

WT Assignment – 2

Q1: What does CSS stand for? Name three types of CSS. List three common properties used in CSS for styling text.

Sol: CSS stands for **Cascading Style Sheets**.

Three types of CSS are:

1. **Inline CSS:** Styles applied directly within HTML elements using the style attribute.
2. **Internal CSS:** Styles defined within a <style> tag in the <head> section of an HTML document.
3. **External CSS:** Styles defined in a separate CSS file linked to the HTML document using the <link> tag.

Three common properties used in CSS for styling text are:

1. **font-family:** Specifies the font of the text.
2. **font-size:** Sets the size of the text.
3. **Color:** Defines the color of the text.

Q2: Explain the difference between internal, external, and inline CSS.

Sol:

Internal CSS: CSS rules are placed within the <style> tag in the <head> section of an HTML document. It applies to that single HTML page only.

External CSS: CSS rules are defined in a separate css file and linked to the HTML document using the <link> tag this allows for the same css file to be used across multiple pages.

Inline CSS: CSS rules are applied directly to an element of HTML using the style attribute. It affects only that particular element.

Q3: How does the position: absolute differ from position: relative?

Sol:

Absolute: Positions an element relative to the nearest positioned ancestor if there's no such ancestor, it positions itself relative to the document body.

Relative: Positions an element relative to its original position in the document flow. It allows shifting an element without removing it from the normal flow.

Q4: Describe the difference between id and class selectors in CSS.

Sol:

ID Selector: Uses # followed by the Id name. Each Id should be unique within an HTML document, meaning it's used for one specific element.

Class Selector: Uses . followed by the class name. Classes can be applied to multiple elements, allowing for reusable styling.

Q5: Use CSS to create a hover effect that changes the text color of a button when a user hovers over it.

Sol:

HTML Code:

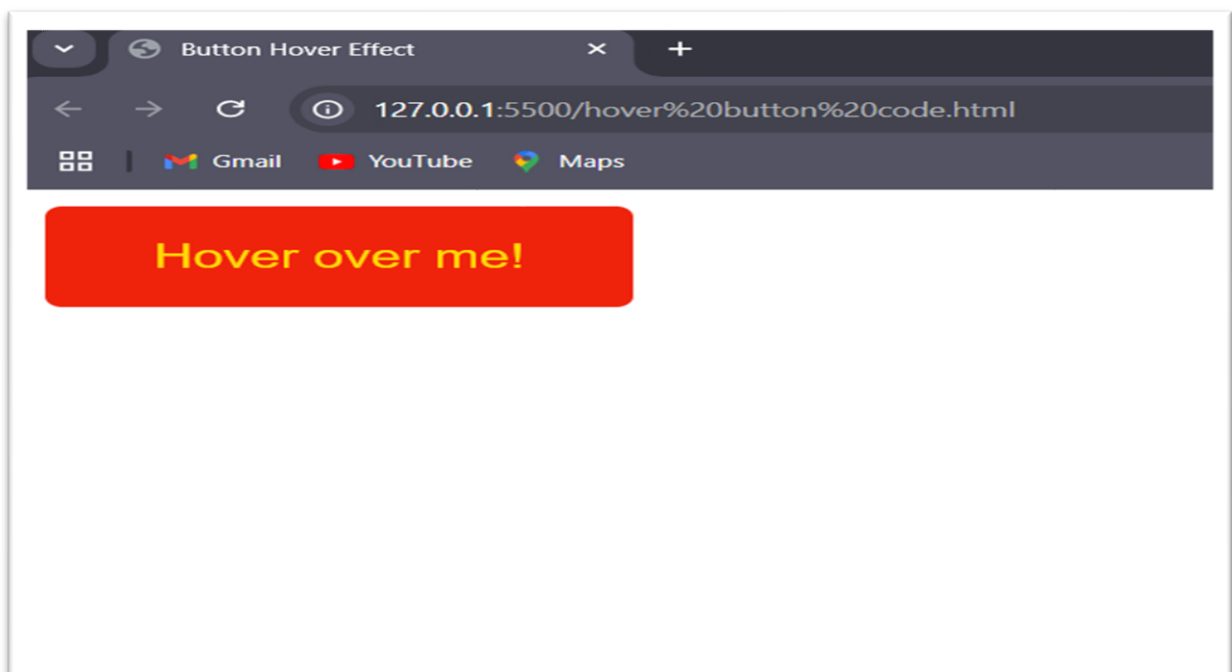
```
<html>
<head>
  <title>Button Hover Effect</title>
  <link rel="stylesheet" href="hover.css">
</head>
<body>
  <button class="hover-button">Hover over me!</button>
</body>
</html>
```

CSS Code:

```
.hover-button {  
    background-color: #ed1d06;  
    color: white;  
    padding: 15px 32px;  
    border: none;  
    border-radius: 5px;  
    cursor: pointer;  
    font-size: 16px;  
    transition: color 0.3s;  
}
```

```
.hover-button:hover {  
    color: #FFD700;  
}
```

Output:



Q6: Style a form using CSS so that the input fields have a specific width, border color, and padding.

