

## PRACTICE\_1-2

### FUNDAMENTALS OF WEB – DEVELOPMENTS HTML, CSS

#### THEORY INTRODUCTION

HTML is the **language in which most websites are written**. HTML is used to create pages and make them functional. The code used to make them visually appealing is known as CSS. Tags and attributes are the basis of HTML. They work together but perform different functions – it is worth investing 2 minutes in **differentiating the two**.

**Tags** are used to **mark up the start of an HTML element** and they are usually enclosed in angle brackets. An example of a tag is: `<h1>`.

Most tags must be opened `<h1>` and closed `</h1>` in order to function.

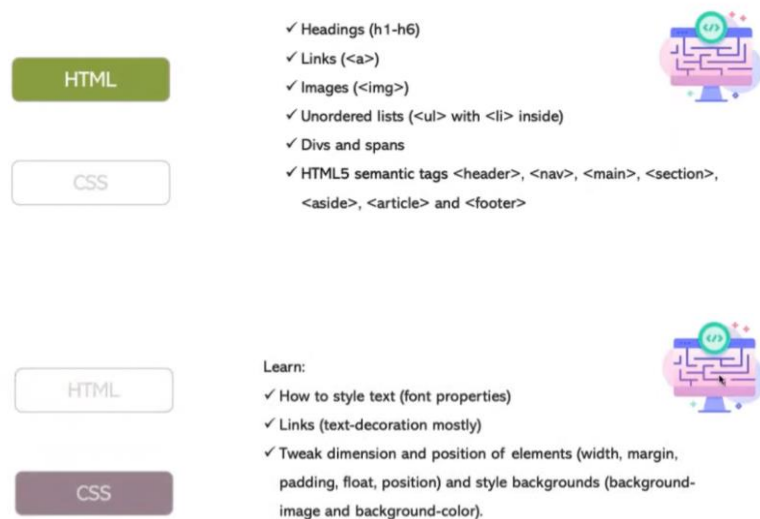
**Attributes** contain **additional pieces of information**. Attributes take the form of an opening tag and additional info is **placed inside**.

An example of an attribute is:

```

```

In this instance, the image source (src) and the alt text (alt) are attributes of the `<img>` tag.



#### RULES TO REMEMBER

1. The vast majority of tags must be **opened** (`<tag>`) and **closed** (`</tag>`) with the element information such as a title or text resting between the tags.
2. When using multiple tags, the tags must be **closed in the order in which they were opened**.

For example:

```
<strong><em>This is really important!</em></strong>
```

## BASIC CONSTRUCTION OF AN HTML PAGE

These tags should be placed underneath each other **at the top of every HTML page** that you create.

`<!DOCTYPE html>` — This tag **specifies the language** you will write on the page. In this case, the language is HTML 5.

`<html>` — This tag signals that from here on we are going to write in HTML code.

`<head>` — This is where all the **metadata for the page** goes — stuff mostly meant for search engines and other computer programs.

`<body>` — This is where the **content of the page** goes.



*Pic.1 - Average HTML page is structured visually.*

## FURTHER TAGS

Inside the `<head>` tag, there is one tag that is always included: `<title>`, but there are others that are just as important:

`<title>`

This is where **insert the page name** as it will appear at the top of the browser window or tab.

`<meta>`

This is where information *about* the document is stored: character encoding, name (page context), description.

## Basic `<head>` section:

```
<head>
<title>My First Webpage</title>
<meta charset="UTF-8">
<meta name="description" content="This field contains information about your page. It is usually around two sentences long.">
<meta name="author" content="Alla Jammine">
</head>
```

## ADDING CONTENT. Making `<body>` tag.

The HTML `<body>` is where we add the content which is designed for viewing by human eyes.

This includes **text, images, tables, forms** and everything else that we see on the internet each day.

## *ADDING HTML HEADINGS TO YOUR WEB PAGE*

In HTML, headings are written in the following elements:

- `<h1>`
- `<h2>`
- `<h3>`
- `<h4>`
- `<h5>`
- `<h6>`

`<h1>` and `<h2>` should be used for the most important titles, while the remaining tags should be used for sub-headings and less important text.

**Search engine bots use this order** when deciphering which information is most important on a page.

### *Creating Your Heading*

On a new line in the HTML editor, type:

```
<h1>Welcome to My Page</h1>
```

## *HOW TO ADD TEXT IN HTML*

Adding text to our HTML page is simple using an element opened with the tag `<p>` which **creates a new paragraph**. We place all of our regular text inside the element `<p>`.

When we write text in HTML, we also have a number of other elements we can use to **control the text or make it appear in a certain way**.

## *ADDING LINKS IN HTML*

Almost everything you click on while surfing the web is a link **takes you to another page** within the website you are visiting or to an external site.

Links are included in an attribute opened by the `<a>` tag.

This element is the first that we've met which uses an attribute and so it **looks different to previously mentioned tags**.

The Anchor Tag

The `<a>` (or anchor) opening tag is written in the format:

```
<a href="https://blogging.com/how-to-start-a-blog/">Your Link Text Here </a>
```

The **first part** of the attribute **points to the page that will open** once the link is clicked.

