"A Bright Mind is Nothing without a Humble Heart"

Grade 9

2nd Quarter

Lessons 1 & 2

"A Bright Mind is Nothing without a Humble Heart"

What is CSS?

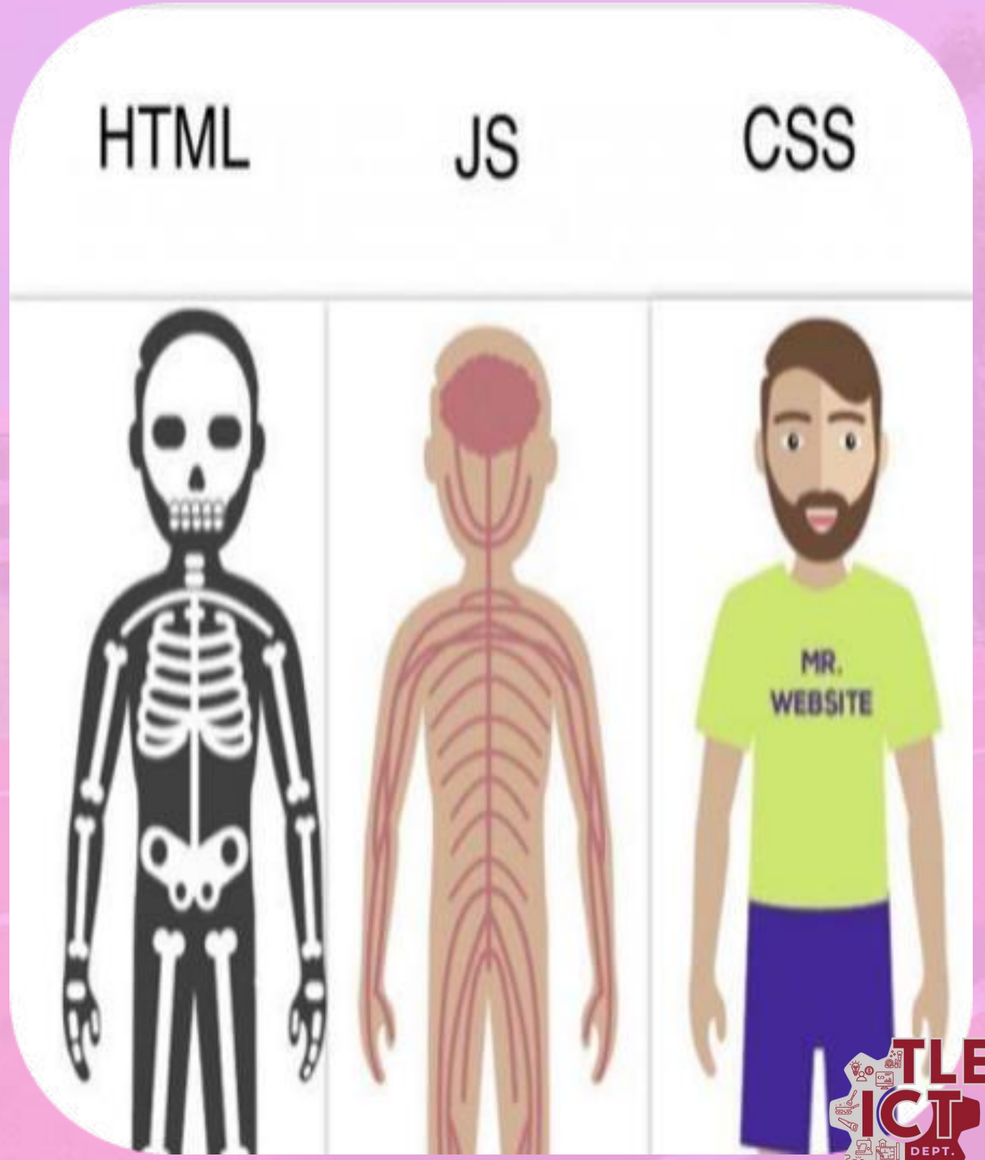
- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media
- CSS saves a lot of work. It can control the layout of multiple web pages all at once
- External stylesheets are stored in CSS files.
- CSS is the language we use to style a Web page.

Why use CSS?

