

Day 1 – HTML Fundamentals

Date: 23-10-2025

Topic: Understand the structure of a web page using HTML, create basic layouts, forms, and tables that will later connect with CSS and React.

1. INTRODUCTION TO HTML

HTML (HyperText Markup Language) is the standard language used to create the structure of web pages.

It defines the content of a webpage — headings, paragraphs, images, links, tables, and forms.

Every HTML document has a .html extension.

Structure of an HTML Page

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<title>My First Web Page</title>
```

```
</head>
```

```
<body>
```

```
<h1>Welcome to HTML Basics</h1>
```

```
<p>This is my first HTML web page.</p>
```

```
</body>
```

```
</html>
```

Explanation:

- `<!DOCTYPE html>` – defines the document type (HTML5)
- `<html>` – root tag for all HTML content
- `<head>` – contains metadata like title and stylesheet links
- `<body>` – contains visible content that appears in the browser

2. HTML ELEMENTS & ATTRIBUTES

Elements are building blocks of HTML (e.g., `<p>`, `<h1>`, ``, `<table>`).

Attributes provide additional information to elements (e.g., `src`, `href`, `class`, `id`).

Example:

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

- href = URL link
- target="_blank" = opens the link in a new tab

3. HEADINGS, PARAGRAPHS, AND LISTS

- **Headings:** <h1> to <h6> define title hierarchy.
- **Paragraphs:** <p> defines text blocks.
- **Lists:**
 - Ordered List: for numbered lists
 - Unordered List: for bullet lists
 - List Items: represents each item

Example:

```
<h2>Course Topics</h2>
```

```
<ol>
```

```
<li>HTML Basics</li>
```

```
<li>CSS Design</li>
```

```
<li>JavaScript Programming</li>
```

```
</ol>
```

4. LINKS & IMAGES

Links:

```
<a href="https://www.google.com">Go to Google</a>
```

Images:

```

```

- src = image path
- alt = alternate text (for accessibility)

5. HTML Tables

Tables are used to display data in rows and columns.

Example:

```

<table border="1">

<tr>

  <th>Student Name</th>

  <th>Course</th>

  <th>Marks</th>

</tr>

<tr>

  <td>Udaya Kumar</td>

  <td>.NET</td>

  <td>90</td>

</tr>

<tr>

  <td>Rahul</td>

  <td>Java</td>

  <td>85</td>

</tr>

</table>

```

Key Tags:

- <table> → table container
- <tr> → table row
- <th> → table header cell
- <td> → table data cell

6. HTML FORMS

Forms are used to collect user input, such as login, registration, or data entry.

Example:

```

<form action="/submit" method="POST">

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

  <input type="text" id="name" name="username" required><br><br>

```

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

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

```
<label for="course">Course:</label>
```

```
<select id="course" name="course">
```

```
<option>.NET</option>
```

```
<option>Java</option>
```

```
<option>Python</option>
```

```
</select><br><br>
```

```
<input type="submit" value="Submit">
```

```
</form>
```

Explanation:

- <form> defines the input area
- action specifies the URL where data is submitted
- method specifies HTTP method (GET or POST)
- required ensures mandatory fields

7. SEMANTIC HTML (HTML5 ELEMENTS)

Semantic elements describe their purpose, making code more meaningful and SEO friendly.

Examples:

- <header> – top section of the page
- <nav> – navigation bar
- <section> – group of related content
- <article> – independent content block
- <footer> – bottom of the page

Example:

```
<header>
```

```
<h1>Dhruv Compusoft Portal</h1>
```

</header>

<nav>

Home | About | Contact

</nav>

<section>

<h2>About Us</h2>

<p>We are a software development company.</p>

</section>

<footer>

<p>© 2025 Dhruv Compusoft</p>

</footer>

8. BEST PRACTICES

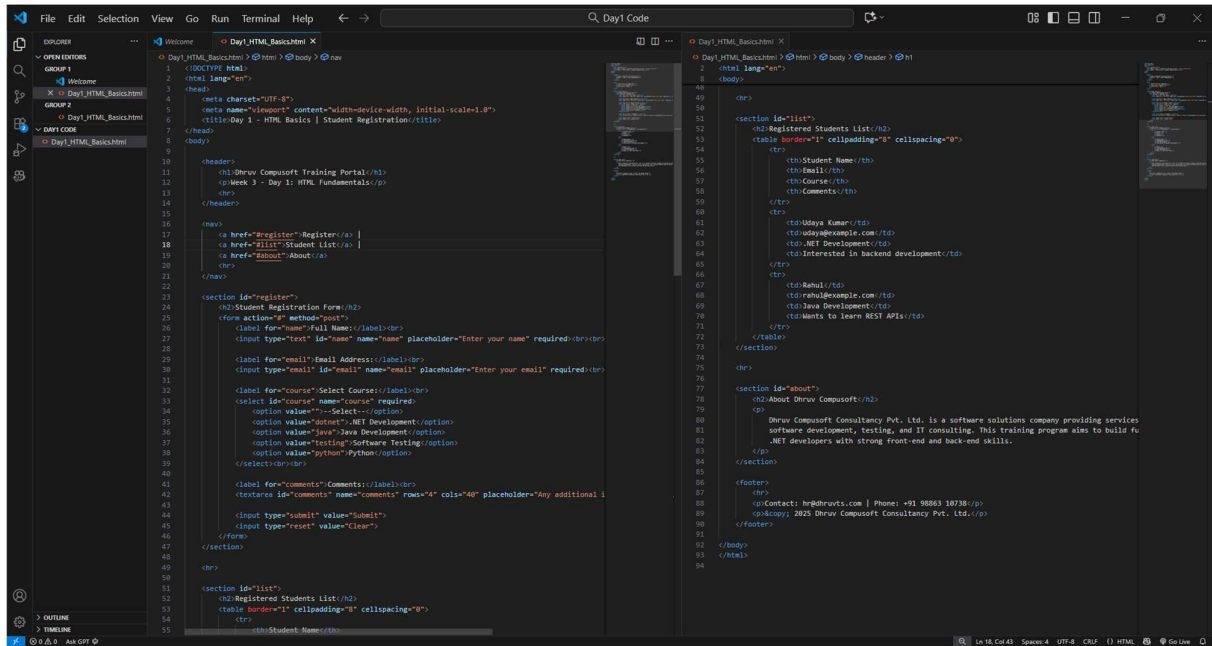
- Always close tags properly.
- Use lowercase tag names.
- Include alt for all images.
- Indent code for readability.
- Use semantic tags whenever possible.
- Validate your HTML using W3C Validator (<https://validator.w3.org/>).

Mini Practice Task (Day 1)

Create a **Student Registration Page** using:

- HTML form (name, email, course)
- Table for student list
- Semantic layout (header, section, footer)

Snapshots :



Code File : Day1_HTML_Basics.html

Dhruv Compusoft Training Portal

Week 3 - Day 1: HTML Fundamentals

[Register](#) | [Student List](#) | [About](#)

Student Registration Form

Full Name:

Email Address:

Select Course:

Comments:

Registered Students List

Student Name	Email	Course	Comments
Udaya Kumar	udaya@example.com	.NET Development	Interested in backend development
Rahul	rahul@example.com	Java Development	Wants to learn REST APIs

About Dhruv Compusoft

Dhruv Compusoft Consultancy Pvt. Ltd. is a software solutions company providing services in software development, testing, and IT consulting. This training program aims to build full-stack .NET developers with strong front-end and back-end skills.

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Output : Day1_HTML_Basics.html