Meanwhile, the **second part** of the attribute contains the **text which will be displayed** to a visitor in order to entice them to click on that link.

If you are building your own website then you will most likely host all of your pages on professional web hosting.

In this case, internal links on your website will `<a href="mylinkedpage.html">Linktle Here</a>`.

## **CREATING AN ANCHOR TAG**

1. Make a duplicate of the code from your current index.html page.
2. Copy / paste it into a new window in your HTML editor.
3. Save this new page as "page2.html" and ensure that it is saved in the same folder as your index.html page.

On page2.html add the following code:

```
<a href="http://www.google.com">Google</a>
```

This will create a link to Google on page 2. Hit save and return to your index.html page.

On a new line on index.html add the following code:

```
<a href="*folder(s)*/page2.html">Page2</a>
```

Ensure the folder path to the file (page2.html) is correct. **Hit save and preview** index.html in your browser.

If **everything is correct** then **you will see a link which will take you to your second page**. On the second page, there will be a link that will take you to google.com.

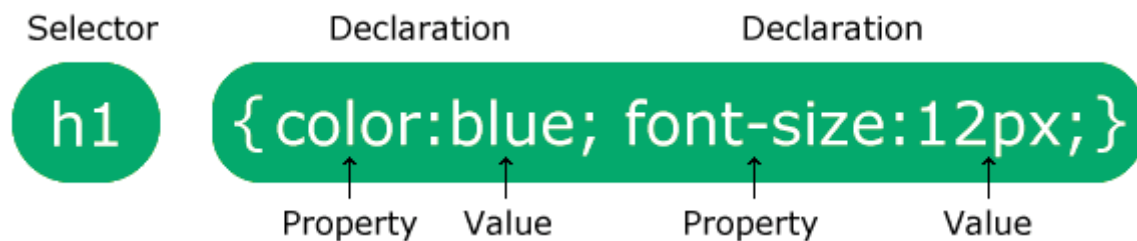
## ADDING IMAGES IN HTML TO YOUR WEBSITE

The `<img>` tag has everything you need to display images on your site.

Much like the `<a>` anchor element, `<img>` also contains an attribute.

The attribute *features information* for your computer regarding the **source**, **height**, **width** and **alt text** of the image.

## CSS BASICS



The selector points to the HTML element you want to style. The declaration block contains one or more declarations separated by semicolons. Each declaration includes a CSS property name and a value, separated by a colon.

Multiple CSS declarations are separated with semicolons, and declaration blocks are surrounded by curly braces.

Example

In this example all `<p>` elements will be center-aligned, with a red text color:

```
p {  
  color: red;  
  text-align: center;  
}
```

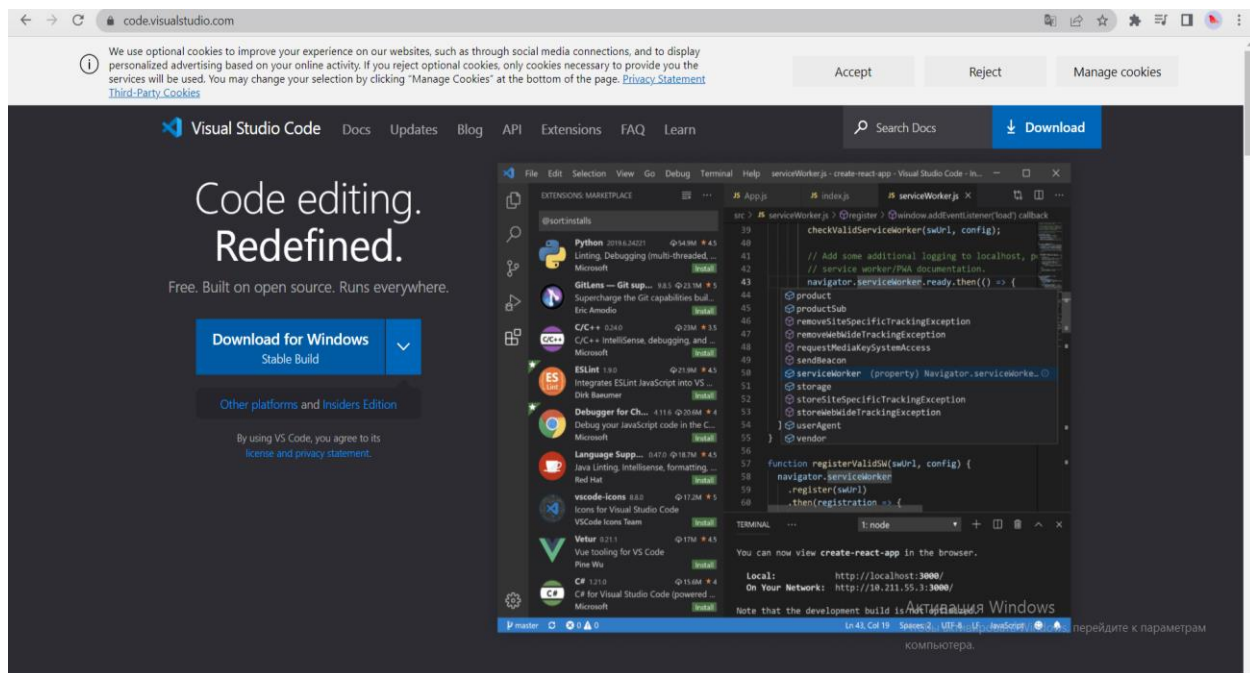
Try it Yourself »

