

## Q1: Restaurant Website – Menu Page

Problem Statement:

Design a “Menu” page for a restaurant website.

Requirements:

Use a table to display at least 3 dishes with columns for Dish Name, Price, and Availability.

Add an image of each dish beside the table.

Use class and ID to style dish names and price in different colors using CSS.

Apply CSS3 background gradient to the page background.

Add a hyperlink at the bottom to navigate to a “Contact Us” page.

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

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Menu - Restaurant</title>
  <link rel="stylesheet" href="style.css">
</head>

<body>
  <h1>Our Menu</h1>
  <table>
    <tr>
      <th>Dish Name</th>
      <th>Price</th>
      <th>Availability</th>
    </tr>
    <tr>
      <td class="dish-name">Pasta</td>
      <td class="price">$12.99</td>
      <td>Available</td>
    </tr>
    <tr>
      <td class="dish-name">Pizza</td>
      <td class="price">$15.99</td>
      <td>Available</td>
    </tr>
    <tr>
      <td class="dish-name">Burger</td>
      <td class="price">$8.99</td>
      <td>Out of Stock</td>
    </tr>
  </table>

```

```

        </tr>
    </table>
    <div class="dish-images">
        
        
        
    </div>
    <a href="contact.html">Contact Us</a>
</body>

</html>

```

```

body {
    background: linear-gradient(to right, #ff7e5f, #feb47b);
    font-family: Arial, sans-serif;
}

h1 {
    text-align: center;
    color: white;
}

table {
    width: 80%;
    margin: 20px auto;
    border-collapse: collapse;
    background-color: rgba(255, 255, 255, 0.8);
}