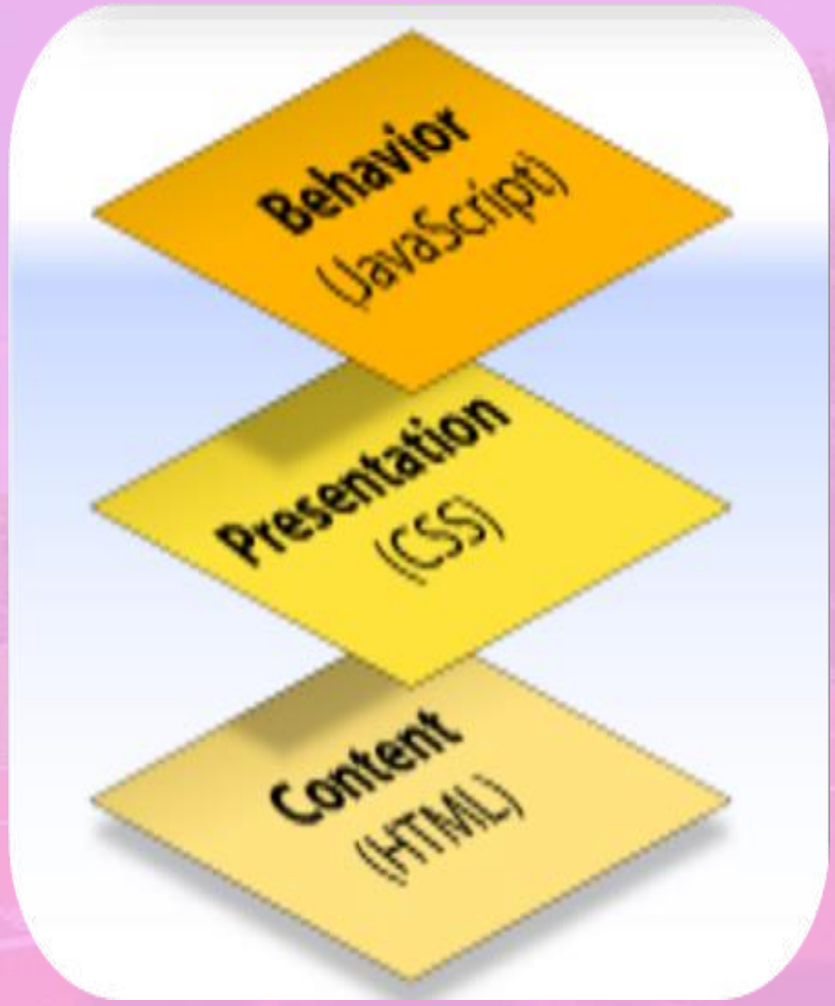
CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.

Layers of a Webpage

Just like how the elements of human body were layered and placed on top of each other – bones, muscles, veins, etc., to become a whole, the web page, is also composed of layers to make it whole.



The following are the layers of a webpage:



3.Behavior Layer

2. Presentation Layer

1.Content Layer

Each layer of the webpage has its specific use or function in the web page. Each plays an important role to be able to attain the goal or objective of a particular website.

Content Layer

The content layer is where you:

- define and layout the text, images, animation, sound, video and everything you want to put in a web page with the use of tags
- is the underlying HTML code of that page. Just as a house's frame creates a strong foundation upon which the rest of the house is built, a solid foundation of HTML creates a platform upon which a website can be created

Content Layer needs to have:

- Text that is easy to understand
- Text that makes sense without a visual representation (wrong example: "click on the links below")
- Alternative text for every image, sound piece or video that is content
- Text that is fit for the web (KISS, structured into headers, paragraphs and lists)

Content Layer needs to have:

- Explanations of Acronyms and Abbreviations
- Content images need to be unambiguous for the colorblind and text in images needs to have a sufficient size and contrast.
- Information to the users of changes necessary to her environment (example: “opens in a new window” or “PDF document, 182kb”)

Presentation Layer

The presentation layer is where you can define how people see your web page in a browser.