### Example Explained:

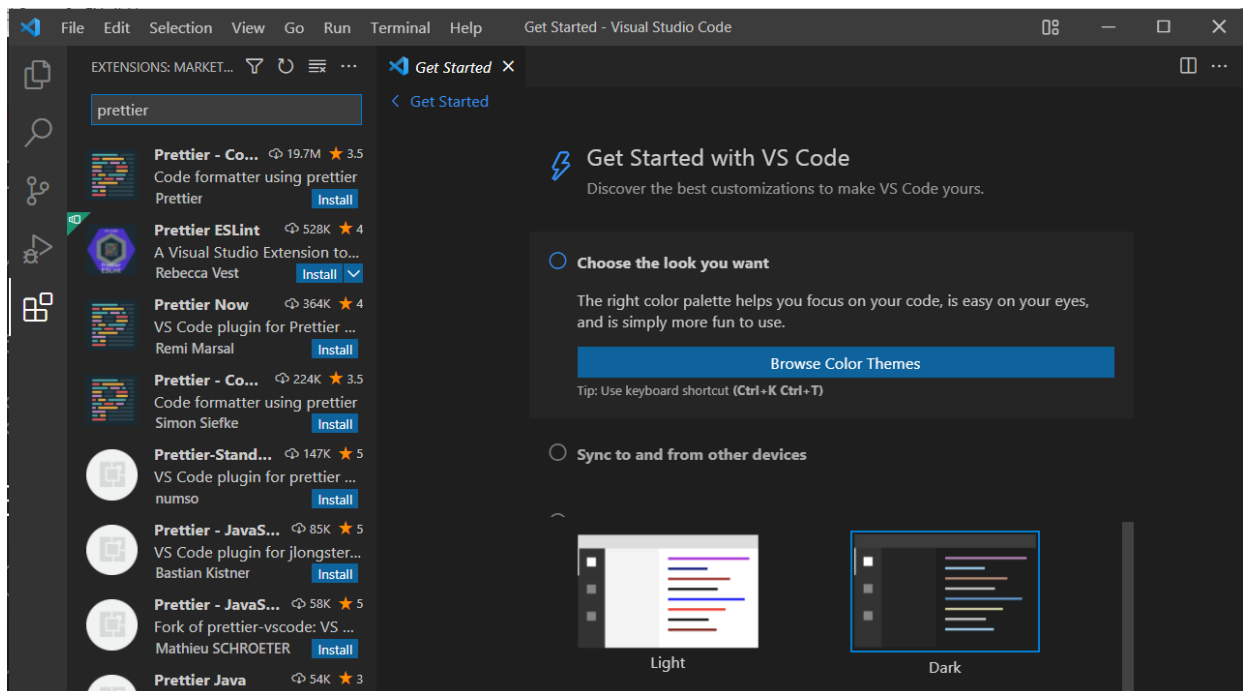
- `p` is a selector in CSS (it points to the HTML element you want to style: `<p>`).
- `color` is a property, and `red` is the property value
- `text-align` is a property, and `center` is the property value