th,
td {
    padding: 10px;
    text-align: left;
    border: 1px solid #ddd;
}

.dish-name {
    color: #3498db;
}

```

```

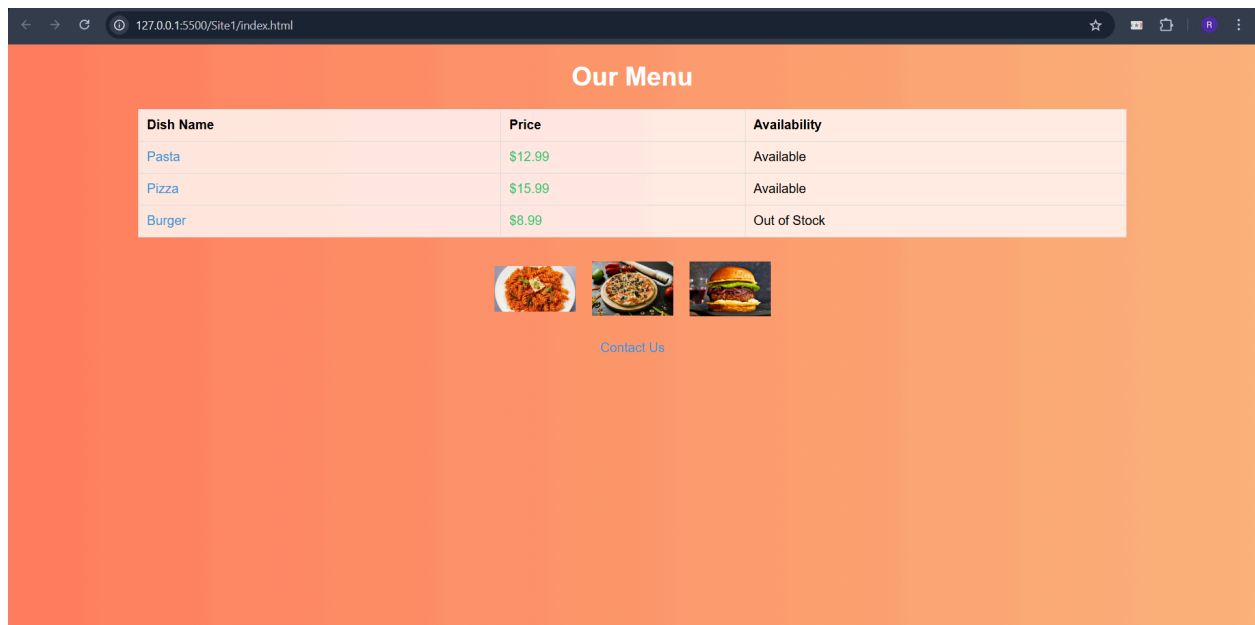
.price {
  color: #2ecc71;
}

.dish-images{
  display: flex;
  justify-content: center;
  align-items: center;
}

.dish-images img {
  width: 100px;
  margin: 10px;
}

a {
  display: block;
  text-align: center;
  margin-top: 20px;
  color: #3498db;
  text-decoration: none;
}

```



## Q2: Music Streaming Website – Song Page

Problem Statement:

Create a “Now Playing” page for a music streaming platform.

Requirements:

Embed an HTML5 <audio> player with controls and a sample .mp3 file.

Add a video trailer of the artist using the <video> tag.

Use CSS transitions so the audio player section slightly changes opacity on hover.

Style the artist’s name using a pseudo-element (::before) to show an icon next before it.

Include a list of top 5 songs in an ordered list.

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

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Now Playing</title>
  <link rel="stylesheet" href="style.css">
</head>

<body>
  <h1>Now Playing</h1>
  <audio controls>
    <source src="sample.mp3" type="audio/mp3">
    Your browser does not support the audio element.
  </audio>

  <video width="320" height="240" controls>
    <source src="artist-trailer.mp4" type="video/mp4">
    Your browser does not support the video tag.
  </video>

  <div class="audio-player">
    <h2>Artist: <span class="artist-name">Artist Name</span></h2>
  </div>

  <h3>Top 5 Songs</h3>
  <ol>
    <li>Song 1</li>
    <li>Song 2</li>
```

```
        <li>Song 3</li>
        <li>Song 4</li>
        <li>Song 5</li>
    </ol>
</body>

</html>
```

```
body {
    font-family: Arial, sans-serif;
    background-color: #f4f4f4;
    text-align: center;
}

h1 {
    color: #333;
}

audio,
video {
    margin: 20px auto;
    width: 320px;
    display: block;
}

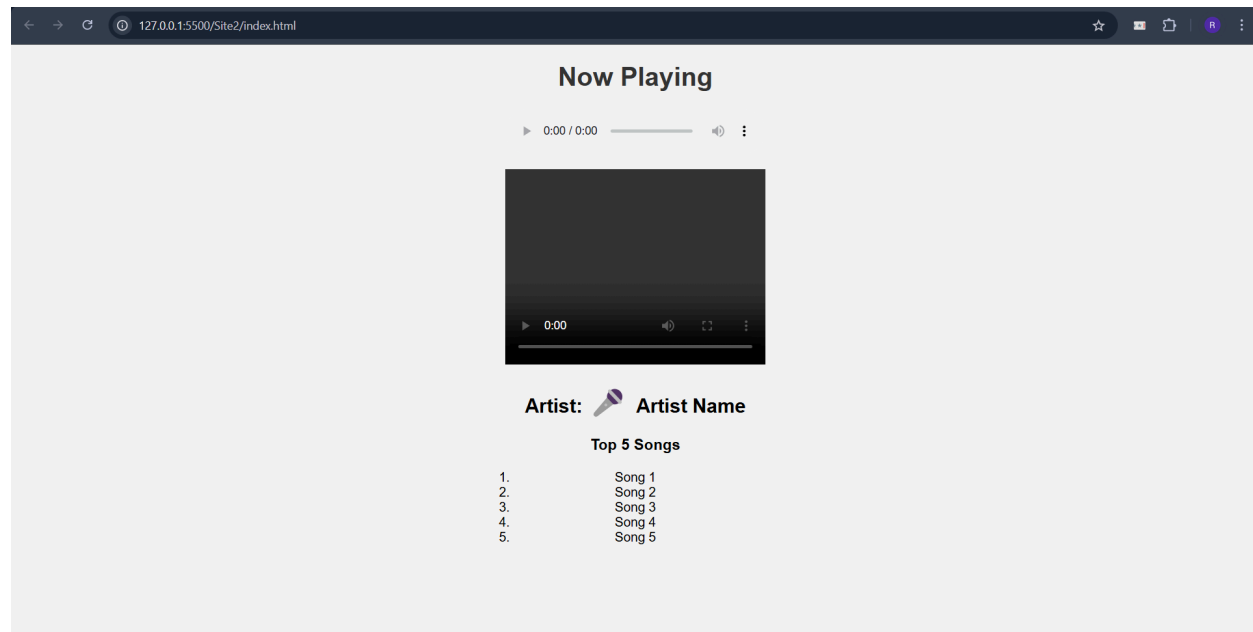
.audio-player {
    position: relative;
}

.artist-name::before {
    content: "🎤";
    margin-right: 10px;
    font-size: 1.5em;
}

.audio-player:hover {
    opacity: 0.9;
    transition: opacity 0.3s;
}

ol {
    list-style-type: decimal;
```

```
margin: 20px auto;
padding: 0;
max-width: 300px;
}
```



