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.

# A Simple HTML Document

## Example

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

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

</body>
</html>
```

- The `<html>` element is the root element of an HTML page
- The `<head>` element contains meta information about the HTML page
- The `<title>` element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
- The `<body>` element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The `<h1>` element defines a large heading
- The `<p>` element defines a paragraph

```html
<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>
```

# 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>
```

# HTML History

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

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

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 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".

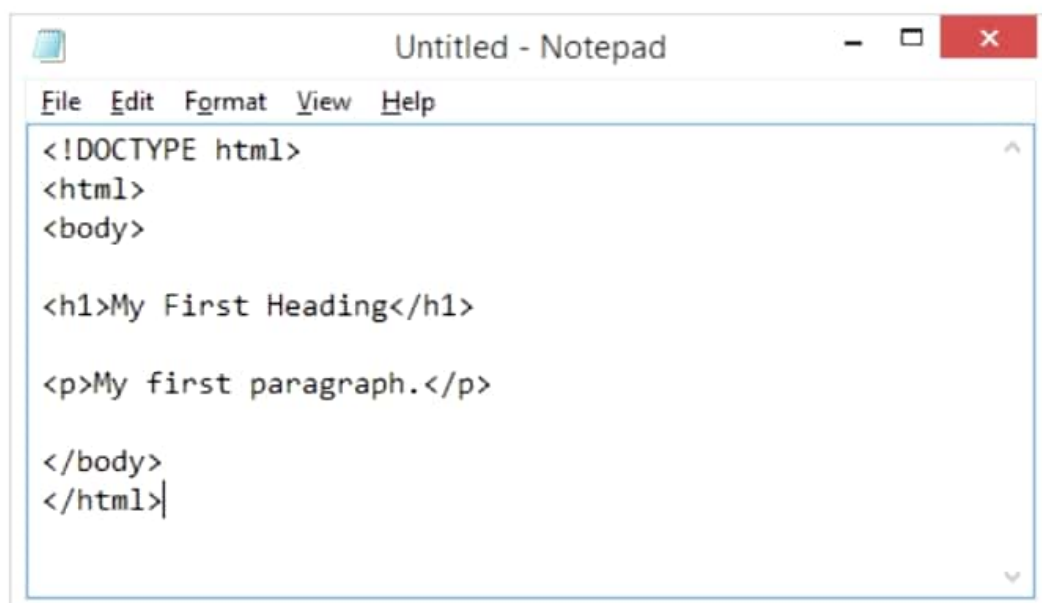**Then open a new document to place the code.**

Write or copy the following HTML code into Notepad:

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

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</html>
```
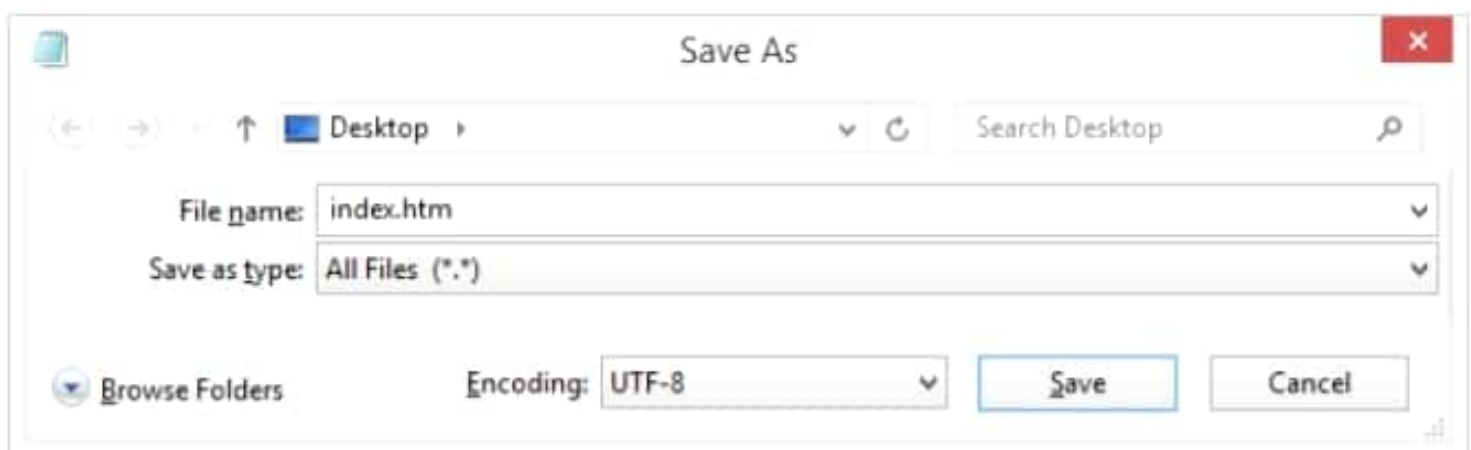
Untitled - Notepad

File   Edit   Format   View   Help

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

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</html>
```

