

HTML5_Day2_Hands_On_Koduru_Ushasree

Problem 1

Assessment Goal: Validate understanding of links and form elements.

Hands-on Tasks:

1. Create two HTML pages and link them using navigation links
2. Add a navigation bar with Home and Contact links
3. Create a registration form with:
 - o Name
 - o Email
 - o Password
 - o Gender (radio buttons)
 - o Course selection (dropdown)
4. Use required and placeholder attributes

Expected Outcome:

A multi-page website with working navigation and a basic form.

Code:-

```
Day2 > p1 > ◊ index.html > ✉ html
 1   <!DOCTYPE html>
 2   <html>
 3   <head>
 4   |   <title>Home</title>
 5   </head>
 6   <body>
 7
 8   |   <nav>
 9   |   |   <a href="page1.html">Home</a> |
10   |   |   <a href="page2.html">Contact</a>
11   |   </nav>
12
13   |   <h1>Welcome to Our Website</h1>
14   |   <p>This is the home page.</p>
15
16   </body>
17   </html>
```

```
Day2 > p1 > form.html > html > body
1  <!DOCTYPE html>
2  <html>
3  <head>
4  |   <title>Contact</title>
5  </head>
6  <body>
7  |   <nav>
8  |   |   <a href="page1.html">Home</a> |
9  |   |   <a href="page2.html">Contact</a>
10 |   </nav>
11 <h2>Registration Form</h2>
12 <form>
13 |   <label>Name:</label><br>
14 |   <input type="text" placeholder="Enter your name" required><br><br>
15 |
16 |   <label>Email:</label><br>
17 |   <input type="email" placeholder="Enter your email" required><br><br>
18 |
19 |   <label>Password:</label><br>
20 |   <input type="password" placeholder="Enter password" required><br><br>
21 |
22 |   <label>Gender:</label><br>
23 |   <input type="radio" name="gender" required> Male
24 |   <input type="radio" name="gender"> Female<br><br>
25 |
26 |   <label>Course:</label><br>
27 |   <select required>
28 |   |   <option value="">Select Course</option>
29 |   |   <option>HTML</option>
30 |   |   <option>CSS</option>
31 |   |   <option>JavaScript</option>
32 |   </select><br><br>
33 |   <button type="submit">Register</button>
34 |   </form>
35 </body>
36 </html>
```

Output :-

[Home](#) | [Contact](#)

Welcome to Our Website

This is the home page.

Technical Requirements :-

This task must be developed using only HTML5 without CSS or JavaScript. Two separate HTML files should be created and connected using anchor () tags with relative paths. A semantic element must be used for navigation links on both pages. The registration form must include input fields such as text, email, password, radio buttons, and a dropdown menu. The required and placeholder attributes must be used for basic built-in validation. The code should be properly structured and well-indented.

Problem 2: Simple Website Navigation System (Level-1)

Scenario

A small coaching institute wants a basic static website with multiple pages so students can easily navigate between sections like Home, Courses, and Contact.

Requirements

- Create 3 HTML pages:
 - index.html (Home)
 - courses.html
 - contact.html
- Use:
 - <nav> element to create a navigation menu
 - <a> anchor tags for navigation
- Navigation menu should appear on all pages
- Use relative paths to link pages
- Include at least:
 - One internal anchor link (#section)
 - One external link (e.g., institute's social media)

Code :-

```
Day2 > p1 > p2 > index.html > html
1   <!DOCTYPE html>
2   <html>
3   <head>
4   |     <title>Home</title>
5   </head>
6   <body>
7
8       <nav>
9           <a href="index.html">Home</a> |
10          <a href="courses.html">Courses</a> |
11          <a href="contact.html">Contact</a>
12      </nav>
13
14      <h1>Home Page</h1>
15
16      <a href="#about">Go to About Section</a>
17
18      <h2 id="about">About Us</h2>
19      <p>Welcome to our coaching institute.</p>
20
21      <p>
22          Follow us:
23          <a href="https://facebook.com" target="_blank">Facebook</a>
24      </p>
25
26  </body>
27  </html>
```

```
Day2 > p1 > p2 > courses.html > html > body
1   <!DOCTYPE html>
2   <html>
3   <head>
4   |     <title>Courses</title>
5   </head>
6   <body>
7       <nav>
8           <a href="index.html">Home</a> |
9           <a href="courses.html">Courses</a> |
10          <a href="contact.html">Contact</a>
11      </nav>
12      <h1>Our Courses</h1>
13      <ul>
14          <li>HTML</li>
15          <li>CSS</li>
16          <li>JavaScript</li>
17      </ul>
18  </body>
19  </html>
```

```
Day2 > p1 > p2 > contact.html > html
1   <!DOCTYPE html>
2   <html>
3   <head>
4     <title>Contact</title>
5   </head>
6   <body>
7
8     <nav>
9       <a href="index.html">Home</a> |
10      <a href="courses.html">Courses</a> |
11      <a href="contact.html">Contact</a>
12    </nav>
13
14    <h1>Contact Us</h1>
15    <p>Email: info@institute.com</p>
16
17  </body>
18 </html>
```

Output :-

[Home](#) | [Courses](#) | [Contact](#)

Home Page

[Go to About Section](#)

About Us

Welcome to our coaching institute.

Follow us: [Facebook](#)

Technical Requirements :-

The website must consist of three separate HTML5 pages linked using relative paths. A semantic `<nav>` element should appear consistently on all pages for navigation. Anchor (`<a>`) tags must be used for page linking. At least one internal anchor link using `#section` and one external link (opening in a new tab) must be included. No CSS or JavaScript is allowed, and the structure should follow proper HTML5 semantics with readable indentation.

