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>
```

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

Tip: 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

- 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**: Only the content inside the <body> section (the white area above) is displayed in a browser.

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 HTML is:

```
<!DOCTYPE html>
```

HTML VERSIONS

- Since the early days of the web, there have been many versions of HTML:

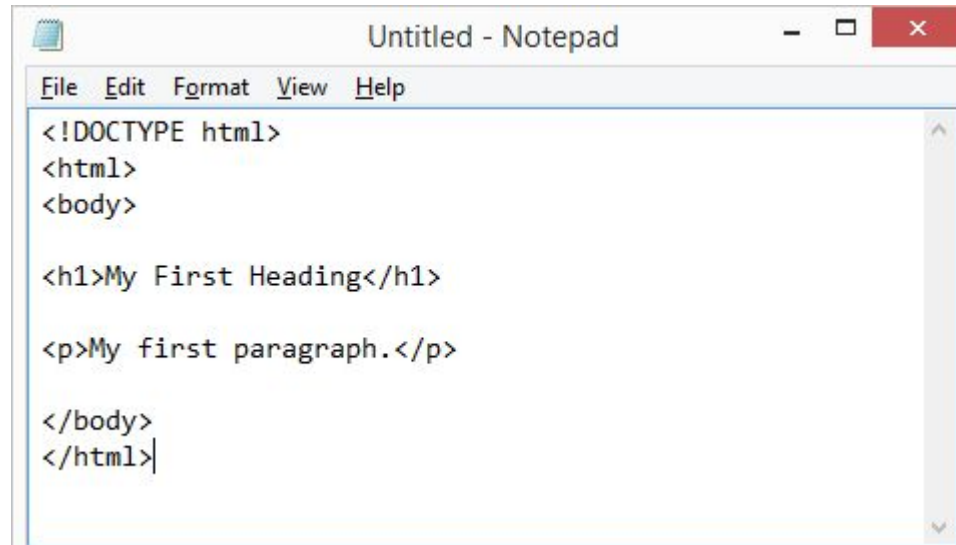| Version	Year
HTML	1991
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML	2000
HTML5	2014

HTML EDITORS
WRITE HTML USING NOTEPAD OR TEXTEDIT

- Web pages can be created and modified by using professional HTML editors.

- However, for learning HTML usually recommend a simple text editor like Notepad (PC) or TextEdit (Mac).

- 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 2: Write Some HTML

- Write or copy some HTML into Notepad.

