Module 2 – Mernstack - HTML

• HTML Forms - Theory Assignment

Question 1: What are HTML forms used for? Describe the purpose of the input, textarea, select, and button elements.

HTML forms are used to collect user input and send it to a server for processing. They are commonly used in login pages, search bars, registration forms, and surveys.

Main Form Elements and Their Purpose:

- `<input>` – Used to take user input like text, email, passwords, numbers, etc.
  - Example: `<input type="text" name="username">` (Text input)
- `<textarea>` – Allows users to enter multi-line text, such as comments or messages.
  - Example: `<textarea name="message"></textarea>`
- `<select>` – Creates a drop-down list for users to choose from multiple options.
- `<button>` – Used to submit a form or trigger an action.
  - Example: `<button type="submit">Submit</button>`

Question 2: Difference Between GET and POST Methods in Form Submission

When submitting a form, the method determines how data is sent to the server.

GET Method:

- Data is appended to the URL as query parameters (e.g., example.com?name=John).
- Can be bookmarked and cached.
- Suitable for search forms and retrieving data

POST Method:

- Data is sent in the request body, not visible in the URL.
- More secure and suitable for sensitive data (e.g., passwords).
- Used for form submissions that modify server data (like registration or login).

Question 3: What is the purpose of the <label> element in a form, and how does it improve accessibility?

The <label> element is used to associate text descriptions with form inputs, making it easier for users (especially those using screen readers) to understand form fields.

Why is <label> important?

- Improves accessibility – Screen readers can announce the label when the input is focused.
- Enhances usability – Clicking on a label also selects the input field.
- Better form structure – Makes forms more readable and user-friendly.