



	adjustments, to enhance the overall look and feel of the site.			
--	--	--	--	--

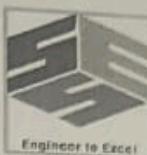
SET -2

1	You are updating a legacy web application to take advantage of modern web standards. The project involves transitioning from an earlier HTML version to HTML5. The goal is to leverage HTML5's new features to improve web development practices and enhance the functionality of web forms.	10	C01	2
2	Designing a user registration form for a new web application. The form needs to capture essential information such as name, email, and a message from users. It is crucial to implement client-side validation to ensure that the data entered is accurate and complete before the form is submitted.	10	C01	3
3	Designing a website that needs to function effectively across various devices and screen sizes. The design should include different types of layouts such as fixed, fluid, and responsive. To achieve this, you need to use CSS techniques like Flexbox or Grid to ensure that the layout adapts well to different screen sizes and maintains a consistent user experience.	10	C01	2
4	To create a webpage that offers a seamless user experience across devices, responsive design principles must be applied. This involves using fluid grids, flexible images, and media queries to ensure the layout adjusts gracefully to different screen sizes. For instance, on a desktop, the webpage might display multiple columns with detailed content, while on a smartphone, the same content could stack vertically for easy scrolling. Navigation menus should transform into a hamburger icon on smaller screens, ensuring they remain accessible without taking up too much space. Additionally, touch-friendly elements and optimized images ensure fast loading times and a smooth experience on all devices.	10	C01	3

<form method="post">
<label> Name : </label>



SAVEETHA SCHOOL OF ENGINEERING
SIMATS, CHENNAI



5	Given a scenario (e.g., creating a blog post, a product listing), design a webpage using appropriate elements, tables, lists, and images for optimal readability and user experience. Also, describe step-by-step the sequence of HTTP requests and responses that occur when a user accesses a webpage containing multiple resources (HTML, CSS, JavaScript, images).	10	C01	3
---	--	----	-----	---

Assignment - 1

You are updating a legacy web application to take advantage of modern web standards. The project involves transitioning from an earlier HTML version to HTML5. The goal is to leverage HTML5 new features, improve web development practices and enhance the functionality of web forms.

HTML :-

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title> legacy web Application </title>
<meta http-equiv="Content-type" content="text/html"
      charset="utf-8" />
<style type="text/css">
    header { background-color: #f0f0f0; padding: 10px; }
    Content { padding: 10px; }
    footer { background-color: #f0f0f0; padding: 10px;
              text-align: center; }
</style>
</head>
<body>
    <div class="header">
        <h1> welcome to our website </h1>
    <div>
    </div>
    <div class="Content">
        <form action="/submit" method="post">
            <label> Name : </label>
```

```
<input type="text" name="name"/><br/>
<label> Email </label>

<section id="about">
  <h2> About Us </h2>
  <p> we build modern web applications using the latest stand-
  -ards. </p>
</section>

<section id="Contact">
  <h2> Contact Us </h2>
  <form action="/submit" method="post">
    <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="phone"> Phone: </label>
    <input type="tel" id="phone" name="phone">
    <label for="website"> Website: </label>
    <input type="url" id="website" name="website">
    <label for="dob"> Date of Birth: </label>
    <input type="date" id="dob" name="dob">
    <label for="color"> Favorite Color: </label>
    <input type="color" id="color" name="color">
    <label for="feedback"> Feedback: </label>
    <textarea id="feedback" name="feedback" placeholder="your feedback..."></textarea>
    <input type="submit" value="Submit">
  </form>
</section>
</main>
```

```

<section>
  <h2>Our Introduction Video </h2>
  <video controls>
    <source src="video.mp4" type="video/mp4"/>
      Your browser does not support the video tag.
  </video>
</section>
<footer>
  <p>© 2024 My Modern Web Application </p>
</footer>
<script src="script.js" defer></script>
</body>
</html>

```

Name	Birthday Date
John Doe	1990-01-01

2. Designing a user registration form for a new web application, the form needs to capture essential information such as name, email, and a message from users. It is crucial to implement client-side validation to ensure that the layout adapts well to complete before form "The submit:"

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>User Registration </title>
  </head>
  <body>

```

```
font-family: Arial, sans-serif;  
margin: 0;  
padding: 20px;  
background-color: #f0f0f0;  
}  
form {  
background-color: #fff;  
padding: 20px;  
border-radius: 5px;  
max-width: 400px;  
margin: 0 auto;  
box-shadow: 0 0 10px rgba(0,0,0,0.1);  
}  
label {  
display: block;  
margin-bottom: 5px;  
font-weight: bold;  
}  
input, textarea {  
width: 100%;  
padding: 10px;  
margin-bottom: 15px;  
border: 1px solid #ccc;  
border-radius: 4px;  
font-size: 16px;  
}  
input[type="submit"] {  
background-color: #4CAF50;  
color: white;  
border: none;  
cursor: pointer;
```

```

        transition: background-color 0.35 ease;
    }

</style>
</head>
<body>
<form action="/submit" Method="Post" novalidate>
<hr> user Registration </hr>
<label for="name"> Name: </label>
<input type="email" id="email" name="email" required
placeholder="example@example.com" >
<label for="Message"> Message: </label>
<textarea id="Message" name="Message" required
Min length = "10" Max length = "500"
placeholder="Enter your message here...">>
<input type="submit" value="Register" >
</form>
</script>
</body>
</html>