Presentation Layer needs to:

- ensure that text can be zoomed without making the site unusable
- ensure that the interactive elements of the site are easy to find
- ensure that images and foreground and background have enough contrast and are unambiguous to the colorblind

Presentation Layer needs to:

- give the site a consistent navigation
- aid the user through business processes
- separate content into easily understandable units

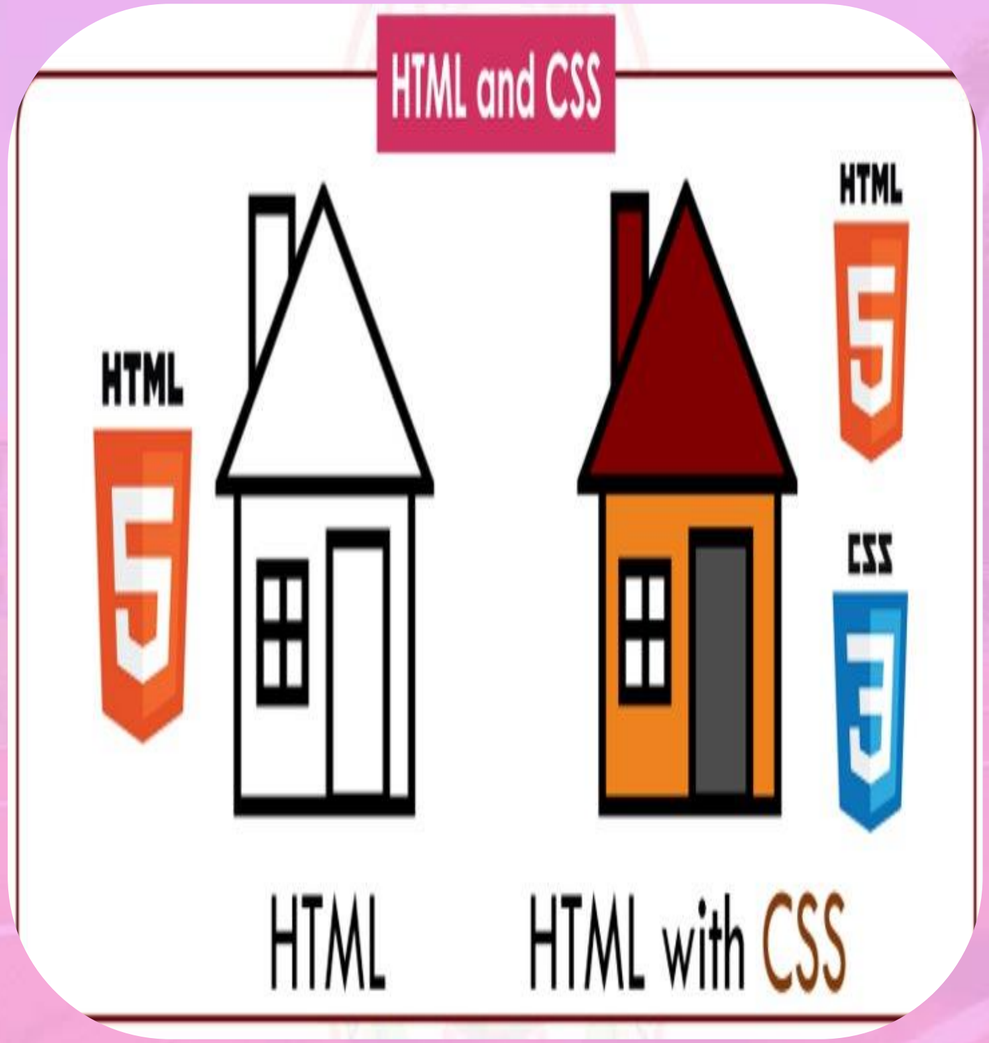
Behavior Layer

The behavior layer is where you have a real-time user interaction with the web page. The interaction may be a simple validation of input or filling out a form or even as big as web-based programs.

Behavior Layer needs to:

- ensure that all the functionality is available to the user regardless of input device
- make the user experience as easy as possible by cutting down on options until they are necessary

In comparison, HTML is used to create the actual content/foundation of the page and CSS is responsible for the design or style of the website, including the layout, visual effects and background color



Benefits of using CSS

CSS saves a lot of work

You do not have to code the CSS repeatedly into an HTML file. You just need to write the CSS code once and then reuse the same stylesheet in multiple HTML pages. This saves coding time and space of your hard disk.