# Step 3: Save the HTML Page

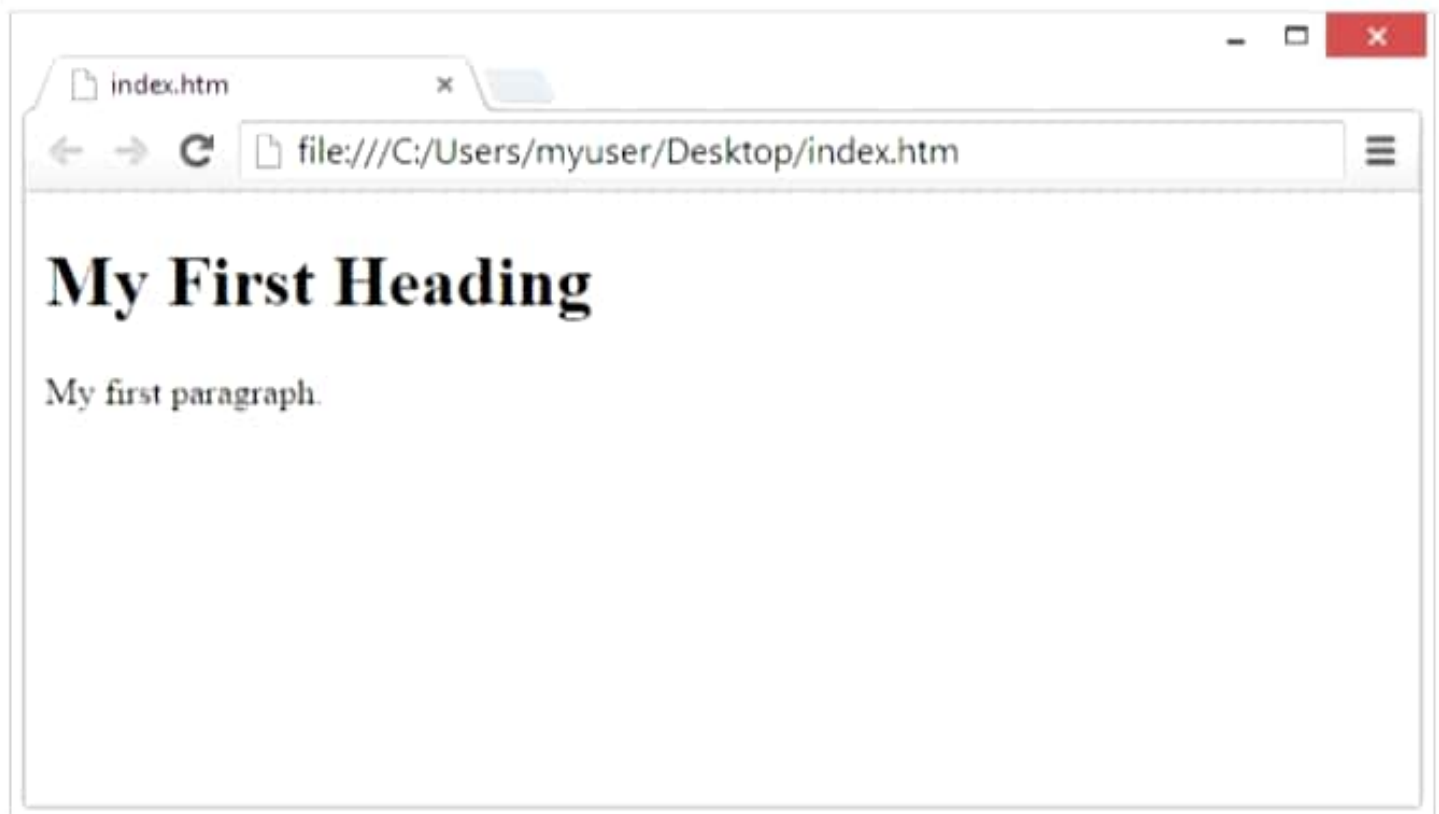Save the file on your computer. Select **File > Save as** in the Notepad menu.