Problem 3: Student Registration Form with Input Types (Level-1)

Scenario

An institute wants a basic student registration form with built-in validation to reduce incorrect submissions.

Requirements

Create an HTML webpage that includes:

Create a form with following input types:

- text (Name)
- email
- tel
- number (Age)
- date

Use **HTML5 built-in validation**:

- required
- min, max
- pattern (for phone number)

Add submit button

Technical Constraints

- HTML5 only
- No JavaScript validation

Use proper <label> tags

Code :-

```
ay2 > p1 > p3 > index.html > html
1   <!DOCTYPE html>
2   <html>
3     <head>
4       <title>Student Registration</title>
5     </head>
6     <body>
7
8       <h2>Student Registration Form</h2>
9
10      <form>
11
12        <label for="name">Name:</label><br>
13        <input type="text" id="name" required><br><br>
14
15        <label for="email">Email:</label><br>
16        <input type="email" id="email" required><br><br>
17
18        <label for="phone">Phone:</label><br>
19        <input type="tel" id="phone" pattern="[0-9]{10}" required><br><br>
20
21        <label for="age">Age:</label><br>
22        <input type="number" id="age" min="18" max="60" required><br><br>
23
24        <label for="dob">Date of Birth:</label><br>
25        <input type="date" id="dob" required><br><br>
26
27        <button type="submit">Submit</button>
28
29      </form>
30
31    </body>
32  </html>
```

Technical Requirements :-

The form must be created using only HTML5 without JavaScript validation. Proper `<label>` tags must be associated with each input field. Advanced input types such as email, tel, number, and date must be used. Built-in validation attributes like required, min, max, and pattern must be implemented. The browser should automatically handle validation errors. The structure should be semantic, clean, and user-friendly.

Output:-

Student Registration Form

Name:

Email:

Phone:

Age:

Date of Birth:

 dd - mm - yyyy

Problem 4: Multi-Page Website with Breadcrumb Navigation (Level-2)

Scenario

A training portal website has multiple levels of pages and users often get confused about where they are. The company wants breadcrumbs for better navigation.

Requirements

Pages:

- Home
- Courses
- Web Development
- HTML Course

Implement:

- <nav> for main menu
- Breadcrumb navigation using anchor tags

Example:

Home > Courses > Web Development > HTML

Use: Hierarchical linking, Relative paths

Breadcrumb should update based on page hierarchy

Code :-

```
Day2 > p1 > p4 > index.html > html
1   <!DOCTYPE html>
2   <html>
3   <head>
4   |   <title>HTML Course</title>
5   </head>
6   <body>
7
8       <nav>
9           <a href="../../home.html">Home</a> |
10          <a href="../index.html">Courses</a>
11      </nav>
12
13      <p>
14          <a href="../../home.html">Home</a> >
15          <a href="../index.html">Courses</a> >
16          <a href="index.html">Web Development</a> >
17          HTML
18      </p>
19
20      <h1>HTML Course</h1>
21      <p>Welcome to HTML training.</p>
22
23  </body>
24  </html>
```

Output:-

[Home](#) | [Courses](#)

[Home](#) > [Courses](#) > [Web Development](#) > HTML

HTML Course

Welcome to HTML training.

Technical Requirements :-

This project must use multiple HTML5 pages organized in a hierarchical folder structure. A semantic `<nav>` element should be used for the main navigation. Breadcrumb navigation must be implemented using anchor tags and relative paths that reflect the correct page hierarchy. No CSS frameworks or JavaScript should be used. All links must work correctly without broken paths, and the structure should clearly represent real-world website navigation.

Problem 5: Course Enrollment Form with Advanced HTML Elements

Scenario

An online learning platform wants to enhance user experience by showing course progress, skill levels, and suggested inputs while filling the form.



Requirements

Create an enrollment form using:

- `<datalist>` for course suggestions
- `<progress>` to show enrollment completion
- `<meter>` to indicate skill level (Beginner–Advanced)

Include modern input types:

- email
- range
- number

Use built-in validation

Code :-

```

Day2 > p1 > p5 > index.html > html
  2   <html>
  6     <body>
10       <form>
11         <label>Email:</label><br>
12         <input type="email" required><br><br>
13
14         <label>Select Course:</label><br>
15         <input list="courses" required>
16         <datalist id="courses">
17           <option value="HTML">
18           <option value="CSS">
19           <option value="JavaScript">
20           <option value="React">
21         </datalist><br><br>
22
23         <label>Skill Level:</label><br>
24         <meter min="0" max="100" value="40"></meter>
25         (Beginner)<br><br>
26
27         <label>Experience Level:</label><b>
28         <input type="range" min="1" max="1<br>
29           <label>Number of Courses:</label><br>
30           <input type="number" min="1" max="5" required><br><br>
31
32           <label>Enrollment Progress:</label><br>
33           <progress value="70" max="100"></progress><br><br>
34
35           <button type="submit">Enroll</button>
36
37         </form>
38
39     </body>
40
41 </html>
42

```

The br element represents a line break in an element's text content.
 Widely available across most browsers.
[MDN Reference](#)

Output :-

Course Enrollment Form

Email:

Select Course:

Skill Level:
 (Beginner)

Experience Level:


Number of Courses:

Enrollment Progress:


Technical Requirements :-

The form must be built using only HTML5 semantic elements without JavaScript or CSS. Advanced elements like `<datalist>`, `<progress>`, and `<meter>` must be included to enhance user experience. Modern input types such as `email`, `range`, and `number` must be used with built-in validation attributes like `required`, `min`, and `max`. The browser should automatically display dropdown suggestions, progress bars, and skill-level indicators. The layout should be clean, structured, and user-friendly.