Benefits of using CSS

Easy maintenance

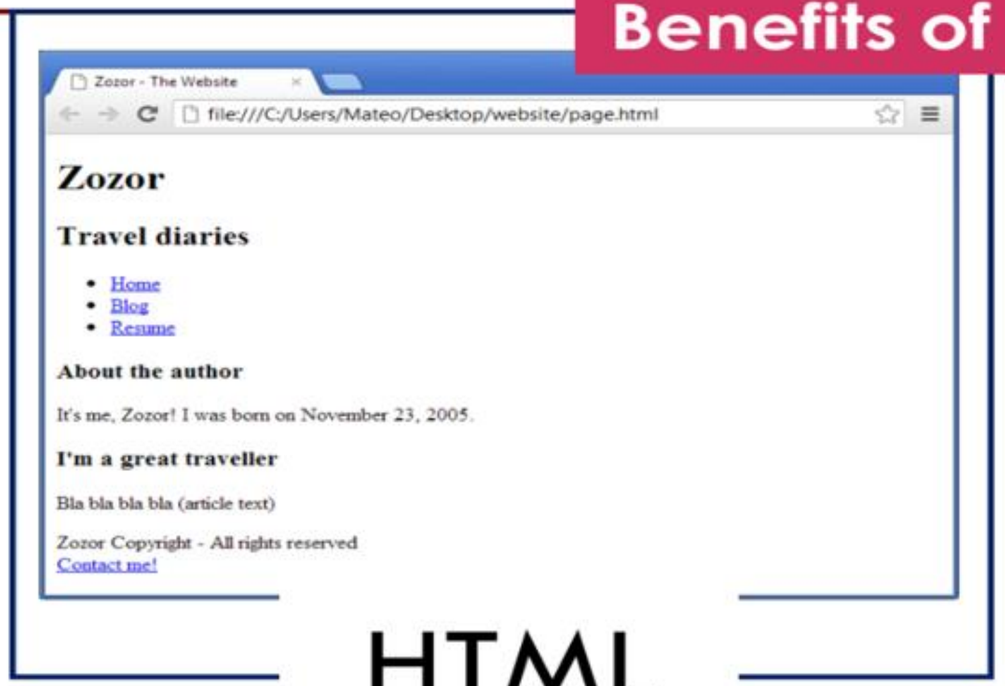
You can control the look and layout of several HTML pages at once.

Benefits of using CSS

Adding style to webpage makes it more pleasing to the eye

Improve the appearance of a website by allowing you to create a much more stylish website since CSS offers a wide array of expressive style capableness.

Benefits of using CSS



You want to have a good impression from your website's visitors? Improve your website by adding CSS to your page. Give your guest a good reason to come back to your site by improving its layout and design.

Capabilities of CSS

1. CSS makes your pages easily updateable. CSS makes it possible to update the layout of the entire page quickly. You can specify a style once and you can apply it as many times in your document.
2. Position objects on the page. CSS gives you control when placing objects on the page exactly where you want them.

Capabilities of CSS

1. Layer objects on the page. CSS allows you to position objects in three dimensions.
2. Create custom tags. CSS allows you to create custom tags to achieve specialized objectives.

Advantages of using CSS

1. Save typing and development time because you have to enter CSS code only once and it can be applied to many HTML scripts.
2. Download faster because your browser will download only one file once.
3. You can also have multiple link tags in one document.

Advantages of using CSS

1. Save typing and development time because you have to enter CSS code only once and it can be applied to many HTML scripts.
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Prerequisites to learning CSS

You should have a basic knowledge and understanding of HTML or XHTML to continue learning CSS.

The Style Sheet and its Parts

- A set of instructions to a Web browser on how to display various elements on a Web page is known as style sheet.
- Every CSS (whether it is contained in a .css file, or embedded in the head element of an HTML document) is a series of instructions called *statements*

The statement does two things:

- It identifies the elements in an HTML document that it affects.
- It tells the browser how to draw these elements.
- Elements are considered to be paragraphs, links, lists items, and so on. In technical terms HTML terms, an element is anything marked up inside HTML tags.

How Do Style Sheet Work?

Style sheets are just text files, or text embedded in the head of an HTML document, that help separate content from appearance. The content of the page goes into an HTML file. And the appearance goes into a style sheet. But how does all this end up as a web page in the reader's browser?

A style sheet suggests the browser to display a page in a particular way, how the pages should be displayed in the browser.

How is CSS applied?

