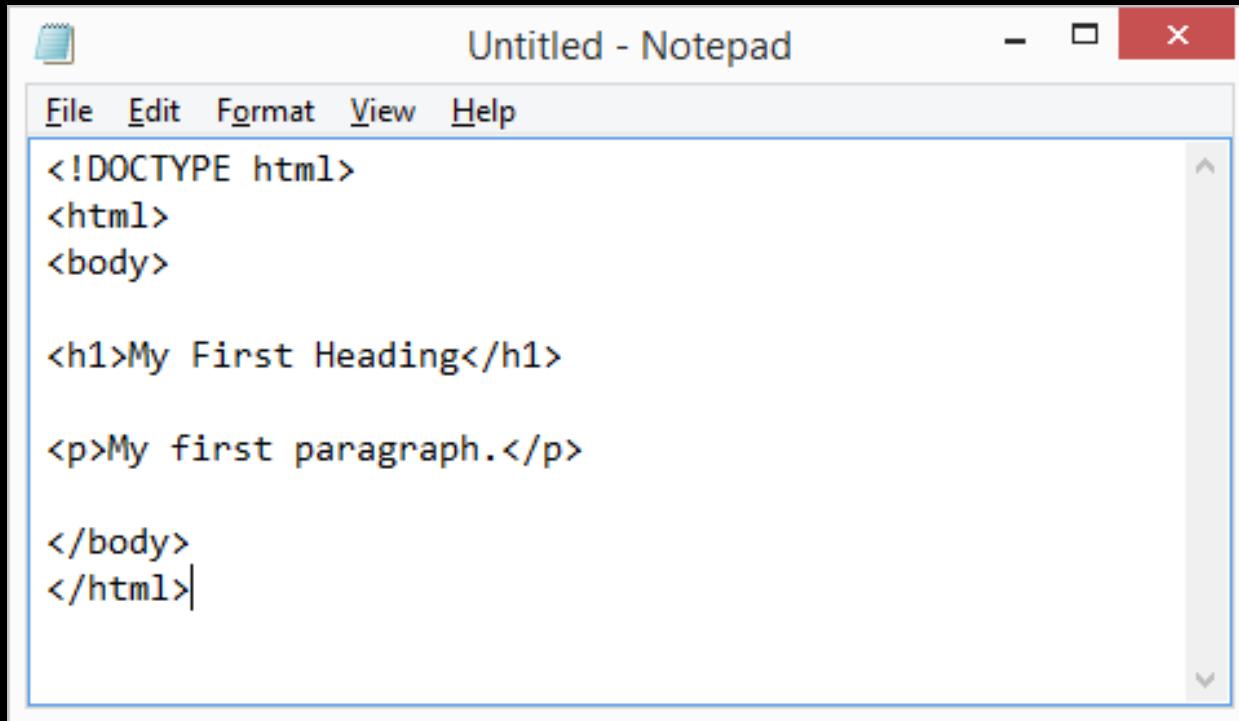
- Windows 8 or later:
- Open the Start Screen (the window symbol at the bottom left on your screen). Type Notepad.
- Windows 7 or earlier:
- Open Start > Programs > Accessories > Notepad