# THE TOOLS:

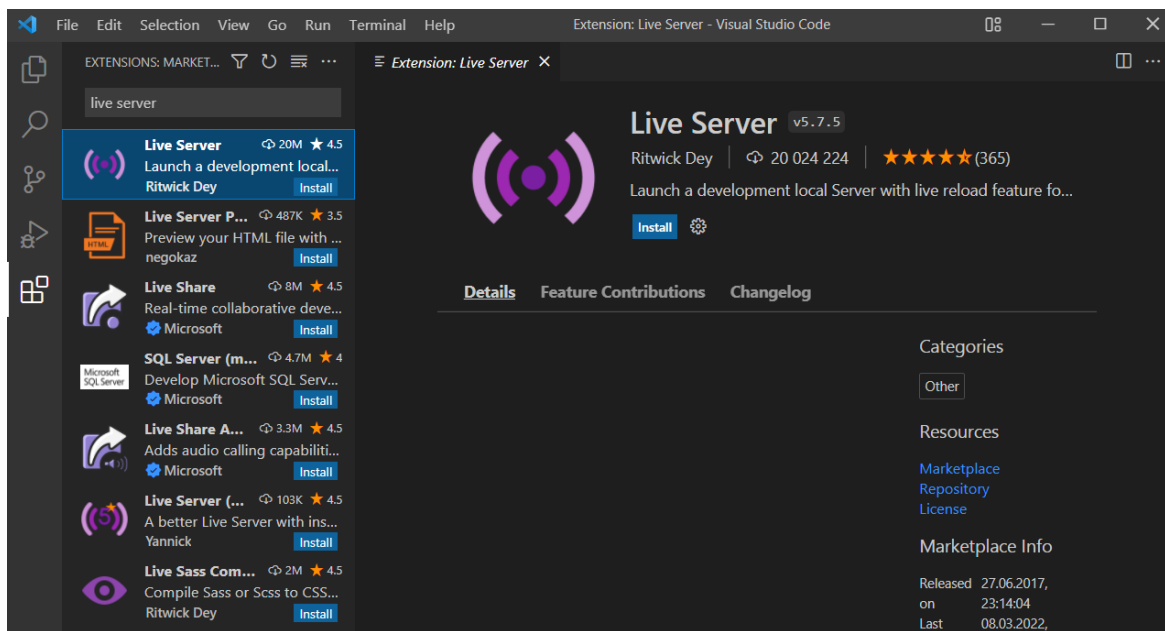
## 1. Code Visual Studio



## 2. Install Prettier Code formatter