### Q3: Tech Conference Website – Registration Page

Problem Statement:

Build a registration form for attendees of a tech conference.

Requirements:

Include fields for Full Name, Email, Phone, Password, and Confirm Password.

Apply HTML5 required, type, and pattern attributes.

Use JavaScript form validation to ensure:

Passwords match.

Name is not empty.

On submit, if validation fails, show an alert using DOM manipulation.

Use CSS3 box-shadow and transform (e.g., scale on focus) for form input fields.

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

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Registration - Tech Conference</title>
  <link rel="stylesheet" href="style.css">
</head>

<body>
  <h1>Register for the Tech Conference</h1>
  <form id="registrationForm">
    <label for="name">Full Name:</label>
    <input type="text" id="name" name="name" required pattern="[A-Za-z\s]+"
placeholder="Enter your full name">

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

    <label for="phone">Phone:</label>
    <input type="tel" id="phone" name="phone" required
pattern="^[0-9]{10}$" placeholder="Enter your phone number">

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

    <label for="confirmPassword">Confirm Password:</label>
    <input type="password" id="confirmPassword" name="confirmPassword"
required placeholder="Confirm your password">

    <button type="submit">Register</button>
  </form>
```

```
    <script src="script.js"></script>
</body>

</html>
```

```
body {
    font-family: Arial, sans-serif;
    background-color: #f4f4f4;
    text-align: center;
}

h1 {
    color: #333;
}

form {
    width: 300px;
    margin: 50px auto;
    padding: 20px;
    background-color: white;
    border-radius: 10px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2);
}

input {
    width: 100%;
    padding: 10px;
    margin: 10px 0;
    border-radius: 5px;
    border: 1px solid #ccc;
    transition: all 0.3s ease;
}

input:focus {
    transform: scale(1.05);
    box-shadow: 0 0 10px rgba(0, 0, 255, 0.5);
}

button {
    background-color: #3498db;
```



```
    color: white;
    border: none;
    padding: 10px;
    width: 100%;
    cursor: pointer;
    border-radius: 5px;
}

button:hover {
    background-color: #2980b9;
}
```

```
document
.getElementById('registrationForm')
.addEventListener('submit', function (event) {
    const name = document.getElementById('name').value
    const password = document.getElementById('password').value
    const confirmPassword = document.getElementById('confirmPassword').value

    if (name.trim() === '') {
        alert('Name cannot be empty.')
        event.preventDefault()
    }