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

| | Save As | |
|---|---|---|
| ← → ↑ 🔲 Desktop ▸ | ⌄ C   Search Desktop | 🔎 |

File name: index.htm

Save as type: All Files (*.*)

▼ Browse Folders   Encoding: UTF-8 ⌄   [ Save ]   [ Cancel ]

# 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:



index.htm

file:///C:/Users/myuser/Desktop/index.htm

## My First Heading

My first paragraph.

# 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>
```

# 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>
```

# 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.w3schools.com">This is a link</a>
```

Try it Yourself »

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

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

HTML attributes provide additional information about HTML elements.

## HTML Attributes

- All HTML elements can have **attributes**
- Attributes provide **additional information** about elements
- Attributes are always specified in **the start tag**
- Attributes usually come in name/value pairs like: **name="value"**

## The href Attribute

The `<a>` tag defines a hyperlink. The `href` attribute specifies the URL of the page the link goes to:

# The src Attribute

The `<img>` tag is used to embed an image in an HTML page. The `src` attribute specifies the path to the image to be displayed:

## Example

```
<img src="img_girl.jpg">
```

Try it Yourself »

There are two ways to specify the URL in the `src` attribute:

relative URLs. They will not break if you change domain.

# The width and height Attributes

The `<img>` tag should also contain the `width` and `height` attributes, which specify the width and height of the image (in pixels):

# Example

```
<img src="img_girl.jpg"
width="500" height="600">
```

# The alt Attribute

The required `alt` attribute for the `<img>` tag specifies an alternate text for an image, if the image for some reason cannot be displayed. This can be due to a slow connection, or an error in the `src` attribute, or if the user uses a screen reader.

# Example

```html
<img src="img_girl.jpg"
alt="Girl with a jacket">
```

A complete list of deprecated HTML tags and attributes are given here. All the tags have been ordered alphabetically along with their equivalent tag or alternate CSS option.

| Tag | Description | Alternate |
|---|---|---|
| <applet> | Deprecated. Specifies an applet | <object> |
| <basefont> | Deprecated. Specifies a base font | |
| <center> | Deprecated. Specifies centered text | text-align |
| <dir> | Deprecated. Specifies a directory list | |
| <embed> | Deprecated. Embeds an application in a document | <object> |

| | | |
|---|---|---|
| **<font>** | Deprecated. Specifies text font, size, and color | font-family, font-size |
| **<isindex>** | Deprecated. Specifies a single-line input field | |
| <listing> | Deprecated. Specifies listing of items | <pre> |
| **<menu>** | Deprecated. Specifies a menu list | |
| **<plaintext>** | Deprecated. Specifies plaintext | <pre> |
| **<s>** | Deprecated. Specifies a strikethrough text | text-decoration |

# HTML List Tags

| Tag | Description |
| --- | --- |
| <ul> | Defines an unordered list |
| <ol> | Defines an ordered list |
| <li> | Defines a list item |
| <dl> | Defines a description list |
| <dt> | Defines a term in a description list |
| <dd> | Describes the term in a description list |

# HTML Description Lists

HTML also supports description lists.

A description list is a list of terms, with a description of each term.

The `<dl>` tag defines the description list, the `<dt>` tag defines the term (name), and the `<dd>` tag describes each term:

## Example

```
<dl>
   <dt>Coffee</dt>
   <dd>- black hot
drink</dd>
   <dt>Milk</dt>
   <dd>- white cold
drink</dd>
</dl>
```

# Ordered HTML List

An ordered list starts with the `<ol>` tag. Each list item starts with the `<li>` tag.

The list items will be marked with numbers by default:

## Example

```
<ol>
    <li>Coffee</li>
    <li>Tea</li>
    <li>Milk</li>
</ol>
```

# Unordered HTML List

An unordered list starts with the `<ul>` tag. Each list item starts with the `<li>` tag.

The list items will be marked with bullets (small black circles) by default:

## Example

```
<ul>
    <li>Coffee</li>
    <li>Tea</li>
    <li>Milk</li>
</ul>
```

## Example

Following is the example program to set background color in HTML.