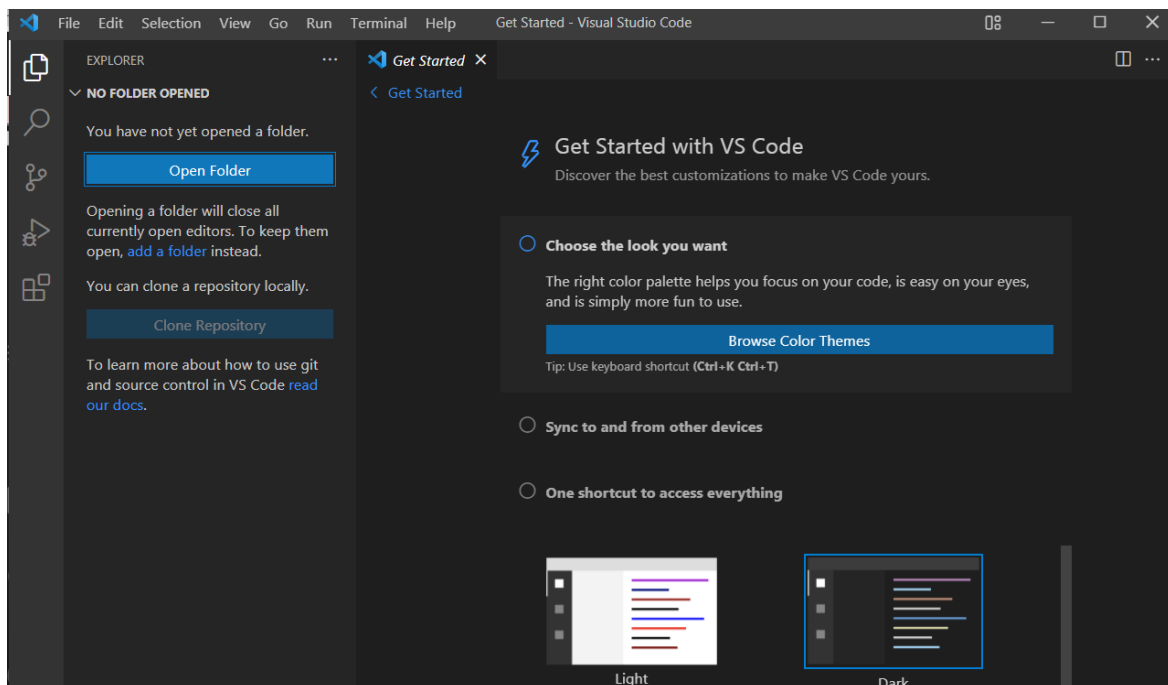


### 3. Install Live Server



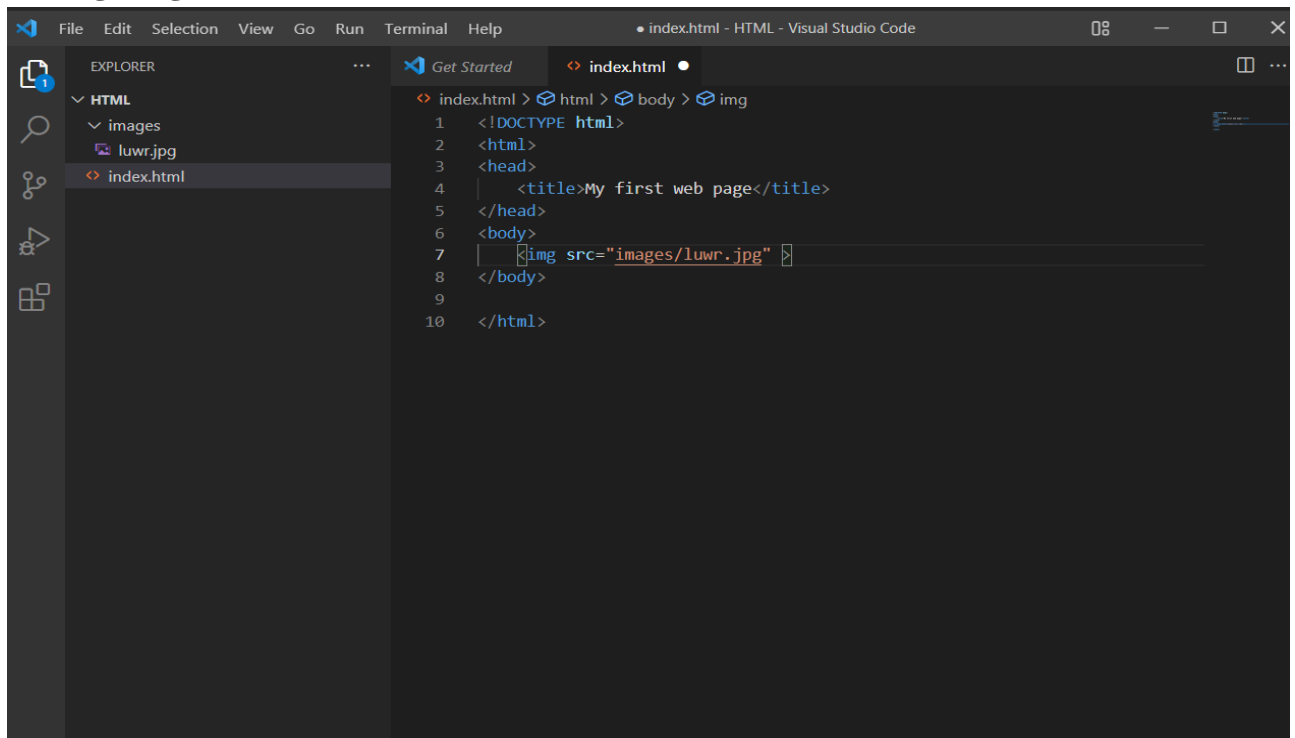
### STEPS:

1. Create an empty HTML folder on your desk - Open Folder – Create a File.

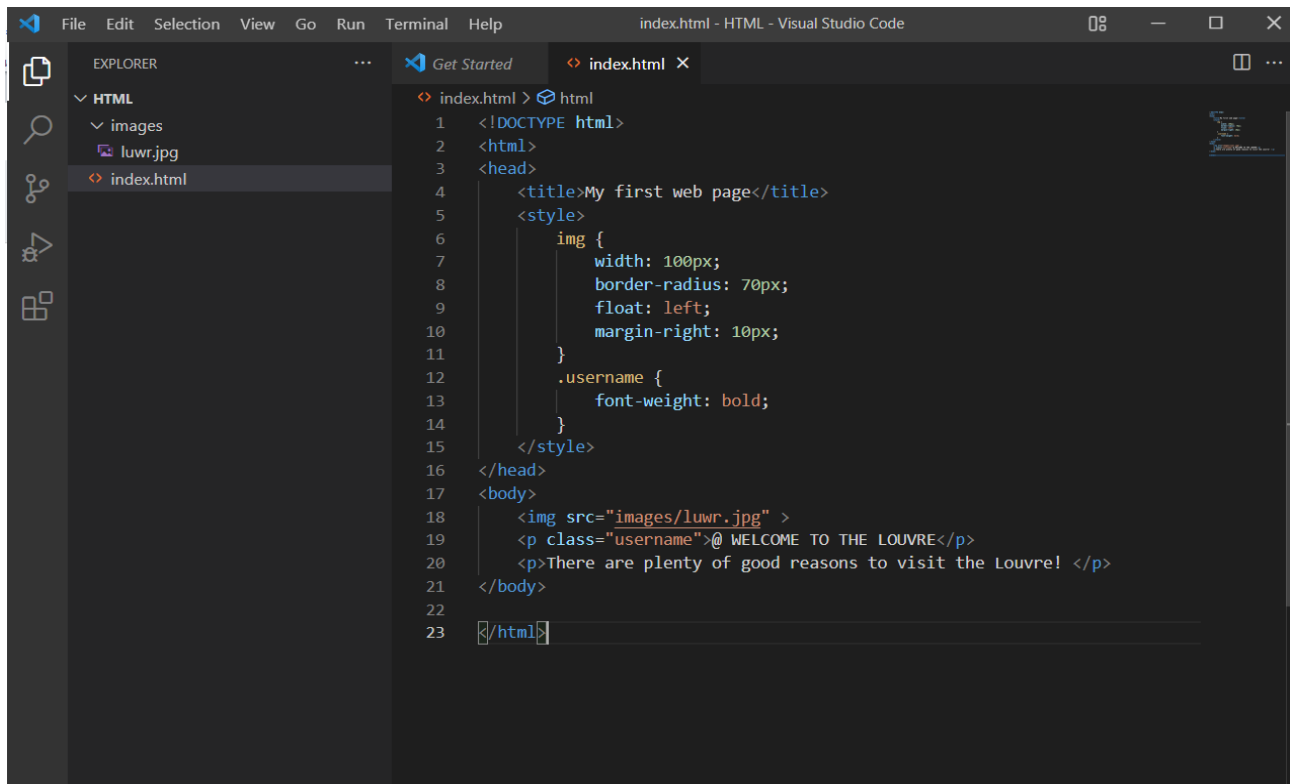


## Example:

### Adding image:

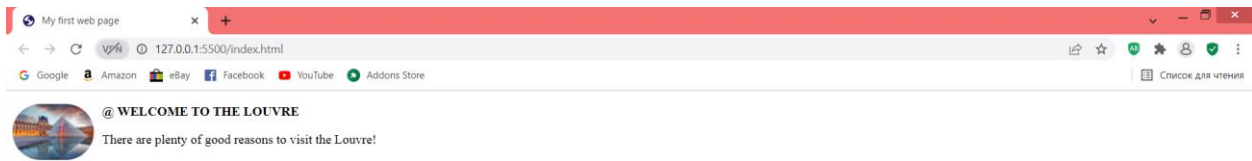


### Adding the User name + correcting the image:

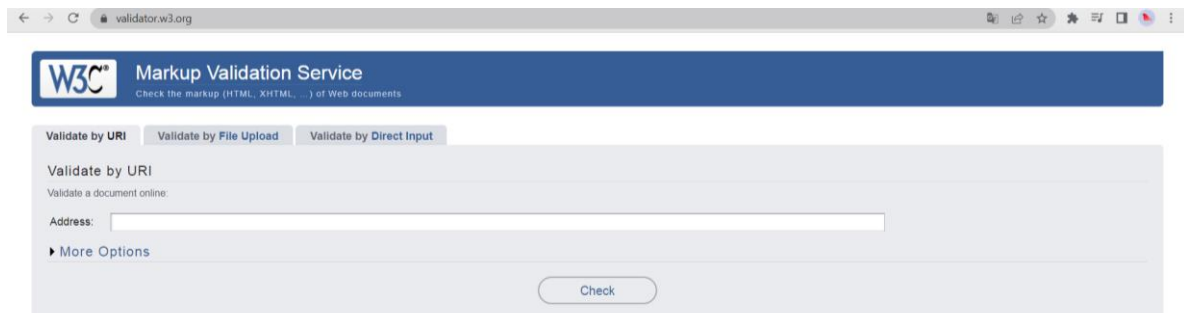




## Live Server work result :



## VALIDATING WEB\_PAGES (HTML)



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](#).



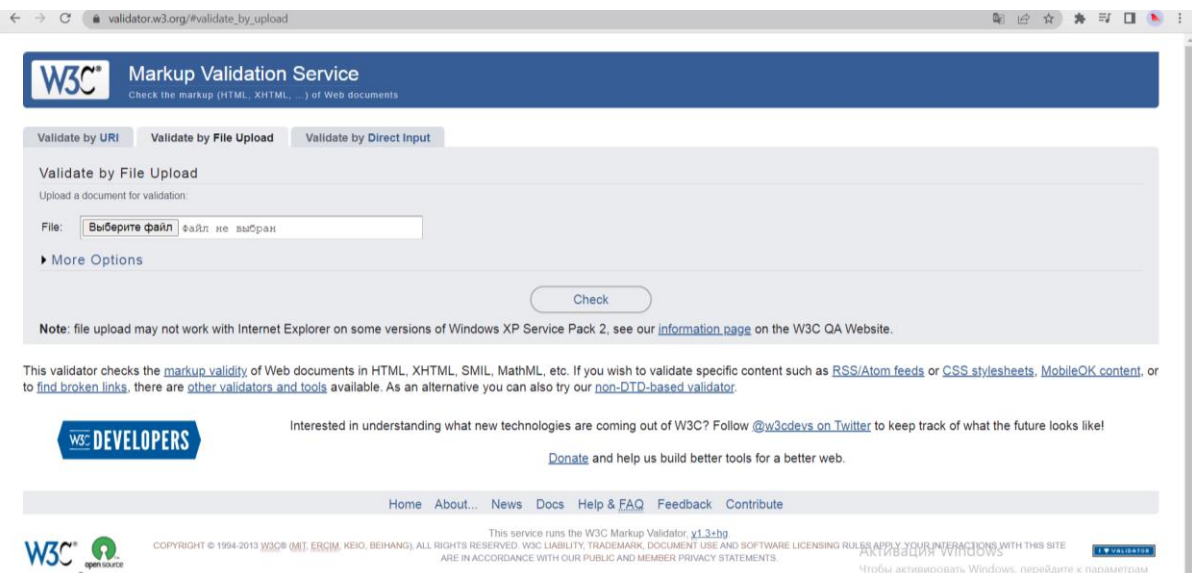
Interested in understanding what new technologies are coming out of W3C? Follow [@w3cdevs on Twitter](#) to keep track of what the future looks like!

[Donate](#) and help us build better tools for a better web.