    if (password !== confirmPassword) {
        alert('Passwords do not match.')
        event.preventDefault()
    }
})
```

127.0.0.1:5500/Site3/index.html

## Register for the Tech Conference

Full Name:

Enter your full name

Email:

Enter your email

Phone:

Enter your phone number

Password:

Enter your password

Confirm Password:

Confirm your password

Register

#### Q4: Online Portfolio – Responsive Layout

Problem Statement:

Create a responsive personal portfolio home page.

Requirements:

Display a profile image and short bio side by side (flex layout).

Include a responsive image gallery with 3 project images using CSS flexbox or grid.

On smaller screens (<600px), the layout must stack vertically using media queries.

Style project images using a pseudo-selector to apply drop shadow and scale to project images.

Add a navigation bar with links styled as a horizontal list using CSS.

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

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Portfolio</title>
  <link rel="stylesheet" href="style.css">
</head>

<body>
  <header>
    <nav>
      <ul>
        <li><a href="#home">Home</a></li>
        <li><a href="#about">About</a></li>
        <li><a href="#projects">Projects</a></li>
        <li><a href="#contact">Contact</a></li>
      </ul>
    </nav>
  </header>

  <section id="home">
    <div class="profile">
      
      <div class="bio">
        <h1>John Doe</h1>
        <p>Web Developer & Designer</p>
      </div>
    </div>
  </section>

  <section id="projects">
    <h2>My Projects</h2>
```

```
        <div class="gallery">
            <div class="project"></div>
            <div class="project"></div>
            <div class="project"></div>
        </div>
    </section>

</body>

</html>
```

```
body {
    font-family: Arial, sans-serif;
}

header nav ul {
    display: flex;
    justify-content: center;
    list-style-type: none;
    padding: 0;
}

header nav ul li {
    margin: 0 15px;
}

header nav ul li a {
    text-decoration: none;
    color: #3498db;
}

.profile {
    display: flex;
    justify-content: center;
    align-items: center;
    margin: 20px;
}
```

```
.profile img {
    width: 150px;
    height: 150px;
    border-radius: 50%;
}

.bio {
    margin-left: 20px;
}

.gallery {
    display: flex;
    justify-content: center;
    gap: 20px;
    flex-wrap: wrap;
}

.project {
    width: 30%;
    margin: 10px;
}

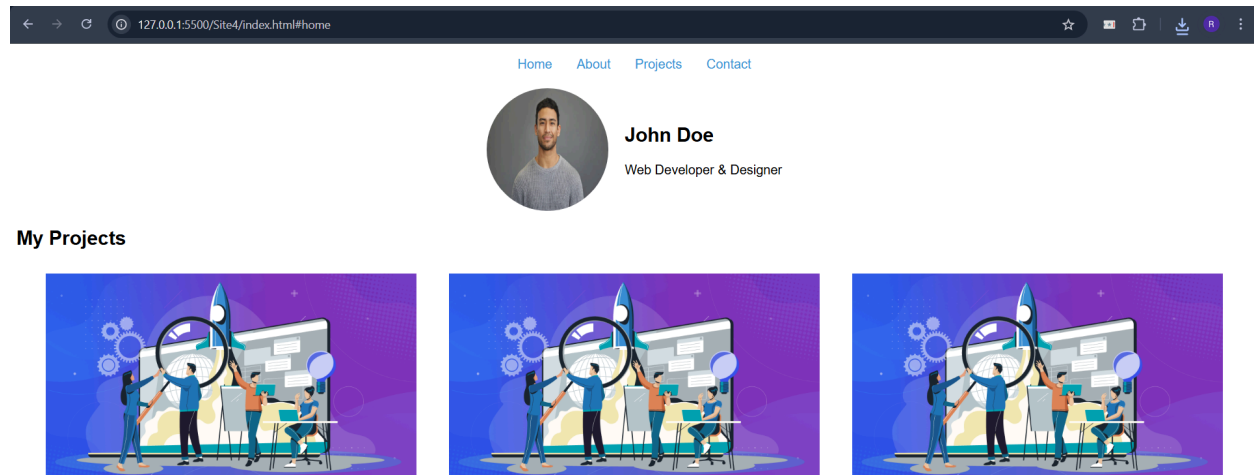
.project img {
    width: 100%;
    height: auto;
    transition: all 0.3s ease;
}

.project img:hover {
    transform: scale(1.05);
    box-shadow: 0 4px 10px rgba(0, 0, 0, 0.2);
}

/* Media Query for smaller screens */
@media screen and (max-width: 600px) {
    .profile {
        flex-direction: column;
        text-align: center;
    }

    .gallery {
        flex-direction: column;
    }
}
```

```
}  
}
```