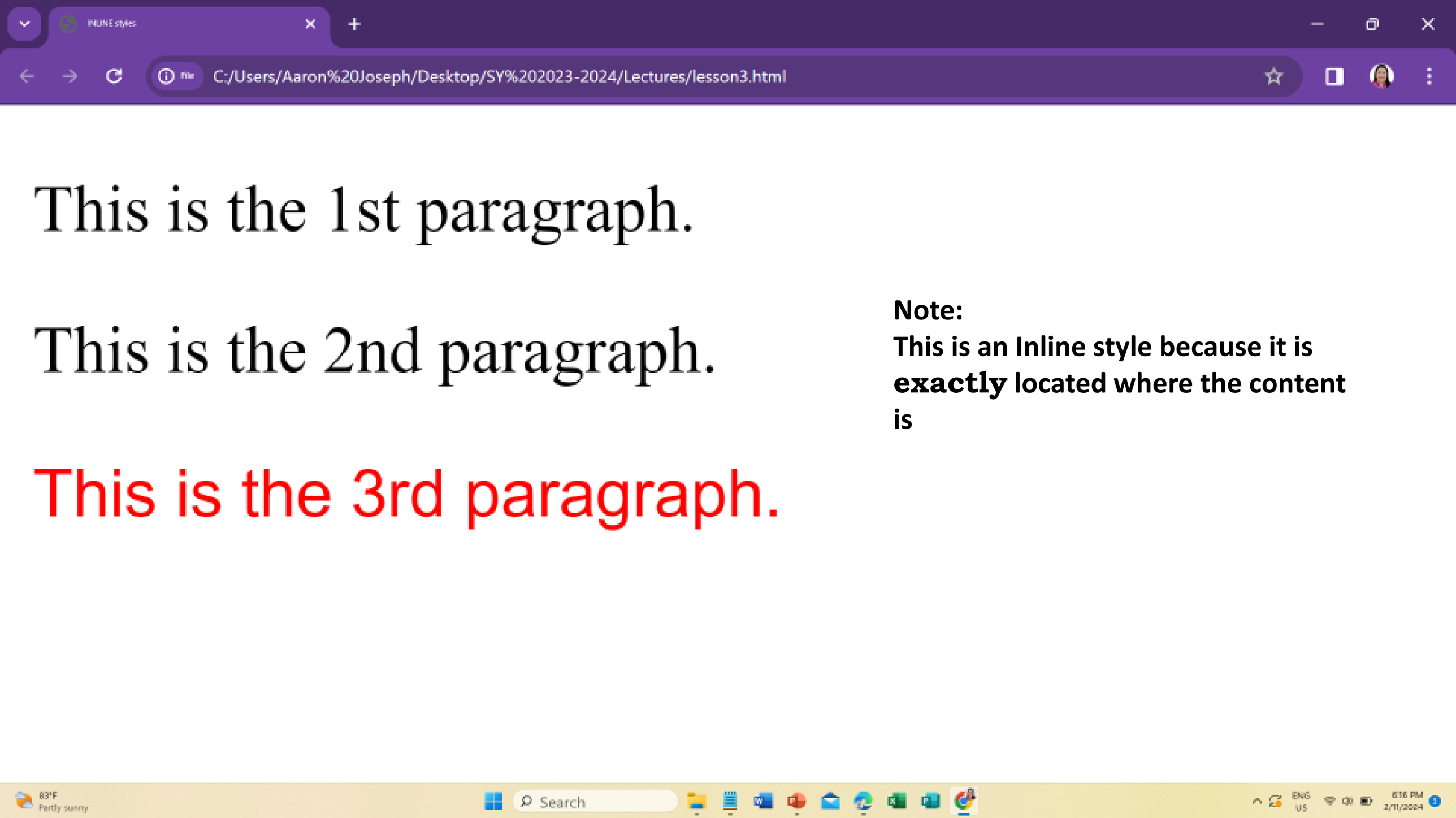
CSS can be applied to HTML or XHTML using three methods: linked, embedded, and inline.