[Home](#) [About...](#) [News](#) [Docs](#) [Help & FAQ](#) [Feedback](#) [Contribute](#)



COPYRIGHT © 1994-2013 W3C® (MIT, ERCIM, KEIO, BEIHANG). ALL RIGHTS RESERVED. W3C LIABILITY, TRADEMARK, DOCUMENT USE AND SOFTWARE LICENSING RULES APPLY. YOUR INTERACTIONS WITH THIS SITE ARE IN ACCORDANCE WITH OUR PUBLIC AND MEMBER PRIVACY STATEMENTS.



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](#).



Interested in understanding what new technologies are coming out of W3C? Follow [@w3cdevs on Twitter](#) to keep track of what the future looks like!

[Donate](#) and help us build better tools for a better web.

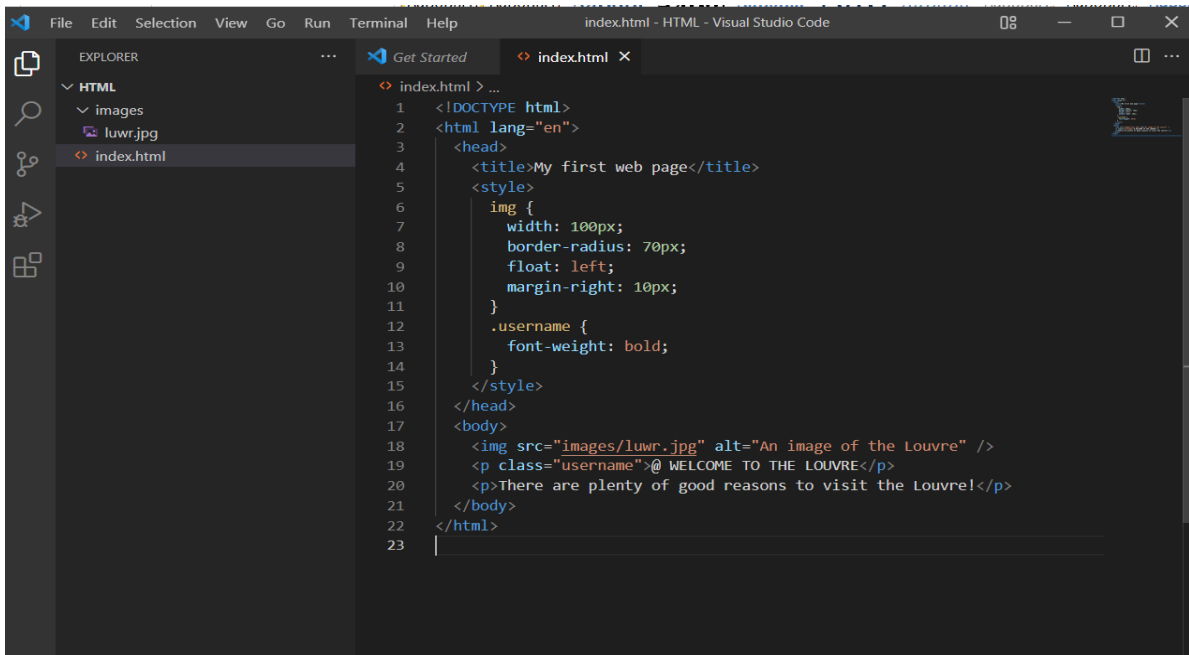
[Home](#) [About...](#) [News](#) [Docs](#) [Help & FAQ](#) [Feedback](#) [Contribute](#)



COPYRIGHT © 1994-2013 W3C® (MIT, ERCIM, KEIO, BEIHANG). ALL RIGHTS RESERVED. W3C LIABILITY, TRADEMARK, DOCUMENT USE AND SOFTWARE LICENSING RULES APPLY. YOUR INTERACTIONS WITH THIS SITE ARE IN ACCORDANCE WITH OUR PUBLIC AND MEMBER PRIVACY STATEMENTS.

