IP-PRACTICAL NO 2

Date of Performance : 16 – 08 – 2022

Software Requirement : Visual Studio Code, NotePad, NotePad++.

Aim : To implement CSS3 .

Objectives : The aim of this experiment is that the students will be able

- To Know the syntax of including CSS into the code.
- To understand different Types of Style sheets & its usage in HTML code

Outcomes : After study of this experiment, the students will be able

- To Apply various styles to HTML Tags .
- To present a web page with better Look & feel for visitors.

Prerequisite : Knowledge of HTML required.

Theory :

What is CSS & its Advantages.

- Cascading Style Sheets, referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable. CSS handles the look and feel part of a web page. Using CSS, you can control the colour of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colours are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects. CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.

Advantages of CSS:

- **CSS saves time:** You can write CSS once and then reuse same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.
- **Pages load faster:** If you are using CSS, you do not need to write HTML tag attributes every time. Just write one CSS rule of a tag and apply it to all the occurrences of that tag. So, less code means faster download times.
- **Easy maintenance:** To make a global change, simply change the style, and all elements in all the web pages will be updated automatically.
- **Superior styles to HTML:** CSS has a much wider array of attributes than HTML, so you can give a far better look to your HTML page in comparison to HTML attributes.

- **Multiple Device Compatibility:** Style sheets allow content to be optimized for more than one type of device. By using the same HTML document, different versions of a website can be presented for handheld devices such as PDAs and cell phones or for printing.
- **Global web standards:** Now HTML attributes are being deprecated and it is being recommended to use CSS. So, it's a good idea to start using CSS in all the HTML pages to make them compatible to future browsers.
- **Platform Independence:** The Script offer consistent platform independence and can support latest browsers as well.

Types of CSS .

- Cascading Style Sheet (CSS) is used to set the style in web pages that contain HTML elements. It sets the background colour, font-size, font-family, colour, … etc. property of elements on a web page.

  There are three types of CSS which are given below:
  - Inline CSS
  - Internal or Embedded CSS
  - External CSS

  Inline CSS: Inline CSS contains the CSS property in the body section attached with element is known as inline CSS. This kind of style is specified within an HTML tag using the style attribute.

  Internal or Embedded CSS: This can be used when a single HTML document must be styled uniquely. The CSS rule set should be within the HTML file in the head section i.e., the CSS is embedded within the HTML file.

  External CSS: External CSS contains separate CSS file which contains only style property with the help of tag attributes (For example class, id, heading, … etc.). CSS property written in a separate file with .css extension and should be linked to the HTML document using link tag. This means that for each element, style can be set only once and that will be applied across web pages.

Pseudo Classes The syntax of

pseudo-classes:

selector:pseudo-class {

property: value;

}

Selector	Example	Description
:active	a:active	Selects the active link
:first-child	p:first-child	Selects every <p> elements that is the first child of its parent
:first-of-type	p:first-of-type	Selects every <p> element that is the first <p> element of its parent
:focus	input:focus	Selects the <input> element that has focus
:hover	a:hover	Selects links on mouse over
:lang(language)	p:lang(it)	Selects every <p> element with a lang attribute value starting with "it"
:link	a:link	Selects all unvisited links
:visited	a:visited	Selects all visited link

Pseudo Elements

The syntax of pseudo-elements:

selector::pseudo-element {

property: value;

}

Selector	Example	Description
::after	p::after	The ::after pseudo-element can be used to insert some content after the content of an element
::before	p::before	The ::before pseudo-element can be used to insert some content before the content of an element
::first-letter	p::first-letter	The ::first-letter pseudoelement is used to add a special style to the first letter of a text
::first-line	p::first-line	The ::first-line pseudoelement is used to add a special style to the first line of a text
::marker	::marker	The ::marker pseudoelement selects the markers of list items
::selection	p::selection	The ::selection pseudoelement matches the portion of an element that is selected by a user

Problem Statement :

Design a web page which includes inline & external Style Sheet by applying

Colour, Background, Fonts, CSS3 selectors, Pseudo classes & Pseudo elements.

Source Code :

IP2.html:

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>CSS</title>
    <style>
        #para1 {
            color:black;
            font-family: 'Helvetica';
        }

        .center {
            text-align: center;
        }

        p.center {
            text-align: center;
            font-family: 'Courier New', Courier, monospace;
            color: black;
        }

        h2,
        h3 {
            font-family: 'Times New Roman', Times, serif;
        }

        p i:first-child {
            color: darkcyan;
        }

        p:first-of-type {
            background:burlywood;
        }

        input:focus {
            background-color: yellow;
        }

        p:lang(fr) {
            background: skyblue;
            font-size: xx-large;
        }
```

