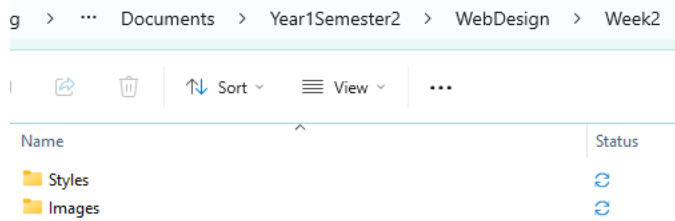


FILES AND FOLDERS – USE ONEDRIVE FOR LAB EXERCISES AND PROJECTS

- Create a new folder OneDrive/Year1Semester2/WebDesign/Week2
- Create 2 new Folders one for Images and another for Styles in Week2



**** Important do not use spaces in your folder names or in your file names**

HTML

- **HTML** stands for **Hypertext Markup Language**, and it is the most widely used language to write Web Pages.
- **Hypertext** refers to the way in which Web pages (**HTML documents**) are linked together, the link on a webpage is called **Hypertext**.

HTML is a **Markup Language** which means you use HTML *to simply "mark-up" a text document with tags* that *tell a Web browser how to structure it to display*.

[html_tutorial.pdf \(tutorialspoint.com\)](http://html_tutorial.pdf(tutorialspoint.com))

HTML Tags

As told earlier, HTML is a markup language and makes use of various tags to format the content. These tags are enclosed within angle braces **<Tag Name>**. Except few tags, most of the tags have their corresponding closing tags. For example, **<html>** has its closing tag **</html>** and **<body>** tag has its closing tag **</body>** tag etc.

Above example of HTML document uses the following tags:

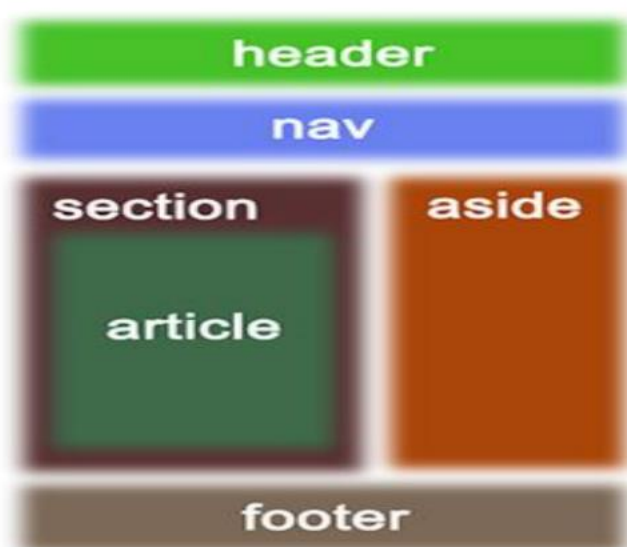
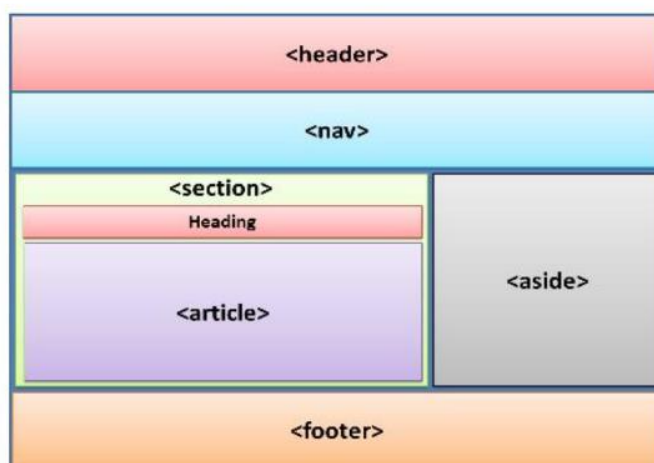
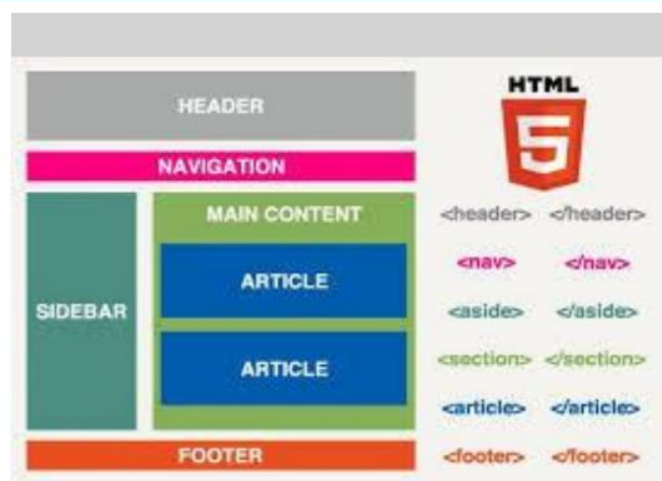
Tag	Description
<!DOCTYPE...>	This tag defines the document type and HTML version.
<html>	This tag encloses the complete HTML document and mainly comprises of document header which is represented by <head>...</head> and document body which is represented by <body>...</body> tags.
<head>	This tag represents the document's header which can keep other HTML tags like <title>, <link> etc.
<title>	The <title> tag is used inside the <head> tag to mention the document title.
<body>	This tag represents the document's body which keeps other HTML tags like <h1>, <div>, <p> etc.
<h1>	This tag represents the heading.
<p>	This tag represents a paragraph.

