

St. Francis Institute of Technology
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Class: TE IT A & B Academic Year: 2023-2024

Experiment – 3

Design of a Webpage for a National Park using HTML/CSS3

- 1. Aim:** To design a webpage for a National Park using HTML/CSS3
- 2. Objective:** After performing the experiment, the students will be able to understand and implement the basic concepts of CSS3 including use of
 - Color, Background, Fonts
 - Tables, Lists,
 - CSS3 selectors
 - Pseudo classes, Pseudo elements
- 3. Lab objective mapped:** Students will be able to *explore* and *illustrate* the use of appropriate CSS tags to format data on webpage (PO3, PO5, PSO3, PSO4)
- 4. Prerequisite:** HTML and CSS3
- 5. Requirements:** The following are the requirements –
 - PC/Laptop
 - Visual Studio Code
 - Browser

6. Pre-Experiment Theory:

CSS stands for Cascading Style Sheets. It is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes. It saves a lot of work as it can control the layout of multiple web pages all at once. The style definitions are normally saved in external .css files. With an external stylesheet file, you can change the look of an entire website by changing just one file!

CSS Syntax –



- 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.

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

Here, all <p> elements will be center-aligned, with a red text color

*CSS Inclusion*ss –

When a browser reads a style sheet, it will format the HTML document according to the information in the style sheet. There are three ways of inserting a style sheet: • External CSS –

- With an external style sheet, you can change the look of an entire website by changing just one file.
- Each HTML page must include a reference to the external style sheet file inside the <link> element, inside the head section.
- External styles are defined within the <link> element, inside the <head> section of an HTML page:

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="mystyle.css">
</head>
<body>
<h1>This is a heading</h1>
<p>This is a paragraph.</p>
</body>
</html>
```

- An external style sheet can be written in any text editor, and must be saved with a .css extension.

```
body {
  background-color: lightblue;
}
h1 {
  color: navy;
  margin-left: 20px;
}
```

- The external .css file should not contain any HTML tags.

• Internal CSS –

- An internal style sheet may be used if one single HTML page has a unique style.
- The internal style is defined inside the <style> element, inside the head section.
- Internal styles are defined within the <style> element, inside the <head> section of an HTML page:

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

```

<head>
<style>
body {
  background-color: linen;
}
h1 {
  color: maroon;
  margin-left: 40px;
}
</style>
</head>
<body>
<h1>This is a heading</h1>
<p>This is a paragraph.</p>
</body>
</html>

```

- Inline CSS –

- An inline style may be used to apply a unique style for a single element.
- To use inline styles, add the style attribute to the relevant element. The style attribute can contain any CSS property.
- Inline styles are defined within the "style" attribute of the relevant element:

```

<!DOCTYPE html>
<html>
<body>
<h1 style="color:blue;text-align:center;">This is a heading</h1>
<p style="color:red;">This is a paragraph.</p>
</body>
</html>

```

- Multiple Style Sheets –

- If some properties have been defined for the same selector (element) in different style sheets, the value from the last read style sheet will be used.

- Cascading Order -

- If there is more than one style specified for an HTML element, all the styles in a page will "cascade" into a new "virtual" style sheet by the following rules, where number one has the highest priority:
 1. Inline style (inside an HTML element)
 2. External and internal style sheets (in the head section)
 3. Browser default

- CSS Comments –

- A CSS comment is placed inside the <style> element, and starts with /* and ends with */

```

/* This is a single-line comment */

```

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

CSS Colors –

Colors are specified using predefined color names, or RGB, HEX, HSL, RGBA, HSLA values. CSS/HTML support 140 standard color names.

- CSS Background Color

```
<h1 style="background-color:DodgerBlue;">Hello World</h1>
<p style="background-color:Tomato;">Welcome...</p>
```

- CSS Text Color

```
<h1 style="color:Tomato;">Hello World</h1>
<p style="color:DodgerBlue;">Welcome..</p>
<p style="color:MediumSeaGreen;">Thankyou..</p>
```

- CSS Border Color

```
<h1 style="border:2px solid Tomato;">Hello World</h1>
<h1 style="border:2px solid DodgerBlue;">Hello World</h1>
<h1 style="border:2px solid Violet;">Hello World</h1>
```

CSS Backgrounds –

The CSS background properties are used to add background effects for elements. • CSS Background Color

```
<h1 style="background-color:pink;">
```

7. Laboratory Exercise:

A. Procedure

Write HTML and CSS (if external file is used) code on Visual Studio Code

For each, Select File, New to write to a new file

Save the file as .html and .css respectively

Write code on Visual Studio Code

Make sure to save both file in the same folder.

To view the output, right-click on the file and select Open With option. Then choose any web browser that is available.

Check output

B. Program Code

Write and execute an HTML and CSS3 code to design a webpage for a National Park as per the given details.



The following features are expected to be used -

- Color, Background, Fonts
- Tables, Lists,
- CSS3 selectors
- Pseudo classes, Pseudo elements

8. Post Experimental Exercise

Google Form Quiz Link –

TEITA:

https://docs.google.com/forms/d/e/1FAIpQLScZIk2OhdagR1owRyCVjQvPzAEFAtZlwvczKk4EKHGPrWkg_Q/viewform?usp=sf_link

TEITB:

https://docs.google.com/forms/d/e/1FAIpQLScvB1golmWn29I5eXGu_DfFAO869CJ5xx34LBFLSBB0YUDRyA/viewform?usp=sf_link

9. Results/Observations/Program output:

Present the program code and output

10. Conclusion:

Write what was performed in the experiment

Write which all features of HTML and CSS you used to perform the experiment.

11. References:

- HTML 5 Black Book (Covers CSS3, JavaScript, XML, XHTML, AJAX, PHP, jQuery)
2Ed., DT Editorial Services
- <https://www.w3schools.com/css/default.asp>
- <https://www.youtube.com/watch?v=1Rs2ND1ryYc>

CODE:

```
<html>

<head>
  <style type="text/css">
    .head{
      display: flex;
      justify-content: space-around;
    }
    .Name{
      color: red;
      background-color: lightgrey;
      width: 900px;
      border: 15px solid #5B9BD5;
      padding: 5px;
      margin: 10px;
      height: 50px;
      /* margin-top: 10%; */
      text-align: center;
      background-position: center;
    }
    .About{
      background-color: #C5E0B4;
      text-align: center;
      padding: 10px;
    }
    .one, .two, .three, .four, .five{
      border: 2px solid #F8CBAD;
      background-color: #F8CBAD;
      margin: 20px;
      padding: 08px;
      height: 400px;
      width: 100px;
      text-align: center;
    }
    .image-section {
      display: flex;
    }
    .image-container {
      display: flex;
      flex-direction: column;
      gap: 20px;
      max-width: 900px;
    }
  </style>
</head>

<body>
  <div class="head">
    <div class="Name">
      <h1>
        </div>
    </div>
  </div>
  <div class="About">
    <h2>
      </div>
  </div>
  <div class="image-section">
    <div class="image-container">
      <img alt="Image 1" />
      <img alt="Image 2" />
      <img alt="Image 3" />
      <img alt="Image 4" />
      <img alt="Image 5" />
    </div>
  </div>
</body>
</html>
```

```

        height: 700px;
        background-color: #B4C7E7;
        justify-content: center;
        align-items: center;
    }
    .section2 {
        display: inline;
        width: 1120px;
        height: 700px;
        background-color: rgb(6, 85, 55);
    }
    .exp{
        background-color: #ffff;
        height: 40px;
        width: 600px;
        font-size: 25px;
        text-align: center;
        margin-left: 250px;
    }
    .section img {
        height: 250px;
    }
    .head img{
        padding: 20px;
        height: 100px;
    }
    .slogan{
        background-color: #F8CBAD;
        text-align: left;
        padding: 10px;
    }
    .section2 .image{
        width: 100px;
        height: 50px;
    }
    .imgs{
        display: grid;
        grid-template-columns: auto auto auto;
        align-items: center;
        justify-content: center;
        gap: 40px;
        margin-top: 60px;
    }
    #im:hover{
        border: 2px solid #F8CBAD;
        height: 180px;
        width: 310px;
    }
    .visit{
        margin-left: 150px;
        margin-top: 50px;
        background-color: #E2F0D9;
        height: 40px;
        width: 600px;
    }
    .links{

```

```

        margin-top: 50px;
        margin-left: 150px;
        background-color: #E2F0D9;
        height: 40px;
        width: 600px;
    }

</style>
</head>

<body style="background-color:#B4C7E7">
    <div class="head" >
        <div class="img">
            

        </div>
        <div class="Name">
            <h1 class="heading">SGNP - Sanjay Gandhi National Park</h1>
        </div></div>

        <div class="Slogan">
            <h2>"Travel - Its a thing that you buy and it makes you
richer"</h2>

        </div>
        <div class="About">
            <h2>About Us:</h2>
            <p>Sanjay Gandhi National Park, also known as SGNP, is an 87 km2
(34 sq mi) protected area in Mumbai, Maharashtra. It was established in 1969
with its headquarters situated at Borivali.</p>
        </div>
        <div class="image-section">
            <div class="image-container">
                <div class="one" border="2px solid blue">
                    <a href="https://sgnp.maharashtra.gov.in/1215/History-of-
SGNP">History</a>
                </div>
                <br><br>
                <div class="two">
                    <a
href="https://sgnp.mahaonline.gov.in/agreement/agreement.aspx?serviceid=2139?M
enuID=1125">Online Booking</a>
                </div>
                <br><br>
                <div class="three">
                    <a
href="https://sgnp.maharashtra.gov.in/1115/Photo">Gallery</a>
                </div>
                <br> <br>
                <div class="four">
                    <a href="https://sgnp.maharashtra.gov.in/1222/Dos-and-
Donts">Do's Don't</a>
                </div>
                <br> <br>
                <div class="five">
                    <a href="https://sgnp.maharashtra.gov.in/1114/Contact -
Us">Contact us</a>
                </div>
            </div>
        </div>
    </div>
</body>
</html>

```



```

</div>
<div class="Section2" style="background-color:#B4C7E7">
  <div class="exp">Come and Experience</div>
  <div class="imgs">
    
    
    
    
    
    
  </div>
  <div class="visit">Feedback from Visitors: </div>
  <div class="links">Important Link for visitors: <a
href="https://en.wikipedia.org/wiki/Sanjay_Gandhi_National_Park#:~:text=This%2
0park%20is%20home%20to,and%2040%20species%20of%20mammals.">For more info click
here</a> </div>
  </div>
</div>
</div>
</body>

</html>
Output:

```