- linked method, the CSS is stored in a separate file, instead of directly in the HTML page
- embedded method, CSS is stored as part of the HTML page, in the header section.
- inline method, CSS is stored directly in the style attributes of the HTML tags

Inline Style

We can define the style for a single element using the *style* attribute. There are various tags that have the *style* attribute and that said line would be its value.

```
<!DOCTYPE html>
<html>
<head>
<title>INLINE styles</title>
</head>
<body>
<p>This is the 1st paragraph.</p>
<p>This is the 2nd paragraph.</p>
<p style="font-family:Arial; color:red;">
This is the 3rd paragraph.
</p>
</body>
</html>
```


INLINE styles
C:/Users/Aaron%20Joseph/Desktop/SY%202023-2024/Lectures/lesson3.html
This is the 1st paragraph.
This is the 2nd paragraph.
This is the 3rd paragraph.
Note:
This is an Inline style because it is exactly located where the content is
83°F
Partly sunny
Search
ENG
US
8:16 PM
2/11/2024

Embedded Style

These are defined by the container tag <style></style> and placed within the head part of the HTML file. It provides style to the WHOLE html file.

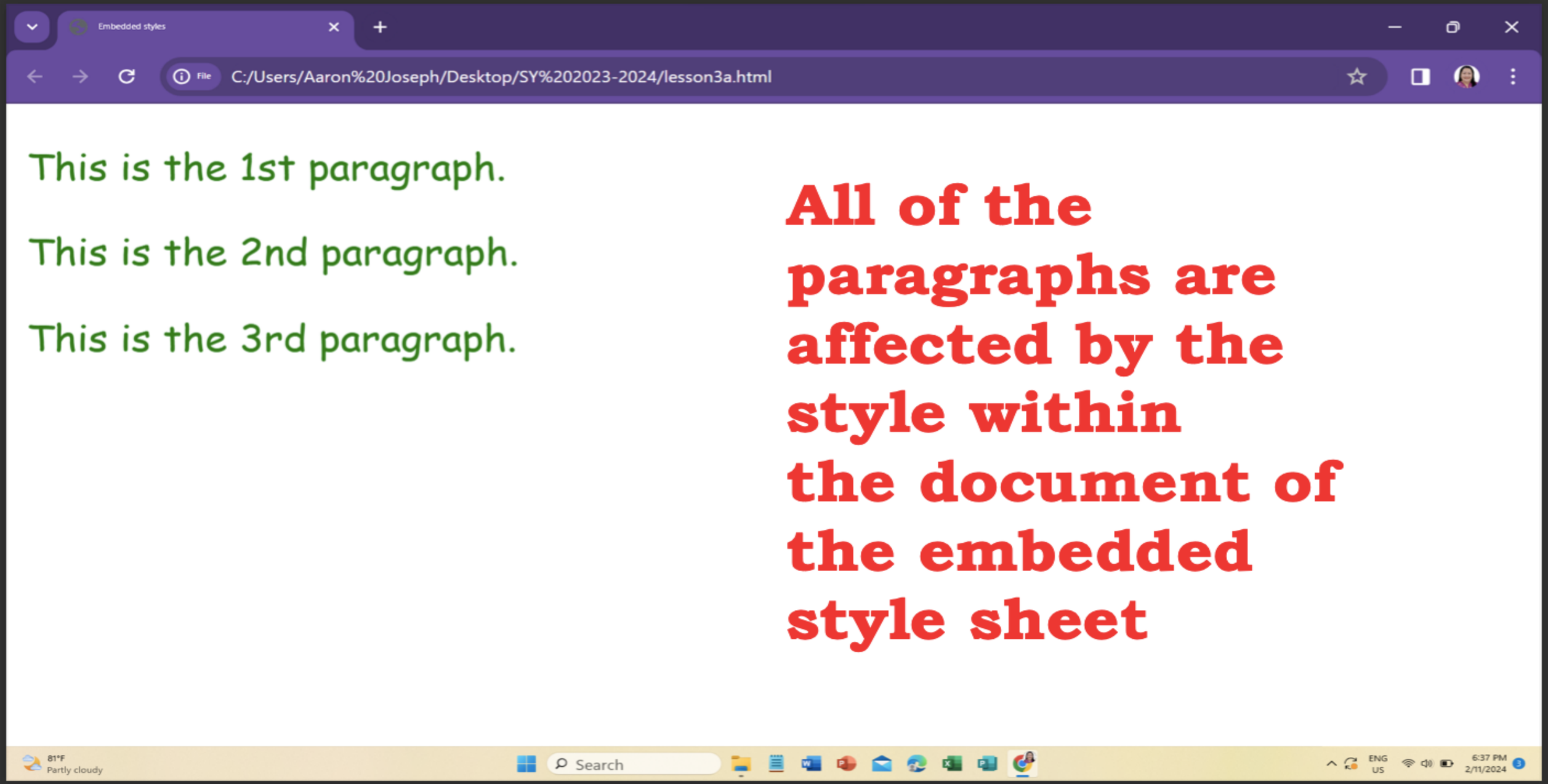
Attribute Table for <style></style>

Attribute Name	Definition	Values
type	Indicates the type of style. Syntax: <style type="text/css>...</style>	text/css