HTML Tag vs. Element

An HTML element is defined by a *starting tag*. If the element contains other content, it ends with a *closing tag*.

For example, **<p>** is starting tag of a paragraph and **</p>** is closing tag of the same paragraph but **<p>This is paragraph</p>** is a paragraph element.

HTML5 WEB PAGE BODY STRUCTURE



```

<header>
  <h1>title</h1>
  <form>Search</form>
  <nav>
    <ul>Site navigation</ul>
  </nav>
</header>
<section>
  <article>
    <h1>Article title</h1>
    <p>Summary</p>
  </article>
</section>
<aside>
  <section>
    <h2>Blogroll...</h2>
  </section>
</aside>
<footer>
  <h2>Footer</h2>
</footer>

```

Week1/Template.html created last week

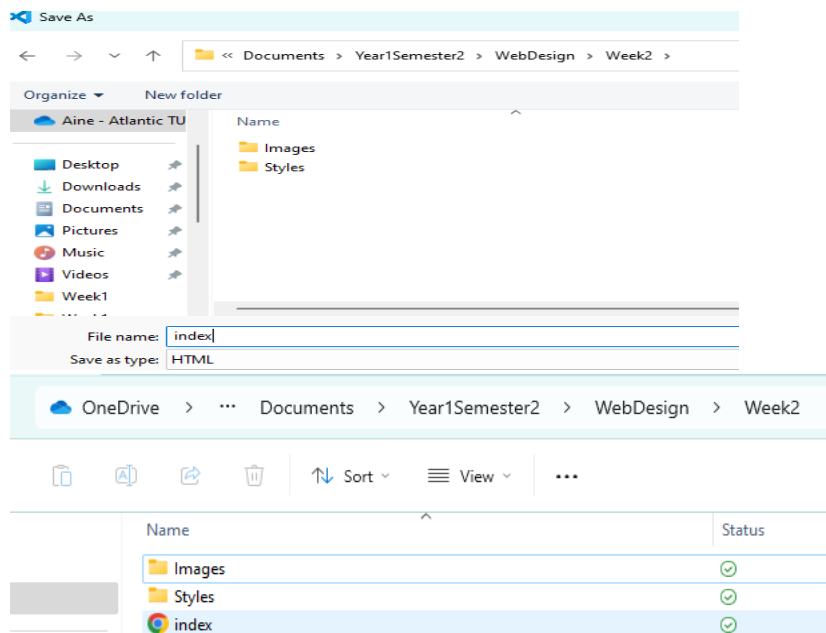
- Add in the additional meta for name="description" of your page
- Add in the additional meta for name="keywords" of your page

```
<!DOCTYPE html>
<!-- This is comments
Date Created Jan 2020
Purpose : Template html5 web page-->
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <meta name="description" content="Template Page">
    <meta name="keywords" content="Sections,Article,Footer">
    <title>HTML 5 Boilerplate</title>
    <link rel="stylesheet" href="style.css">
  </head>
```

```
<body> <!-- Body Tag Start of Body section display on screen -->
  <header>
    <h1> Welcome to this Page - using heading 1 tag h1 </h1>
    <nav>
    </nav>
  </header>
  <main> <!-- Main Section of content on page -->
    <section> <!-- Section grouping of content -->
      <h3> h3 This section display sales</h3>
      <p> Paragraph Sales in month up by 20%</p>
    </section>
    <aside><!-- Aside grouping of content, use css to render to the side -->
      <h3> h3 Aside section- this will need css to place it to the side
    </aside>
  </main>
  <footer> <!-- Footer grouping of content for display end of screen -->
    <center><p>Copyright 2024 Your name</p></center>
  </footer>
</body>
</html>
```

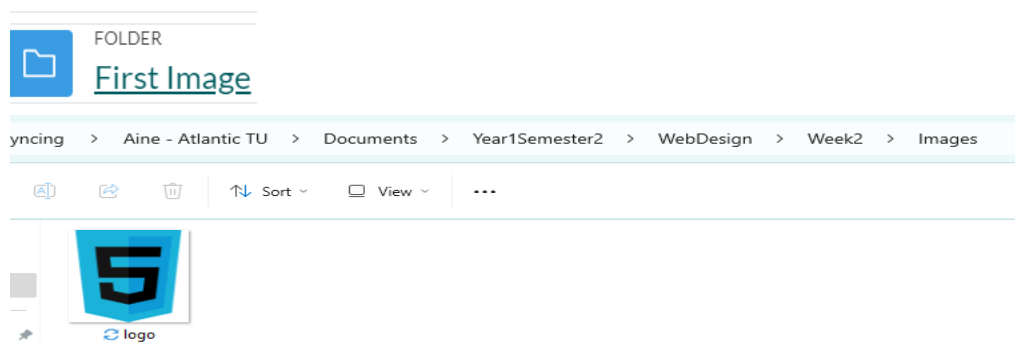
- Open template.html created last week and save as index.html in your week2 folder