# Step 1: 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 some HTML into Notepad.



A screenshot of the Windows Notepad application window titled "Untitled - Notepad". The window has a standard title bar with icons for minimize, maximize, and close. Below the title bar is a menu bar with "File", "Edit", "Format", "View", and "Help". The main content area contains the following HTML code:

```
<!DOCTYPE html>
<html>
<body>

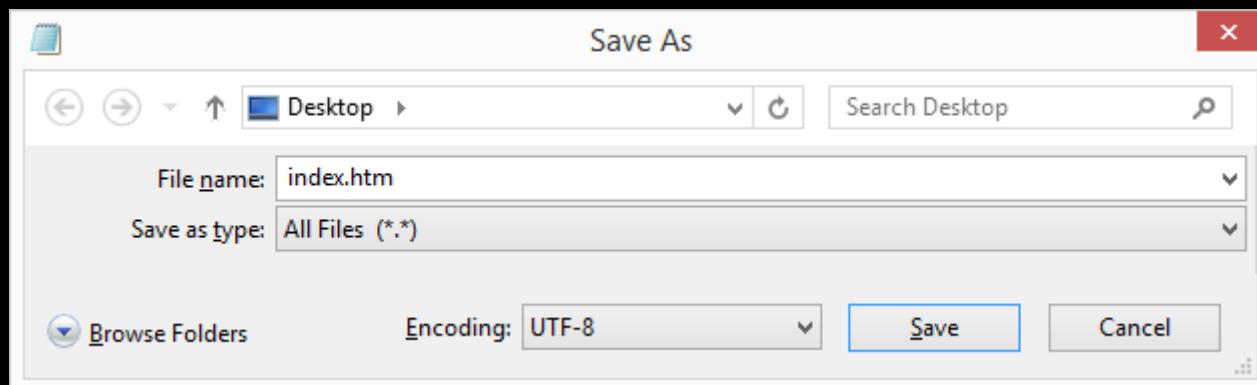
<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</html>
```

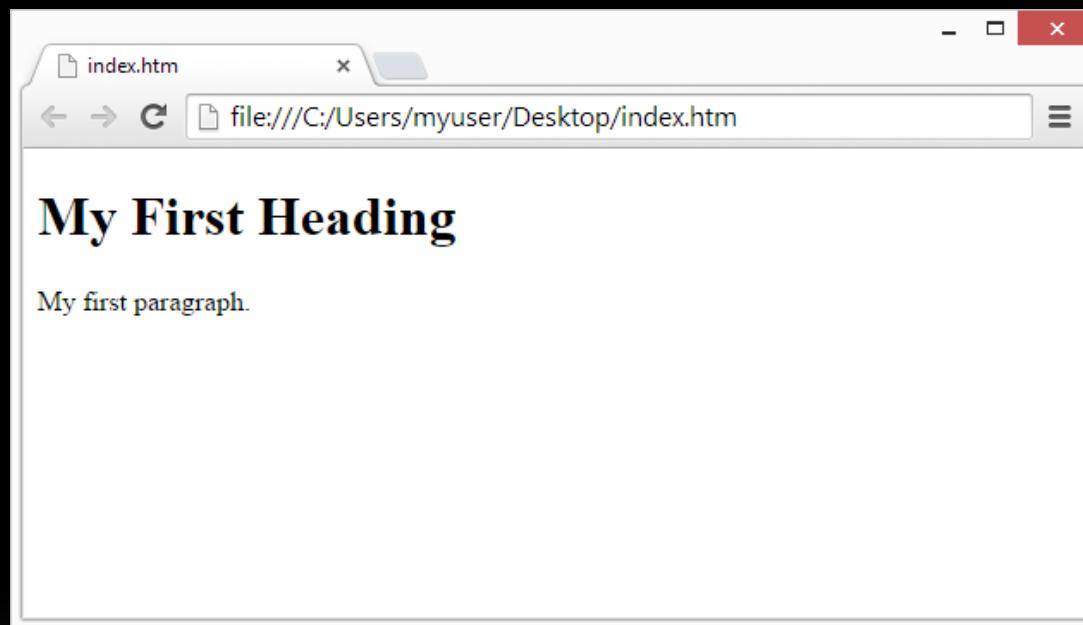
# Step 3: Save the HTML Page

- Save the file on your computer. Select File > Save as in the Notepad menu.
- Name the file “index.htm” or “index.html”, and set the encoding to **UTF-8** (which is the preferred encoding for HTML files).



# 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:



# W3Schools Online Editor

- With our free online editor, you can edit HTML code and view the result in your browser.
- 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:
  - [https://www.w3schools.com/html/tryit.asp?filename=tryhtml\\_default](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_default)

# Exercise 01: First webpage