Sol: ***HTML code:***

```
<html>
<head>
  <title>Styled Form</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 20px;
    }

    form {
      max-width: 400px;
      margin: 0 auto;
    }

    input[type="text"],
    input[type="email"],
    input[type="password"] {
      width: 100%;
      border: 2px solid #3498db;
      padding: 10px;
      margin-bottom: 15px;
      box-sizing: border-box;
      border-radius: 4px;
      font-size: 16px;
    }

    button {
      background-color: #3498db;
      color: white;
      border: none;
      padding: 10px 15px;
      cursor: pointer;
      border-radius: 4px;
      font-size: 16px;
    }

    button:hover {
      background-color: #2980b9;
    }
  </style>
</head>
<body>

  <form>
```

```
<label for="name">Name:</label>
<input type="text" id="name" name="name" required>

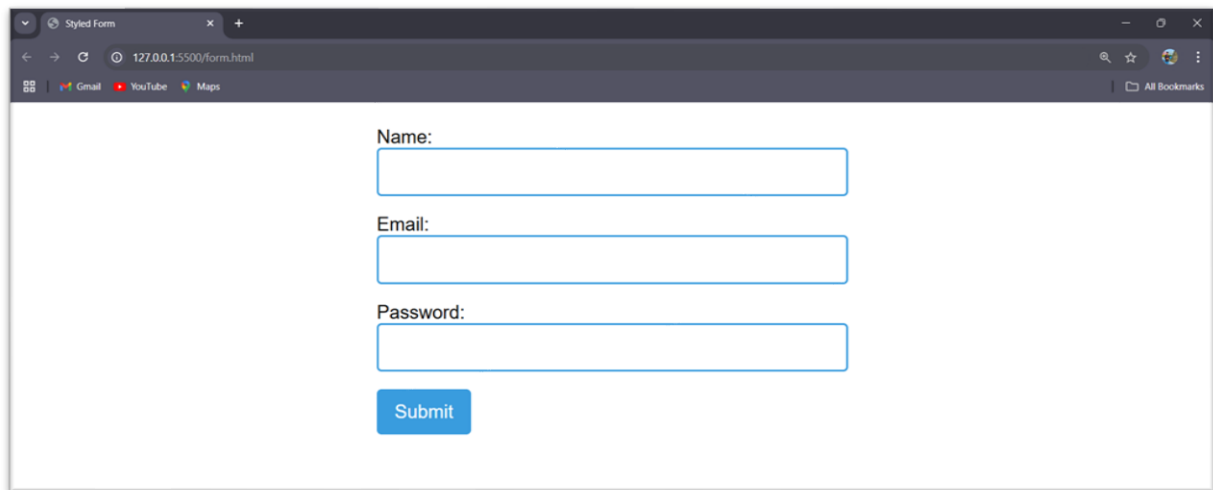
<label for="email">Email:</label>
<input type="email" id="email" name="email" required>

<label for="password">Password:</label>
<input type="password" id="password" name="password" required>

<button type="submit">Submit</button>
</form>

</body>
</html>
```

Output:

A screenshot of a web browser window titled "Styled Form". The address bar shows the URL "127.0.0.1:5500/form.html". The browser's bookmark bar includes links to Gmail, YouTube, and Maps. The form itself is centered on a white background and consists of three vertically stacked input fields. Each field is preceded by a label: "Name:", "Email:", and "Password:". The input fields have a light blue border. Below the input fields is a blue button with the text "Submit" in white.

Q7: Break down the structure of a CSS rule and explain each part of it.

Sol:

```
selector {
    property : value;
}
```

Selector: targets the HTML elements to apply the style.

Property: specifies the styling attribute (eg; color, font-size)

Value: Assign a value to the property (eg; red 20px).

Q8: Construct a CSS stylesheet for a form that uses advanced selectors, pseudo-classes, and media queries.