Week2 Lab Exercise – Template –Images



- **Change Title** to Display HTML5 Page
- ```
<title>HTML5 Page</title>
```
- Download image from the First Image folder on Moodle and place it in Week2/Images folder

### Lab Exercise



## ADD AN IMAGE TO INDEX.HTML

- The <img> tag defines an image in an HTML page.
- The <img> tag has two **required attributes: src and alt.**
  - The **src attribute is required**, and contains the path to the image you want to embed.
  - The **alt attribute holds a text description** of the image, which isn't mandatory but is **incredibly useful for accessibility** — screen readers read this description out to their users so they know what the image means. Alt text is also displayed on the page if the image can't be loaded for some reason: for example, network errors, content blocking,
  - **Use both width and height** to set the intrinsic size of the image, allowing it to take up space before it loads, to mitigate content layout shifts.
- Note: Images are not technically inserted into an HTML page, images are linked to HTML pages. The <img> tag creates a holding space for the **referenced image**.
- When the Web browser gets to that tag, it requests that the image file be downloaded from the server and displayed on the page .
- The <img> tag represents what is known as a **void element or empty** (see [HTML5 spec](#)), so called because it can't have any contents unlike <p> or <h1>

How to insert an image:

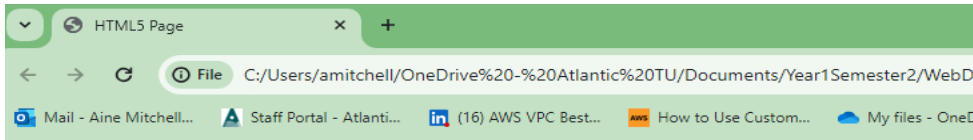
```

```

```
<header>

 <h1> Welcome to this Page - using heading 1 tag h1 </h1>
 <nav>
 </nav>
</header>
```

- Display Page on Chrome browser



## Welcome to this Page - using heading 1 tag h1

**h3** This section display sales

Paragraph Sales in month up by 20%

**h3** Aside section- this will need css to place it to the side of the screen

Copyright 2024 Your name

io

- Display image also in Main Section with default size

```
<main> <!-- Main Section of content on page -->
 <section> <!-- Section grouping of content -->
 <h3> h3 This section display sales</h3>

 <p> Paragraph Sales in month up by 20%</p>
 </section>
```



## Welcome to this Page - using heading 1 tag h1

**h3** This section display sales



Paragraph Sales in month up by 20%

## ADD SOME BOLD, ITALIC AND UNDERLINE TAGS TO YOU INDEX.HTML

Below Underline <u> and *italic* <i> or <em> tags nested

```
<header>

 <h1><i><u>Welcome to this Page</u>-using heading 1 tag h1</i></h1>
```



*Welcome to this Page*-using heading 1 tag h1

h3 This section display sales

Below using the **bold** tags <b>

```
<section> <!-- Section grouping of content -->
 <h3> h3 This section display sales</h3>

 <p> Paragraph Sales in month up by 20%</p>
</section>
```

**Paragraph Sales** in month up by 20%

h3 Aside section- this will need css to place it to the side of the screen



LINE BREAK TAG – NOT TO BE USED FOR BLANK LINES ONLY TO BREAK A TEST LINE

## Line Break Tag

Whenever you use the `<br />` element, anything following it starts from the next line. This tag is an example of an **empty** element, where you do not need opening and closing tags, as there is nothing to go in between them.

The `<br />` tag has a space between the characters **br** and the forward slash. If you omit this space, older browsers will have trouble rendering the line break, while if you miss the forward slash character and just use `<br>` it is not valid in XHTML.

```
</main>
<footer> <!-- Footer grouping of content for display end of screen
 <h3>Company Address</h3>
 <p>1 Main Street
Mullingar
Co.Westmeath</p>
 <center><p>Copyright 2024 Your name</p></center>
</footer>
</body>
/html>
```

### Company Address

1 Main Street  
Mullingar  
Co.Westmeath

Copyright 2024 Your name

## USE W3C MARKUP VALIDATION SERVICE

Go to the URL that follows, identify the file to be validated, and click the Check button:

### [The W3C Markup Validation Service](https://validator.w3.org/)

W3C<sup>®</sup> Markup Validation Service  
Check the markup (HTML, XHTML, ...) of Web documents

Validate by URI   Validate by File Upload   Validate by Direct Input

Validate by File Upload

Upload a document for validation:

File:  index.html

► More Options

**Note:** file upload may not work with Internet Explorer on some versions of Windows XP Service Pack 2, see our [information page](#) on the W3C QA Website.

This validator checks the [markup validity](#) of Web documents in HTML, XHTML, SMIL, MathML, etc. If you wish to validate specific content such as [RSS/Atom feeds](#) or [CSS stylesheets](#), [MobileOK content](#), or to [find broken links](#), there are [other validators and tools](#) available. As an alternative you can also try our [non-DTD-based validator](#).