```

Output:-

User registration		
Name	Email	Msg

3. Designing a website that needs to function effectively across various devices and screen sizes. The design should include different types of layouts such as fixed, fluid and responsive. To achieve this, you need to use CSS techniques like flexbox or Grid to ensure that the layout is responsive.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Responsive Website</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <header>
        <h1>Responsive website</h1>
        <nav>
            <ul>
                <li><a href="#">Home</a></li>
                <li><a href="#">About</a></li>
                <li><a href="#">Services</a></li>
                <li><a href="#">Contact</a></li>
            </ul>
        </nav>
    </header>
    <main>
        <section class="fixed-width">
            <h2>Fixed width section</h2>
            <p>This section has a fixed width and does not change size when the screen size changes.</p>
        </section>
        <section class="fluid-width">
            <h2>Fluid width section</h2>
            <p>This section has a fluid width and adjusts to the screen size, filling up available space.</p>
        </section>
    </main>

```

```
</section>
<section class="responsive-grid">
  <h2> Responsive Grid Section </h2>
  <div class="grid-container">
    <div class="grid-item"> Item 1 </div>
    <div class="grid-item"> Item 2 </div>
    <div class="grid-item"> Item 3 </div>
    <div class="grid-item"> Item 4 </div>
  </div>
</section>
</main>
<footer>
  <p> Footer Content goes here. </p>
</footer>
</body>
</html>
```

Responsive web design

This is the main content area.

Assignment-2

4. To create a webpage that offers a seamless user experience across devices, responsible design principles must be applied. This involves using fluid grids, flexible images, and media queries to ensure the layout adjusts gracefully to different screen sizes. For instance, on a desktop, the webpage might display multiple columns with detailed content, while on a smartphone, the same content could stack vertically for easy scrolling. Navigation menus should transform into a hamburger icon on smaller screens, ensuring they remain accessible without taking up too much space. Additionally, touch-friendly elements and optimized images ensure fast loading times and a smooth experience on all devices.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
        initial-scale=1.0">
    <title> Responsive web Design </title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <header>
        <div class="logo"> MyWebsite </div>
        <nav>
            <ul class="nav-links">
                <li><a href="#"> Home </a> </li>
                <li><a href="#"> About </a> </li>
                <li><a href="#"> Services </a> </li>
                <li><a href="#"> Contact </a> </li>
            </ul>
        <div class="hamburger">
            <div></div>
            <div></div>
            <div></div>
        </div>
    </nav>
</header>
<main>
    <section class="content">
        <article class="text-content">
            <h2> Responsible Design Principles </h2>
            <p> Responsive design ensures that your website provides

```

```
a great user experience on all devices. </p>
</article>
<aside class="sidebar">
    <h2>Additional Information </h2>
    <p>On desktops, content can be displayed in multiple columns.  
On smartphones, content stacks vertically for easy scrolling.</p>
</aside>
</section>
<section class="gallery">
    <h2>Image Gallery </h2>
    <div class="gallery-grid">
        
        
        
        
    </div>
</section>
</main>
<footer>
    <p>© 2024 My Website. All rights reserved. </p>
</footer>
<script>
    const hamburger = document.querySelector('.hamburger');
    const navlinks = document.querySelector('.nav-links');

    hamburger.addEventListener('click', () => {
        navlinks.classList.toggle('open');
    });
</script>
</body>
</html>
```

Output::

Responsive web design
Screen size for optimal experience

5. Given a scenario, design a webpage using appropriate elements, tables, lists, and images for optimal readability and user experience. Also, describe step-by-step the sequence of HTTP requests and responses that occur when a user accesses a webpage containing multiple resources (HTML, CSS, Javascript, images).

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
      initial-scale=1.0">
    <title> My Blog post </title>
    <link rel="stylesheet" href="styles.css">
  </head>
  <body>
    <header>
      <h1>My Blog </h1>
      <nav>
        <ul>
          <li><a href="#">Home</a></li>
          <li><a href="#">About</a></li>
          <li><a href="#">Blog</a></li>
          <li><a href="#">Contact</a></li>
        </ul>
      </nav>
    </header>
    <main>
      <article>
        <h2>The Joy of web Development </h2>
```

<p> posted on August 27, 2024 by John Doe

Introduction

web development is an existing field where you can create amazing experience.

key Technologies

- HTML: The structure of the webpage.
- CSS: The styling of the webpage.
- JavaScript: The interactivity of the webpage.

Comparison of frontend frameworks

Framework	Popularity	Ease of Use
React	High	Moderate
<hr>		
<tr>		

```
<td>Vue</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Angular</td>
<td>Medium</td>
<td>Moderate</td>
</tr>
</tbody>
</table>
<footer>
<p> © 2024 My Blog. All rights reserved. </p>
</footer>
</body>
</html>
```

Output:-

My Blog
By Author Name on citation.

MD Of