# **Assignment WD-HTML**

* **HTML Forms**

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

**Answer:**

HTML forms are used to collect user input and send it to a server for processing. They are essential for tasks such as user,login,search,and feedback submission

* **<input>:** Used to create various types of form fields like text boxes,radio buttons,checkboxes,and more.It allows users to enter data like names,email addresses,or passwords.
* **<textarea>:**Provides a larger input box for multi-line text input,useful for comments,messages,or descriptions.
* **<select>:**Creates a dropdown list of option from which users can choose one or more values.
* **<button>:**Defines a clickable button,typically used to submit the form or trigger other form-related actions.
* **Question 2:Explain the diffrence between the GET and POST method is form submissin.When should each be used?**

**Answer:**

The GET and POST methods are used to send form data to a server,but they work diffrently:

* **GET Method**:
* Sends form data through the URL.
* The data is visible in the browser’s address bar.
* Best for simple,non-sensitive data.
* It can be bookmarked or cached.
* **POST Method**:
* Sends form data in the body of the HTTP request.
* The data is not visible in the URL.
* Suitable for sensitive or large amounts of data.
* Cannot be bookmarked.
* **When to use:**
* Use GET when the form submission is safe, like serching or filtering.
* Use POST when the form modifies data or includes confidential information.

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

**Answer:**

The <label> element in a form is used to define a label for an input element.It helps users understand what information is expected in each input field by providing a descriptive name next to it.

* **How it improves accessibility:**
* It links text to form controls,making it easier for screen readers to read out loud for vissually impaired users.
* When a user clicks on the label,the related input field is automatically focused,making forms easier to navigate.

Using<label> ensures that all users,including those using assistive technologies,can interact with forms more effectively.

* **HTML Tables**

**Question 1:** Explain the structure of an HTML table and the purpose of each of the following elements:<table>,<tr>,<th>,<td>,and<thead>.

**Answer:**

An HTML tabel is usrd to display data in rows and columns.It is made up of serveral elements that structure and contect of the table.

* **<table>:**This is the main container for the table.It wraps all rows and columns of the table.
* **<tr>:**Defines a row in the table.Each row contains one or more table cells.
* **<th>:**Used to define a header cell in a table.It is usually bold and centered.Header cells help describe the type of data in the column or row.
* **<td>:**Represents a standerd cell in the table where actual data is placed.
* **<thead>:**Groups the header content in a table.It is useful for styling or keeping table headers fixed when scrolling.

**Qustion 2:**What is the difference between colspan and rowsoan in tables? Provide examples.

**Answer:**

The colspan and rowspan attributes in HTML tabels are used to merge cells.

* **colspan:**Merges two or more columns into a single cell.
* **Rowspan:**Merges two or more rows into a single cell.

**Example using colspan:**

<table border=”1”>

<tr>

<th colspan=”2”>Name & Email</th>

</tr>

<tr>

<td>jhon</td>

<td>[jhon@example.com</td](mailto:jhon@example.com%3c/td)>

</tr>

</table>

**Example using rowspan:**

<table border=”1”>

<tr>

<th rowspan=”2”>name</th>

<td>jhon</td>

</tr>

<tr>

<td>doe</td>

</tr>

</table>

**Question 3:**Why should tables be used sparingly for layout purpose? What is a better alternative?

**Answer:**

Tables should be used sparingly for layout purpose because they are not flexible or responsive for modern web design.Using tables for layout makes the code harder to maintain and can negatively affect accessibility and page load times.

**Problem with using tables for layout:**

* They are not mobile-friendly or responsive.
* They mix content with presentation, violating the pricipal of separation of concerns.
* Screen readers may misinterpret table-based layouts,confusing users with disabilities.

**Better Alternative:**

Use CSS with layout techniques like Flexbox or CSS Grid. These are more powerful,resposive,and accessible tools for building modern web layouts.