Inline styles are put on the exact tag where the style will be implemented while embedded styles take rather a different approach since it is a document-wide style.

```
<!DOCTYPE html>
<html>
<head>
<title>Embedded styles</title>
<style type="text/css">
    p {font-family:Comic Sans MS; color:green;}
</style>
</head>
<body>
<p>This is the 1st paragraph.</p>
<p>This is the 2nd paragraph.</p>
<p>This is the 3rd paragraph.</p>
</body>
</html>
```

Embedded Style


Embedded styles
File
C:/Users/Aaron%20Joseph/Desktop/SY%202023-2024/lesson3a.html
This is the 1st paragraph.
This is the 2nd paragraph.
This is the 3rd paragraph.
All of the paragraphs are affected by the style within the document of the embedded style sheet
81°F
Partly cloudy
Search
ENG
US
6:37 PM
2/11/2024

Notice that the attributes are encased within curly braces. The open brace has a p (representing , hence, called as selectors) before it, signifying that all attributes within from the open brace (closest to it) up to the next closing brace will be affecting all the paragraphs (or contents encased in in the whole html file.

```
<!DOCTYPE html>
<html>
<head>
<title>Embedded styles</title>
<style type="text/css">
    h1 {color:blue;}
</style>
</head>
<body>
<h1>Cascading Style Sheets</h1>
<p>Embedded style sheets are used when you have a page that you want to present in a different style from the other pages.</p>
</body>
</html>
```

Cascading Style Sheets

Embedded style sheets are used when you have a page that you want to present in a different style from the other pages.

Linked Styles

- made outside the html file
- uses the <link> element, the <link> element allows you to establish document relationships
- the <link> element tells the browser to find the specified style sheet
- it can only be used within the <head></head> section of the document

Linked Styles

- the style sheet file does not contain any HTML code, it contains only style rules; in order for it to take effect, it needs to be linked
- just like html file, it can be written in any text editor then saved with a file extension of .css, remember to change the file type to All Files.

Creating an External CSS file

The following steps will allow you to create and text a basic style sheet. Save your file and test or view your output in a browser.

1. **Open a blank document in Notepad.**
2. **Type the style you want to define.**
3. **On the Menu Bar, click File and click Save.**
4. **Type your filename with a file extension .css and change the file type to all files.**

lesson3c

link

File Edit View

```
p {color:red;}
```

Ln 1, Col | 14 characters

480% | Windows (CRLF) | UTF-8

82°F
Partly cloudy

Search

ENG
US

7:21 PM
2/11/2024

Linking CSS file to HTML file

1. After creating your CSS file, open your HTML file.
2. Type the following inside the HTML file: <link rel="stylesheet" href="linked.css" type="text/css">
3. Save your HTML file.

```
<!DOCTYPE html>
<html>
<head>
<title>External styles</title>
<link rel="stylesheet" href="link.css" type="text/css"/>
</head>
<body>
<p><font size="5">Creative design CSS contains Adobe Photoshop, Illustrator, InDesign and Acrobat.  The book aims to educate the students in creating, designing and editing graphics using the different software that may work relatively.  The book targets both knowledge and applications toward specific output that would basically develop skills towards a career.</font></p>
</body>
</html>
```

```
p {color:white;}
p{background-color:black;}
```

```
<!DOCTYPE html>
<html>
<head>
<title>External styles</title>
<link rel="stylesheet" href="link2.css" type="text/css"/>
</head>
<body>
<p><font size="5">Creative design CSS contains Adobe Photoshop, Illustrator, InDesign and Acrobat.  The book aims to educate the students in creating, designing and editing graphics using the different software that may work relatively.  The book targets both knowledge and applications toward specific output that would basically develop skills towards a career.</font></p>
</body>
</html>
```