```html
<!DOCTYPE html>
<html>
<body style="background-color:kł
    <h1>HTML Articles</h1>
</body>
</html>
```
Edit & Run ⚙

We can specify the background color with RGB value. RGB value indicates its red, green, and blue color intensity. Each intensity value is on a scale of 0 to 255, or in hexadecimal from 00 to FF.

## Example

Following is the example program to set background color with RGB value.

```html
<!DOCTYPE html>
<html>
<head>
    <style>
        body {
            background-color: rgb(:
        }
    </style>
    <h1>HTML Articles</h1>
</head>
```
Edit & Run ⚙

# Syntax

```
<body style="background-color:aquamarine;">
```

# Example

Following is the example program to set background color in HTML.

```
<!DOCTYPE html>                    Edit & Run ⚙
<html>
<body style="background-color:ac
    <h1>HTML Articles</h1>
</body>
</html>
```

We can change the background color by overriding the property with the other color.

Setting the background color of a web page or an element on the web page, enable us to create unique layouts for the web page.

To set the background color in HTML, use the style attribute, with the **CSS property background-color** inside the **body tag** of the **HTML document**.

HTML5 do not support the `<body>` tag `bgcolor` attribute, so the CSS style is used to add background color. The `bgcolor` attribute deprecated in HTML5.

We can change the background color by overriding the property with the other property.

## Syntax

```
<body style="background-color:aquamarine;">
```

# HTML | Div Tag

The div tag is known as Division tag. The div tag is used in HTML to make divisions of content in the web page like (text, images, header, footer, navigation bar, etc). Div tag has both open (<div>) and closing (</div>) tag and it is mandatory to close the tag. The Div is the most usable tag in web development because it helps us to separate out data in the web page and we can create a particular section for particular data or function in the web pages.

- Div tag is Block level tag
- It is a generic container tag
- It is used to group various tags of HTML so that sections can be created and styles can be applied to them.

Marquee is one of the important tags introduced in HTML to support such scrollable texts and images within a web page. In this tutorial, you will learn about the Marquee tag and its different attributes for developing a well-groomed static website.

## The Marquee Tag

The `<marquee>` tag is a container tag of HTML that is implemented for creating scrollable text or images within a web page from either left to right or vice versa, or top to bottom or vice versa. But this tag has been **deprecated in the new version of HTML, i.e., HTML 5.**

# HTML | <nobr> Tag

The **<nobr>** tag is used to create a single line text, that does not matter how long the statement is, this tag used with <wbr> tag. The created single line statement bring the horizontal scroll to read the whole line. The **<nobr>** tag is exact opposite of <br> tag. You can use the CSS white space property as a replacement of this tag.

**Note:** <nobr> tag is not supported in html5.

**Syntax:**

```
<nobr> Statement </nobr>
```

# HTML <dfn> Tag

The <dfn> tag in HTML represents definition element and is used to representing a defining instance in HTML. Generally, the defining instance is the first use of a term in a document. The <dfn> tag requires a starting as well as an ending tag.

## Syntax:

```
<dfn>......</dfn>
```

# HTML \<hr\> Tag

The \<hr\> tag in HTML stands for horizontal rule and is used to insert a horizontal rule or a thematic break in an HTML page to divide or separate document sections. The \<hr\> tag is an empty tag, and it does not require an end tag.

**Tag Attributes:** The table given below describe the \<hr\> tag attributes. **These attributes are not supported in HTML5:**

| Attribute | Value | Description |
| --- | --- | --- |
| align | left center right | Used to specify the alignment of the horizontal rule. |
| noshade | noshade | Used to specify the bar without shading effect. |
| size | pixels | Used to specify the height of the horizontal rule. |
| width | pixels | Used to specify the width of the horizontal rule. |