

# Module 2 – Frontend- HTML

## HTML Basics

### Theory Assignment

- **Question 1:** Define HTML. What is the purpose of HTML in web development?
- **Question 2:** Explain the basic structure of an HTML document. Identify the mandatory tags and their purposes.
- **Question 3:** What is the difference between block-level elements and inline elements in HTML? Provide examples of each.
- **Question 4:** Discuss the role of semantic HTML. Why is it important for accessibility and SEO? Provide examples of semantic elements.

### Lab Assignment

#### Task:

Create a simple HTML webpage that includes:

- ⇒ A header (`<header>`), footer (`<footer>`), main section (`<main>`), and aside section (`<aside>`).
- ⇒ A paragraph with some basic text.
- ⇒ A list (both ordered and unordered).
- ⇒ A link that opens in a new tab.

## HTML Forms

### Theory Assignment

- **Question 1:** What are HTML forms used for? Describe the purpose of the input, textarea, select, and button elements.
- **Question 2:** Explain the difference between the GET and POST methods in form submission. When should each be used?
- **Question 3:** What is the purpose of the label element in a form, and how does it improve accessibility?

### 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.

## HTML Tables

### Theory Assignment

- **Question 1:** Explain the structure of an HTML table and the purpose of each of the following elements: `<table>`, `<tr>`, `<th>`, `<td>`, and `<thead>`.
- **Question 2:** What is the difference between `colspan` and `rowspan` in tables? Provide examples.
- **Question 3:** Why should tables be used sparingly for layout purposes? What is a better alternative?

### Lab Assignment

#### 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.