🧠 Day 2 – Forms, Tables & Basic Styling

1️⃣ Form Tags, Input Types, Labels, Fieldsets

- **`<form>` Tag:**

  - Used to **collect user input** and submit it.

  - Example:

```
<form action="/submit" method="post">
  <!-- input fields go here -->
</form>
```

- **Common `<input>` Types:**

Type	Purpose
text	Single line text input
email	Validates email format
password	Hides characters (●●●●●)
number	Accepts numbers only
date	Select a date
submit	Submit button

- **`<label>` Tag:**

  - Used to define a **label** for form fields.

  - Helps with accessibility (screen readers).

  - Example:

```
<label for="name">Name:</label>
<input type="text" id="name" />
```

- **`<fieldset>` and `<legend>`:**

- **<fieldset>**: Groups related form fields.

- **<legend>**: Title for that group.

- Example:

```
<fieldset>
 <legend>Personal Info</legend>
 <label>Name: <input type="text" /></label>
</fieldset>
```

🧱 **Basic Structure:**

```
<form action="/submit" method="POST">
 <label for="name">Name:</label>
 <input type="text" id="name" name="name"><br><br>

 <label for="email">Email:</label>
 <input type="email" id="email" name="email"><br><br>

 <fieldset>
  <legend>Gender</legend>
  <input type="radio" id="male" name="gender" value="male"> Male
  <input type="radio" id="female" name="gender" value="female"> Female
 </fieldset><br>

 <input type="submit" value="Register">
</form>
```

✅ **Important Input Types:**

- text, email, password, rad io, checkbox, number, date, file, submit

✅ **Fieldset & Legend** – Used to group related inputs.

2️⃣ Table Structure & Attributes

- ◆ **Basic Structure:**

```
<table>
 <tr>
  <th>Name</th>
```

```
  <th>Age</th>
 </tr>
 <tr>
  <td>JP</td>
  <td>28</td>
 </tr>
</table>
```

- ◆ **Important Tags:**

  - <table> – Table start

  - <tr> – Table row

  - <th> – Table header (bold + center by default)

  - <td> – Table data cell

- ◆ **Useful Attributes:**

Attribute	Use
border	Border for table (use CSS ideally)
colspan	Merge columns
rowspan	Merge rows

Example:

```
<td colspan="2">Merged Cell</td>
```

🧱 **Basic Table Example:**

```
<table border="1">
 <tr>
  <th>Name</th>
  <th>Email</th>
 </tr>
 <tr>
  <td>JP</td>
  <td>jp@example.com</td>
```

```
    </tr>
</table>
```

✅ **Tags Used:**

- `<table>` – Start table

- `<tr>` – Table row

- `<th>` – Table heading

- `<td>` – Table data

✅ **Common Attributes:**

- border, colspan, rowspan, cellpadding, cellspacing

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3 CSS Selectors: Element, Class, ID

- **Element Selector:**

Applies style to all elements of a type.

```
p {
  color: blue;
}
```

- **Class Selector:**

Used for **group styling**.

```
.intro {
  font-size: 20px;
}
```

HTML:

```
<p class="intro">Hello</p>
```

- **ID Selector:**

Used for **unique styling**.

```
#main {
  background-color: yellow;
}
```

HTML:

```
<div id="main"></div>
```

🧱 **Example:**

```
<!-- HTML -->
<p>This is a paragraph</p>
<p class="highlight">This is highlighted</p>
<p id="important">This is important</p>

/* CSS */
p {
  color: blue; /* element selector */
}
.highlight {
  background-color: yellow; /* class selector */
}
#important {
  font-weight: bold; /* id selector */
}
```

✅ p → All <p> tags
✅ .className → Use for **multiple elements**
✅ #idName → Use for **unique elements**

4️⃣ Inline vs Internal vs External CSS

Type	Where?	Syntax Example
Inline	Inside HTML element	Hello
Internal	Inside <style> in <head>	<style>p { color: blue; }</style>
External	In a .css file	styles.css → p { color: green; } + <link> tag

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5️⃣ Basic Styling of Forms & Tables

🧱 Form Styling Example:

```css
input[type="text"], input[type="email"], input[type="password"] {
  padding: 8px;
  border: 1px solid #ccc;
  border-radius: 5px;
}
```

🧱 Table Styling Example:

```css
table {
  border-collapse: collapse;
  width: 100%;
}
td, th {
  border: 1px solid #333;
  padding: 10px;
  text-align: center;
}
```

🔸 Hands-On Exercises

✅ Task 1: Create a registration form with validation-ready fields

📌 Fields to include:

- Full Name, Email, Password, Gender (radio), Skills (checkbox), Country (select), Resume Upload (file), Submit button

✅ Task 2: Build a data table

- Example: Student details table with 5 rows

- Add border, spacing, padding, and hover styles

✅ Task 3: Style form inputs & buttons

- Button hover effect

- Rounded borders

- Consistent spacing between fields

✅ **Task 4: Apply text styling**

- Heading with custom font

- Paragraph with custom color and center alignment