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Grouping Selectors

You can group selectors and combine it in one CSS file. Each selector should be separated by a comma. Example code:

```
h1{color:blue;}
p{color:blue;}
p{background-color:black;}
```

This code can be minimized to

```
h1,p{color:blue;}
p{background-color:black;}
```

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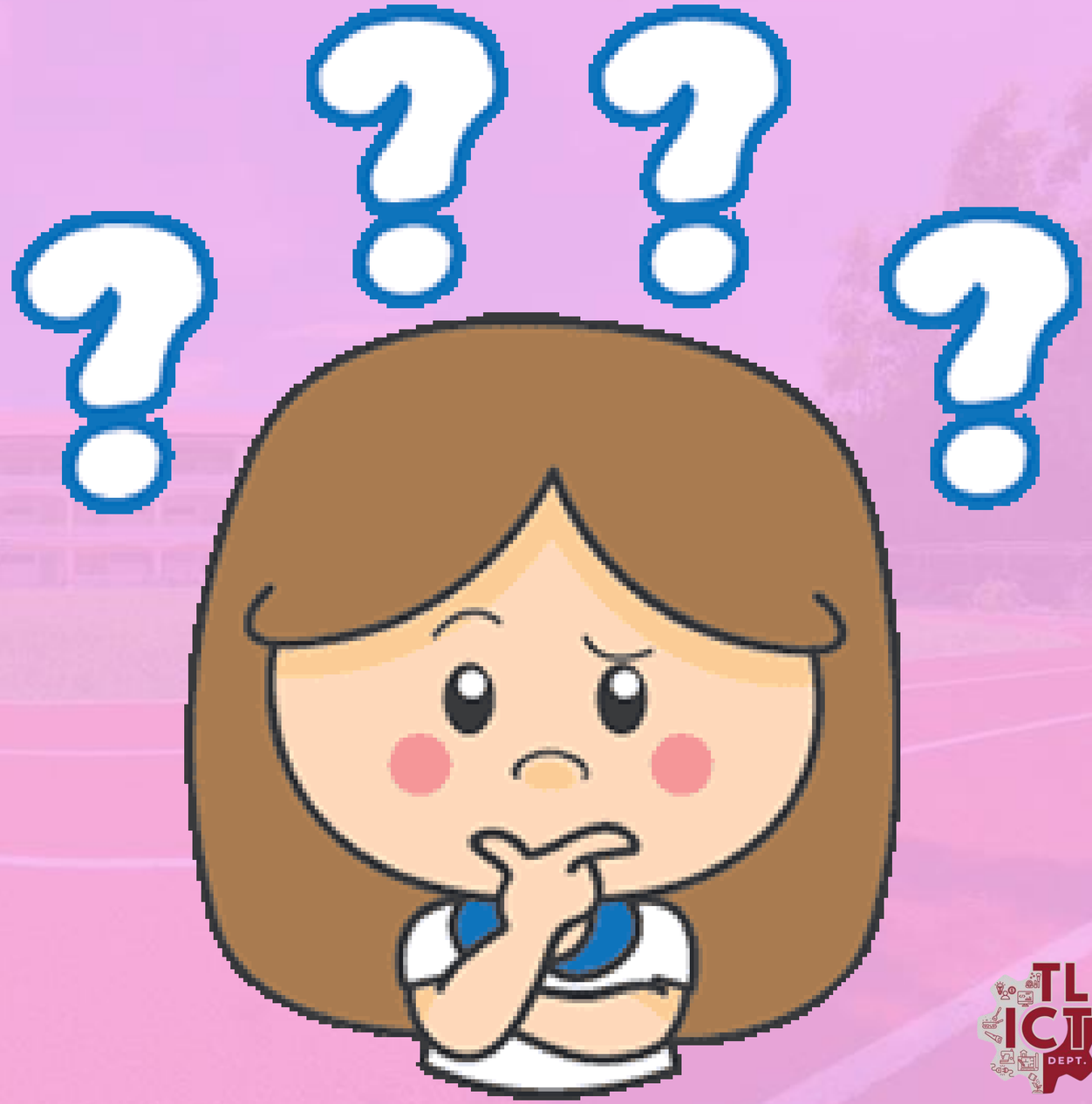
Any Questions?



How can you apply the lesson in your activities as a student? (Practical/actual application)


Lets do this.


Summary