```
Untitled - Notepad

File  Edit  Format  View  Help

<!DOCTYPE html>
<html>
<body>

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</html>
```
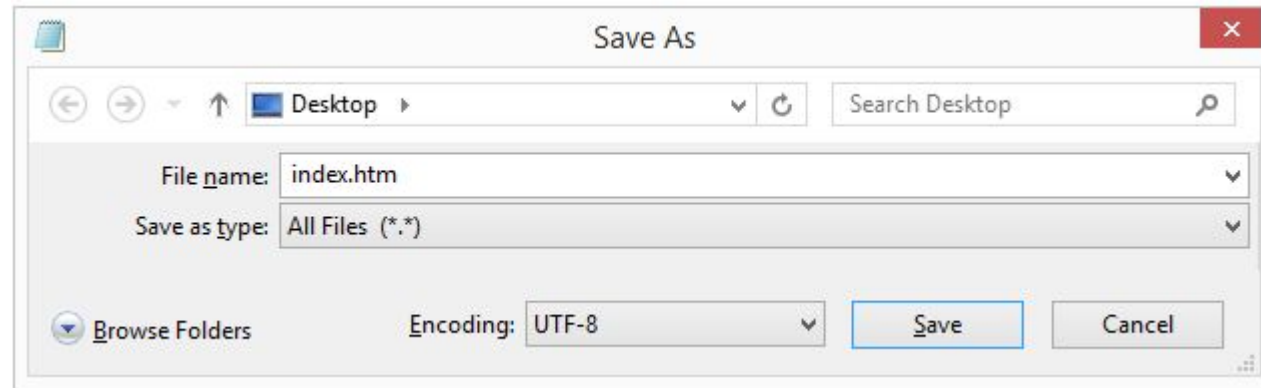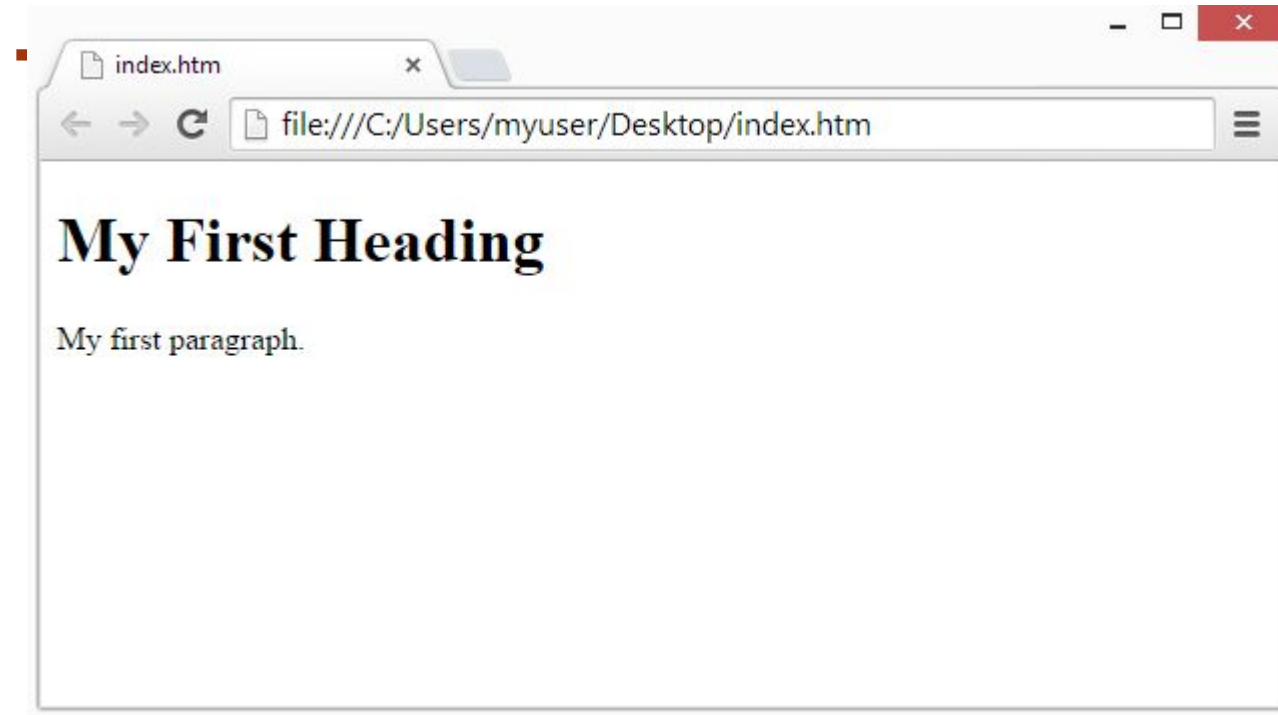
- Step 3: Save the HTML Page

- 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).

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:

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>

- Try yourself

HTML BASIC EXAMPLES

- 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>
```

My First Heading

My first paragraph.

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

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

<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>

</body>
</html>
```

This is heading 1

This is heading 2

This is heading 3

This is heading 4

This is heading 5

This is heading 6

HTML PARAGRAPHS

- HTML paragraphs are defined with the **<p>** tag:

- Example

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

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

</body>
</html>
```

This is a paragraph.

This is a paragraph.

This is a paragraph.

HTML LINKS

- HTML links are defined with the **<a>** tag:

- Example

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

<a href="https://www.w3schools.com">This is a link</a>

</body>
</html>
```

This is a link

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

- Attributes are used to provide additional information about HTML elements.

HTML IMAGES

- HTML images are defined with the **<img>** tag.

- The source file (src), alternative text (alt), width, and height are provided as attributes:

- Example

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

<img src="w3schools.jpg" alt="W3Schools.com" width="104" height="142">

</body>
</html>
```

1. What is HTML?

2. list the properties of HTML.

3. What are HTML Tags?

4. Tell about HTML Tags more.

5. What are Web Browsers?

6. What is HTML Page Structure?

7. What are HTML Editors?

8. What are HTML Headings?

9. What are HTML Paragraphs?

10. What are HTML Links?

11. What are HTML Images?