### Q5: E-learning Platform – Course Page

Problem Statement:

Design a Course Information page for an online learning platform.

Requirements:

Include a table listing 3 courses with columns: Course Name, Duration, and Instructor.

Each course name should be a hyperlink to the course details page.

Add a short HTML5 video intro for one of the courses.

Use CSS pseudo-selectors (:nth-child, :hover) to style rows differently.

Add a call to action button that uses CSS transition and transform effects on hover.

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

```
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Course Information</title>
  <link rel="stylesheet" href="style.css">
</head>

<body>
  <h1>Course Information</h1>
  <table>
    <tr>
      <th>Course Name</th>
      <th>Duration</th>
      <th>Instructor</th>
    </tr>
    <tr>
      <td><a href="course-details.html">JavaScript Basics</a></td>
      <td>6 Weeks</td>
      <td>John Doe</td>
    </tr>
    <tr>
      <td><a href="course-details.html">Advanced CSS</a></td>
      <td>8 Weeks</td>
      <td>Jane Smith</td>
    </tr>
    <tr>
      <td><a href="course-details.html">React Development</a></td>
      <td>10 Weeks</td>
      <td>David Lee</td>
    </tr>
  </table>

  <section id="intro-video">
    <h2>Course Introduction: JavaScript Basics</h2>
    <video width="320" height="240" controls>
      <source src="javascript-intro.mp4" type="video/mp4">
      Your browser does not support the video tag.
    </video>
  </section>

  <button>Enroll Now</button>
```

```
</body>
```

```
</html>
```

```
body {  
    font-family: Arial, sans-serif;  
    margin: 20px;  
}
```

```
h1 {  
    text-align: center;  
}
```

```
table {  
    width: 80%;  
    margin: 20px auto;  
    border-collapse: collapse;  
    background-color: #f9f9f9;  
}
```

```
th,  
td {  
    padding: 10px;  
    text-align: left;  
    border: 1px solid #ddd;  
}
```

```
a {  
    text-decoration: none;  
    color: #3498db;  
}
```

```
a:hover {  
    text-decoration: underline;  
}
```

```
#intro-video {  
    text-align: center;  
    margin: 20px 0;  
}
```



```
button {
    background-color: #3498db;
    color: white;
    border: none;
    padding: 10px 20px;
    cursor: pointer;
    border-radius: 5px;
    margin: 20px auto;
    display: block;
}

button:hover {
    background-color: #2980b9;
}

/* Styling table rows */
tr:nth-child(odd) {
    background-color: #f2f2f2;
}

tr:hover {
    background-color: #f1c40f;
    transition: background-color 0.3s ease;
}

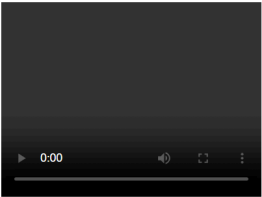
button {
    transition: transform 0.3s ease;
}

button:hover {
    transform: scale(1.1);
}
```

## Course Information

Course Name	Duration	Instructor
JavaScript Basics	6 Weeks	John Doe
Advanced CSS	8 Weeks	Jane Smith
React Development	10 Weeks	David Lee

## Course Introduction: JavaScript Basics

[Enroll Now](#)