```
        a:link {
            color: black;
        }
        a:visited {
 color: navy;
 }
 a:hover {
 color: darkmagenta;
 font-size: x-large;
 }
 a:active {
 color: darkolivegreen;
 }
 img.gif {
 display: none;
 background-color:darksalmon;
 padding: 5px;
 }
 div:hover img.gif {
 display: block;
 }
 p.center::first-letter {
 color:brown;
 font-size: 150%;
 }
 p.center::first-line {
 color:black;
 font-variant: small-caps;
 }
 h2::before {
 content: "~~";
 }
 h2::after {
 content: "~~";
}
 ::marker {
 color:darkviolet;
 font-size: 23px;
 }
 ::selection {
 color: white;
 background: black;
 }
</style>
<link rel="stylesheet" type="text/css" href="IP2.css">
</head>
```

```
<body>
    <p lang="en" style="text-align: center;">Welcome!</p>
    <form style="font-size:medium;">
        Full name: <input type="text" name="name"><br><br>
        Gender: <input type="text" name="gender"><br><br>
        Age: <input type="number" name="age">
    </form>
    <h1 style="color:crimson; text-align: center; font-family:
Georgia;">Cascading Style Sheets</h1>
    <nav>
        <a href="https://www.geeksforgeeks.org/css/">CSS Tutorial -
GeeksForGeeks</a>
    </nav>
    <br>
    <p id="para1">CSS (Cascading Style Sheets) is a stylesheet language used
to design a webpage to make it attractive. The reason for
    using this is to simplify the process of making web pages presentable. It
allows you to apply styles on web pages. More
    importantly, it enables you to do this independent of the HTML that makes
up each web page.<br>
    There are three types of CSS: <br>
    ~Inline: Inline CSS contains the CSS property in the body section attached
with the element known as inline CSS. <br>
    ~Internal or Embedded: The CSS ruleset should be within the HTML file in
the head section i.e the CSS is embedded within
    the HTML file. <br>
    ~External: External CSS contains a separate CSS file that contains only
style property with the help of tag attributes. <br>
    </p>
        <br>
        <h2>Syntax</h2>
        <p>CSS has a simple syntax and uses a number of English keywords to
specify the names
            of various style properties. A style sheet consists of a list of
rules. Each rule or rule-set
            consists of one or more selectors, and a declaration block.</p>