Sol: ***HTML Code:***

```
<html>
<head>
  <title>Contact Form</title>
  <link rel="stylesheet" href="project.css">
</head>
<body>
  <div class="form-container">
    <h2>Contact Us</h2>
    <form>
      <div class="form-group">
        <label for="name">Name:</label>
        <input type="text" id="name" name="name" required placeholder="Enter your name">
      </div>
      <div class="form-group">
        <label for="email">Email:</label>
        <input type="email" id="email" name="email" required placeholder="Enter your email">
      </div>
      <div class="form-group">
        <label for="message">Message:</label>
        <textarea id="message" name="message" rows="4" required placeholder="Enter your
message"></textarea>
      </div>
      <button type="submit">Send Message</button>
    </form>
  </div>
</body>
</html>
```

CSS Code:

```
* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}

body {
  font-family: Arial, sans-serif;
  background-color: #f4f4f4;
  color: #333;
  line-height: 1.6;
}

.form-container {
  max-width: 500px;
  margin: 50px auto;
  padding: 20px;
  background-color: #fff;
  border-radius: 8px;
  box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);
}

h2 {
  text-align: center;
  margin-bottom: 20px;
  color: #007BFF;
}

.form-group {
  margin-bottom: 20px;
}

label {
  display: block;
  margin-bottom: 5px;
  font-weight: bold;
}

input[type="text"],
input[type="email"],
textarea {
  width: 100%;
  padding: 10px;
  border: 1px solid #ddd;
  border-radius: 4px;
  font-size: 16px;
  transition: border-color 0.3s, box-shadow 0.3s;
}

input[type="text"]:focus,
input[type="email"]:focus,
textarea:focus {
  border-color: #007BFF;
```

```
    box-shadow: 0 0 5px rgba(0, 123, 255, 0.5);
    outline: none;
}

input:not(:placeholder-shown):valid {
    border-color: #28a745;
}

input:not(:placeholder-shown):invalid {
    border-color: #dc3545;
}

button {
    display: block;
    width: 100%;
    padding: 10px;
    background-color: #007bff;
    color: #fff;
    border: none;
    border-radius: 4px;
    font-size: 16px;
    cursor: pointer;
    transition: background-color 0.3s;
}

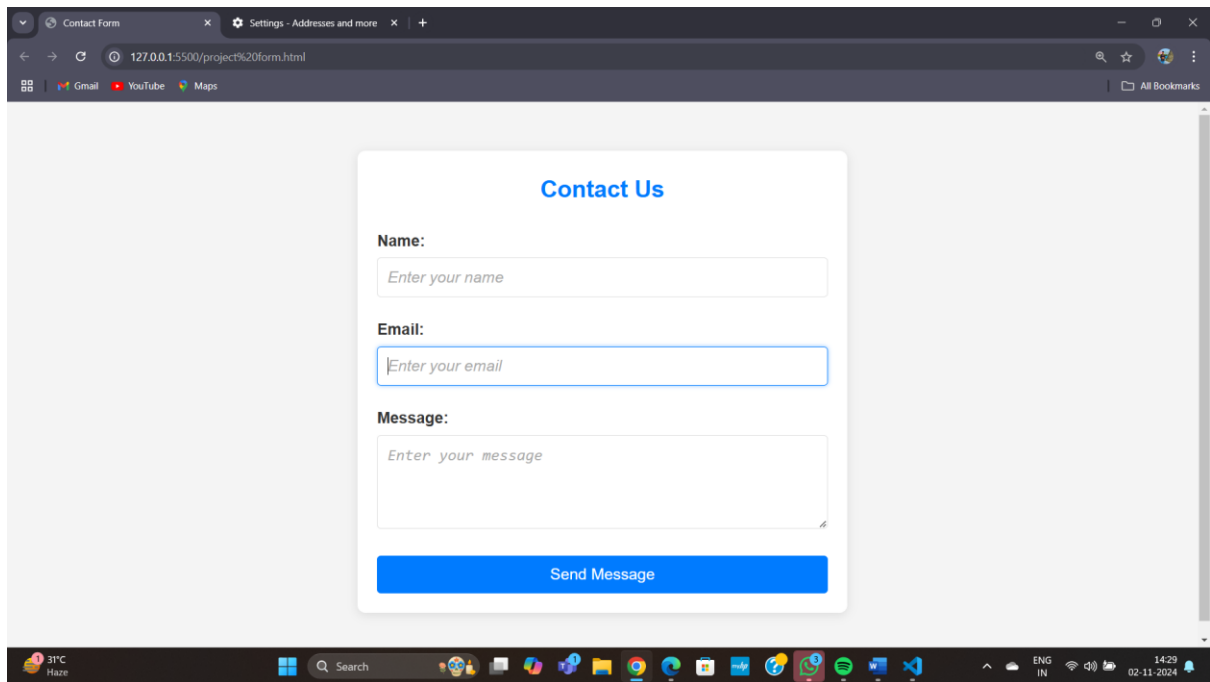
button:hover {
    background-color: #0056b3;
}

@media (max-width: 600px) {
    .form-container {
        margin: 20px;
        padding: 15px;
    }

    input[type="text"],
    input[type="email"],
    textarea {
        font-size: 14px;
    }

    button {
        font-size: 14px;
    }
}

::placeholder {
    color: #aaa;
    font-style: italic;
}
```

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