Module 2 – Mernstack – HTML

1) HTML Basics

Lab Assignment

• Task:

Create a simple HTML webpage that includes:

• A header (), footer (), main section (), and aside section ()

. • A paragraph with some basic text.

• A list (both ordered and unordered).

• A link that opens in a new tab.

Ans:

Demo.html

```
<!DOCTYPE html>
<html>
 <head>
  <title>My Simple Webpage</title>
 </head>
 <body>

  <header>
   <h1>Welcome to My Page</h1>
  </header>


  <aside>
   <p>This is the aside section (like a sidebar).</p>
  </aside>


  <main>
```

```
<p>This is a paragraph with some basic text.</p>

<h2>Ordered List</h2>
<ol>
  <li>First item</li>
  <li>Second item</li>
</ol>

<h2>Unordered List</h2>
<ul>
  <li>Apple</li>
  <li>Banana</li>
</ul>

<a href="https://www.example.com" target="_blank">Visit Example</a>
</main>

<footer>
  <p>&copy; 2025 My Website</p>
</footer>

</body>
</html>
```

2) HTML Forms

Lab Assignment

• Task:

Create a contact form with the following fields:

- Full name (text input)

- Email (email input)

- Phone number (tel input)

- Subject (dropdown menu)

- Message (textarea)

- Submit button

Additional Requirements:

- Use appropriate form validation using required, minlength, maxlength, and pattern.

- Link form labels with their corresponding inputs using the for attribute.

Ans:

```
<!DOCTYPE html>

<html>

<head>

 <title>Contact Form</title>

</head>

<body>


 <h2>Contact Us</h2>


 <form>

  <!-- Full Name -->

  <label for="name">Full Name:</label>

  <input type="text" id="name" name="name" required minlength="3"
maxlength="30"><br><br>


  <!-- Email -->

  <label for="email">Email:</label>
```

```
    <input type="email" id="email" name="email" required><br><br>


    <!-- Phone Number -->

    <label for="phone">Phone:</label>

    <input type="tel" id="phone" name="phone" required pattern="[0-9]{10}"
placeholder="10-digit number"><br><br>


    <!-- Subject Dropdown -->

    <label for="subject">Subject:</label>

    <select id="subject" name="subject" required>

      <option value="">--Select--</option>

      <option value="help">Help</option>

      <option value="feedback">Feedback</option>

      <option value="other">Other</option>

    </select><br><br>


    <!-- Message -->

    <label for="message">Message:</label><br>

    <textarea id="message" name="message" rows="4" cols="30" required
minlength="10" maxlength="300"></textarea><br><br>


    <!-- Submit Button -->

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

  </form>


</body>

</html>
```

3) HTML Tables

- Task:

 Create a product catalog table that includes the following columns:

- Product Name

- Product Image (use placeholder image URLs)

- Price

 - Description

- Availability (in stock, out of stock)

Additional Requirements:

- Use thead for the table header.

- Add a border and some basic styling using inline CSS.

 - Use colspan or rowspan to merge cells where applicable.

Ans:


```html
<!DOCTYPE html>
<html>
 <head>
  <title>Product Catalog</title>
 </head>
 <body>
  <h2>Product Catalog</h2>

  <table border="1" style="border-collapse: collapse; width: 100%">
   <thead style="background-color: #f2f2f2">
    <tr>
     <th>Product Name</th>
     <th>Image</th>
     <th>Price</th>
     <th>Description</th>
```

```html
    <th>Availability</th>
   </tr>
  </thead>
  <tr>
   <td rowspan="2">Smartphone</td>
   <td>
    <img
     src="https://m.media-amazon.com/images/I/61XO4bORHUL._SX679_.jpg"
     alt="Phone"
     width="100px"
     height="100px"
    />
   </td>
   <td>$299</td>
   <td>Compact and powerful</td>
   <td>In Stock</td>
  </tr>

  <tr>
   <td>
    <img
     src="https://media-
ik.croma.com/prod/https://media.tatacroma.com/Croma%20Assets/Communication/
Mobiles/Images/309731_0_yooz4b.png?tr=w-640"
     alt="Phone 2"
     width="100px"
     height="100px"
    />
   </td>
```

```html
    <td>$349</td>

    <td>High performance model</td>

    <td>Out of Stock</td>

   </tr>


   <tr>

    <td>Laptop</td>

    <td>

     <img

      src="https://cdn.mos.cms.futurecdn.net/Gw3Se82bvppoJsHc4rCVsQ-1200-
80.jpg.webp"

      alt="Phone 2"

      width="200px"

      height="100px"

     />

    </td>

    <td>$799</td>

    <td>Lightweight, 14-inch display</td>

    <td>In Stock</td>

   </tr>

  </table>

 </body>

</html>
```