        <p class="center">The CSS specifications are maintained by the World
Wide Web
            Consortium (W3C). Internet media type (MIME type) text/css is
registered for use with CSS
            by RFC 2318 (March 1998).</p>
        <p>W3C operates a free CSS validation service for CSS documents.</p>
        <br>
        <figure class="center">
            <img src="css-logo.png" width="200" height="200">
            <figcaption>The official logo of the latest version, CSS
3</figcaption>
        </figure>
```

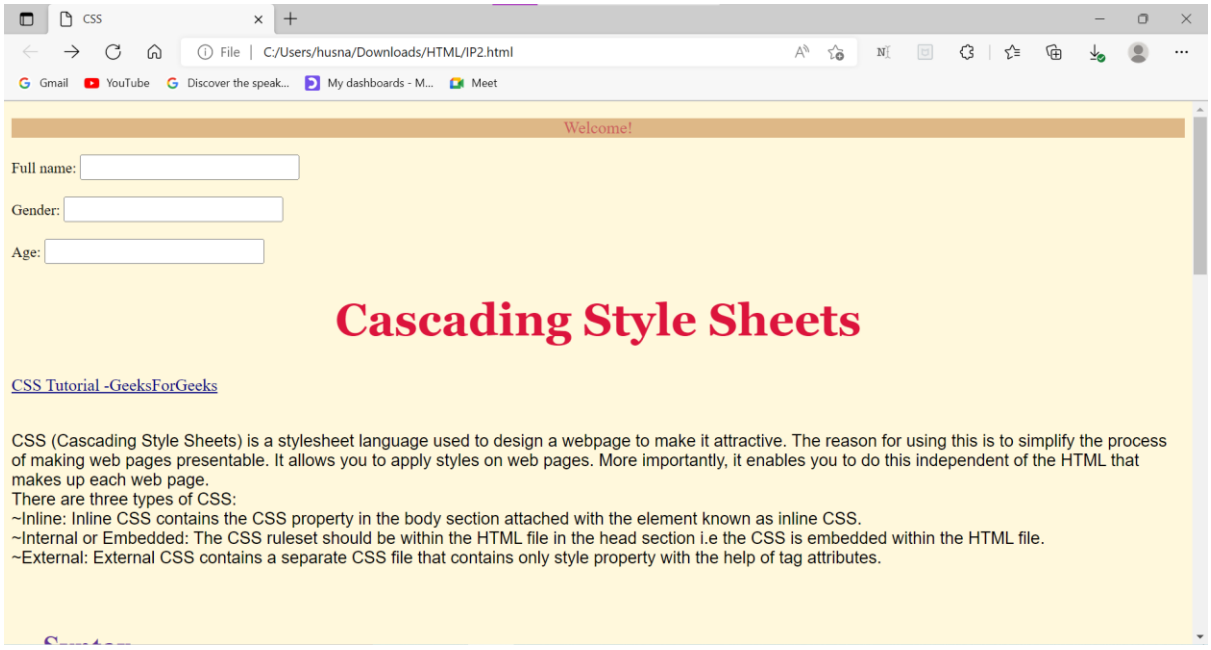
```
        <br>
        <h2>How is CSS different from HTML?</h2>
        <ul>
            <li>HTML is used to define a structure of a web page whereas CSS
is used to style the web pages by using different styling
            features.</li>
            <li>HTML consists of tags inside which text is enclosed and CSS
consists of selectors and declaration blocks.</li>
            <li>CSS can be internal or external depending upon the
requirement.</li>
            <li>We cannot use HTML inside a CSS sheet but we can use CSS
inside an HTML document.</li>
            <li>CSS has comparatively higher backup and support than
HTML.</li>
        </ul>
        <br>
        <h3>Why is CSS used in HTML?</h3>
        <ol>
            <li>Saves a lot of time</li>
            <li>Provide more attributes</li>
            <li>Provide more attributes</li>
            <li>Easier Website maintenance</li>
            <li>Multiple device compatibility</li>
            </ol>
            <br>
            <h2>Why do we learn CSS?</h2>
            <ol>
                <li>Base for web development</li>
                <li>Makes your website look attractive</li>
                <li>Makes the design come live</li>
                <li>Increases user experience of the website</li>
            </ol>
            <br>
            <br>
            <div><b style="font-size: x-large; color:blueviolet;">Hover
here</b>
                <img src="bubble.gif" width="500" height="400" class="gif">
            </div>
            </body>
            </html>
```

IP2.css:

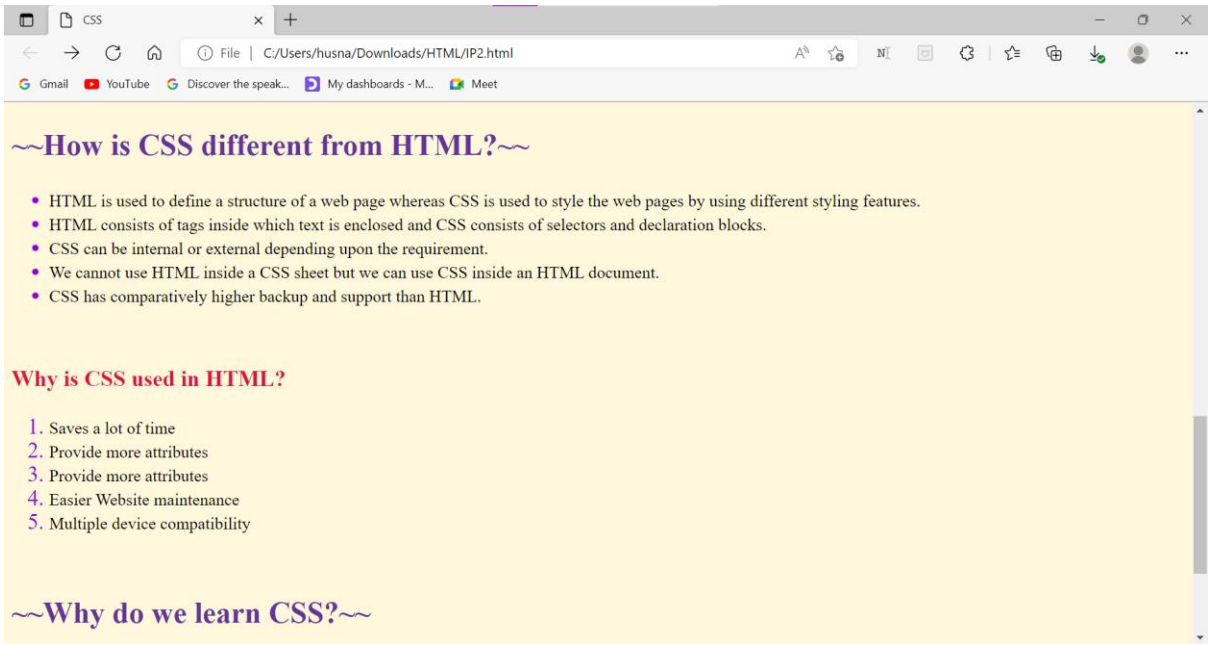
```
body{
        background-color:cornsilk;
        font-size: large;
    }
```

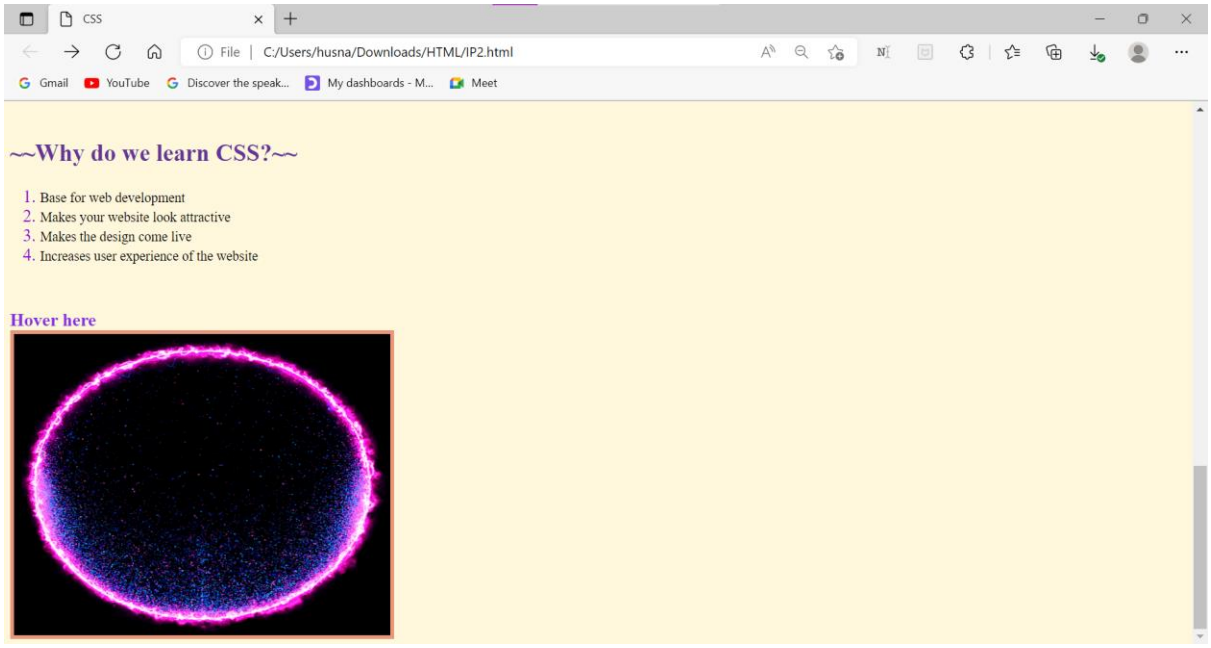
```
h1 {
    font-family: Cambria;
    font-size: xxx-large;
}