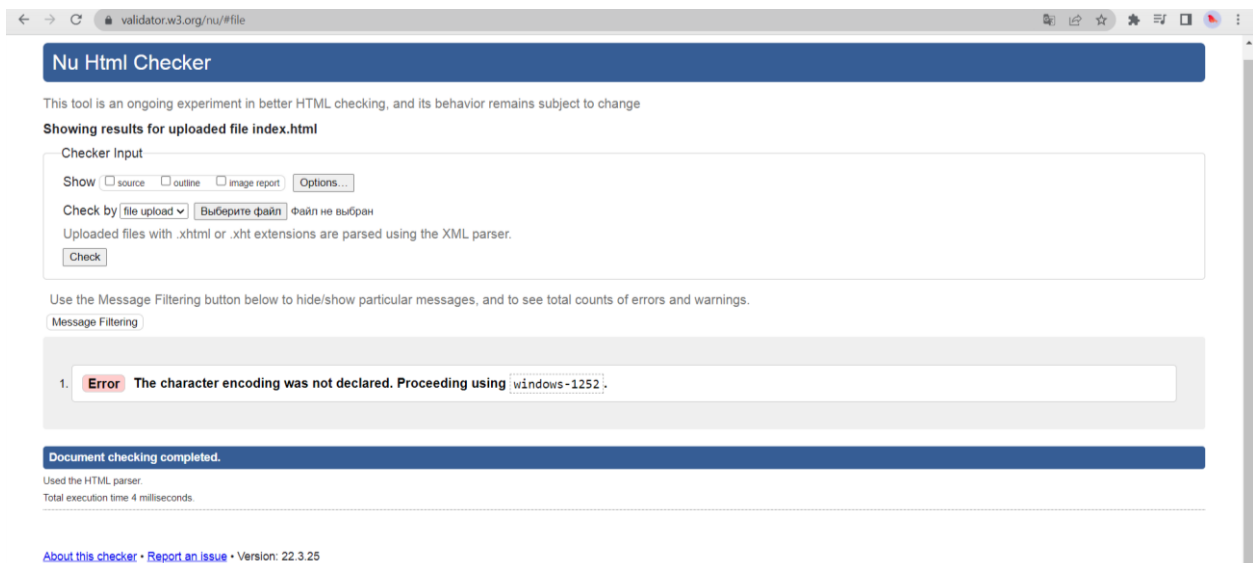


## Fixing the Errors:



```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>My first web page</title>
5     <style>
6       img {
7         width: 100px;
8         border-radius: 70px;
9         float: left;
10        margin-right: 10px;
11      }
12      .username {
13        font-weight: bold;
14      }
15    </style>
16  </head>
17  <body>
18    
19    <p class="username">@ WELCOME TO THE LOUVRE</p>
20    <p>There are plenty of good reasons to visit the Louvre!</p>
21  </body>
22 </html>
23
```

Check one more time:



Nu Html Checker

This tool is an ongoing experiment in better HTML checking, and its behavior remains subject to change

Showing results for uploaded file index.html

Checker Input

Show ☐ source ☐ outline ☐ image report 

Check by

Uploaded files with .xhtml or .xht extensions are parsed using the XML parser.

Use the Message Filtering button below to hide/show particular messages, and to see total counts of errors and warnings.

Message Filtering

1. **Error** The character encoding was not declared. Proceeding using windows-1252.

Document checking completed.

Used the HTML parser.

Total execution time 4 milliseconds.

[About this checker](#) • [Report an issue](#) • Version: 22.3.25

## VALIDATING WEB\_PAGES (CSS)

← → ↻ jigsaw.w3.org/css-validator/#validate\_by\_upload Deutsch English Español Français 한국어 Italiano Nederlands 日本語 Polski Português Русский العربية Svenska Български Українська Čeština Romanian Magyar Ελληνικά 繁體中文

### W3C CSS Validation Service

Проверка каскадных таблиц стилей (CSS) и документов (X)HTML с таблицами стилей

Проверить URI    Проверить загруженный файл    Проверить набранный текст

Проверить загруженный файл

Выберите документ, который вы хотели бы проверить.

Локальный файл CSS:  файл не выбран

► Дополнительные возможности

**W3C DEVELOPERS** Interested in understanding what new technologies are coming out of W3C? Follow [@w3cdevs on Twitter](#) to keep track of what the future looks like!

[Donate](#) and help us build better tools for a better web.

Примечание: Если вы хотите проверить каскадные таблицы стилей, встроенные в документ (X)HTML, вы должны сначала [проверить на корректность сам документ \(X\)HTML](#).

О сервисе    Документация    Скачать    Отзывы    Создатели


---

← → ↻ jigsaw.w3.org/css-validator/validator


**Поздравляем! Ошибок не обнаружено.**

Этот документ проходит проверку по стандарту **CSS3 + SVG** !

Для того, чтобы продемонстрировать посетителям, что вы заботитесь о создании корректных страниц, вы можете разместить этот знак на любой проверенной странице. Вот код XHTML для размещения:




```
<p>
  <a href="http://jigsaw.w3.org/css-validator/check/referer">
    
    </a>
  </p>
```



```
<p>
  <a href="http://jigsaw.w3.org/css-validator/check/referer">
    
    </a>
  </p>
```

(закройте тег img, используя > вместо />, если используете HTML <= 4.01)



Interested in "developing" your developer skills? In W3C's hands-on Professional Certificate Program, learn how to code the right way by creating Web sites and apps that use the latest Web standards. [Find out more!](#)

[Donate](#) and help us build better tools for a better web.

## INDIVIDUAL TASK:

1. Create a WEB page. It should include:
  - Title,
  - Subtitles,
  - Main text,
  - text for subtitles
  - Author information icon.
2. Use color for the background, use google font for the Title and Subtitles.
3. Add 3 pictures to the created WEB page. Locate them appropriately to the web page.
4. Use filters tags (Black and White, Sepia, Blurred) for each of them.
5. For the main Web Page create two WEB subpages.
6. Each of them should include continuation text of your topic with titles, 2 pictures, link for the internet source and return link to the Main Web Page.
7. Use CSS to each page of created WEB page.