h2 {
    color: rebeccapurple;
    font-size: xx-large;
}

h3 {
    color:crimson;
    font-size: x-large;
}

p {
        font-family: Gill Sans;
        color: indianred;
}

input {
    font-size: large;
}
```

Output :




CSS
File | C:/Users/husna/Downloads/HTML/IP2.html
Gmail
YouTube
Discover the speak...
My dashboards - M...
Meet
~~Syntax~~
CSS has a simple syntax and uses a number of English keywords to specify the names of various style properties. A style sheet consists of a list of rules. Each rule or rule-set consists of one or more selectors, and a declaration block.
THE CSS SPECIFICATIONS ARE MAINTAINED BY THE WORLD WIDE WEB CONSORTIUM (W3C). INTERNET MEDIA TYPE (MIME TYPE) TEXT/CSS IS REGISTERED FOR USE WITH CSS by RFC 2318 (March 1998).
W3C operates a free CSS validation service for CSS documents.
The official logo of the latest version, CSS 3


CSS
File | C:/Users/husna/Downloads/HTML/IP2.html
Gmail
YouTube
Discover the speak...
My dashboards - M...
Meet
~~How is CSS different from HTML?~~
HTML is used to define a structure of a web page whereas CSS is used to style the web pages by using different styling features.
HTML consists of tags inside which text is enclosed and CSS consists of selectors and declaration blocks.
CSS can be internal or external depending upon the requirement.
We cannot use HTML inside a CSS sheet but we can use CSS inside an HTML document.
CSS has comparatively higher backup and support than HTML.
Why is CSS used in HTML?
1. Saves a lot of time
2. Provide more attributes
3. Provide more attributes
4. Easier Website maintenance
5. Multiple device compatibility
~~Why do we learn CSS?~~



Conclusion :

From the above experiment, we were introduced to CSS. We implemented CSS3.

We learned the syntax of including CSS into the code. We understood different types of Style sheets & its usage in HTML code. We applied various HTML tags in our code to make a creative webpage.

Performance : (5+2)M	Journal : 3M	Lab Ethics : 3M	Attendance : 3M	Total : 15M	Faculty Sign