HTML5 – Day-2 Hands On – Chintha Ramakrishna

Problem 1

1. **Problem Statement** - Create two HTML pages (Home and Contact), link them using navigation links, and add a registration form with Name, Email, Password, Gender (radio buttons), Course (dropdown), and use required and placeholder attributes.

Code :-

Registration form :-

```html
<!DOCTYPE html>
<html>
<head>
    <title>Home Page</title>
</head>
<body>

<!-- Name Heading -->
<h1>Rama Krishna</h1>

<!-- Navigation Bar -->
<nav>
    <a href="index.html">Home</a> |
    <a href="contact.html">Contact</a>
</nav>

<hr>

<h2>Registration Form</h2>

<form>

<label>Name:</label><br>
<input type="text" placeholder="Enter your name" required>
<br><br>

<label>Email:</label><br>
```

```html
<input type="email" placeholder="Enter your email" required>
<br><br>

<label>Password:</label><br>
<input type="password" placeholder="Enter password" required>
<br><br>

<label>Gender:</label><br>
<input type="radio" name="gender" required> Male
<input type="radio" name="gender" required> Female
<br><br>

<!-- Data List -->
<label>Select Course:</label><br>
<input list="courses" placeholder="Select or type course" required>

<datalist id="courses">
    <option value="HTML">
    <option value="CSS">
    <option value="JavaScript">
    <option value="Python">
</datalist>
<br><br>

<input type="submit" value="Register">

</form>

</body>
</html>
```

Contact code:-

```html
<!DOCTYPE html>
<html>
<head>
    <title>Contact Page</title>
</head>
```

```
<body>

<!-- Navigation Bar -->
<nav>
    <a href="registration.html">Home</a> |
    <a href="contact.html">Contact</a>

</nav>

<h1>Contact Us</h1>

<p>Email: support@example.com</p>
<p>Phone: +91 9876543210</p>

</body>
</html>
```

Output :-

Rama Krishna

Home | Contact

_____

Registration Form

Name:
[Enter your name]

Email:
[Enter your email]

Password:
[Enter password]

Gender:
○ Male ○ Female

Select Course:
[Select or type course]

[Register]

Contact Us

Email: support@example.com

Phone: +91 9876543210

Explanation :-

- This project creates two HTML pages and connects them using navigation links.
- The navigation bar contains **Home** and **Contact** links to move between pages.
- The registration form collects user details like Name, Email, and Password.
- It also includes Gender selection using radio buttons and Course selection using a dropdown list.
- The `required` and `placeholder` attributes help users enter correct information before submitting the form.

Problem 2

2. **Problem Statement** - Create three HTML pages (Home, Courses, Contact) using only HTML5, add a semantic `<nav>` menu with working relative links on all pages, and include one internal anchor link and one external link.

Code :-

Index code :-

```html
<!DOCTYPE html>
<html>
<head>
    <title>Home - Coaching Institute</title>
</head>
<body>

<h1>ABC Coaching Institute</h1>

<!-- Navigation Menu -->
```

```
<nav>
    <a href="index.html">Home</a> |
    <a href="courses.html">Courses</a> |
    <a href="contact.html">Contact</a> |
    <a href="#about">About Us</a> |
    <a href="https://www.instagram.com" target="_blank">Instagram</a>
</nav>

<hr>

<h2>Welcome to Our Institute</h2>
<p>We provide quality education for students.</p>

<!-- Internal Section -->
<h2 id="about">About Us</h2>
<p>
ABC Coaching Institute offers professional training in programming,
web development, and competitive exams.
</p>

</body>
</html>
```

Courses code :-

```
<!DOCTYPE html>
<html>
<head>
    <title>Courses - Coaching Institute</title>
</head>
<body>

<h1>ABC Coaching Institute</h1>

<nav>
    <a href="index.html">Home</a> |
    <a href="courses.html">Courses</a> |
    <a href="contact.html">Contact</a>
</nav>

<hr>
```

```
<h2>Our Courses</h2>

<ul>
    <li>HTML & CSS</li>
    <li>JavaScript</li>
    <li>Python Programming</li>
    <li>Data Structures</li>
</ul>

</body>
</html>
```

Contact :-

```
<!DOCTYPE html>
<html>
<head>
    <title>Contact - Coaching Institute</title>
</head>
<body>

<h1>ABC Coaching Institute</h1>

<nav>
    <a href="index.html">Home</a> |
    <a href="courses.html">Courses</a> |
    <a href="contact.html">Contact</a>
</nav>

<hr>

<h2>Contact Us</h2>

<p>Email: abc@gmail.com</p>
<p>Phone: +91 9876543210</p>

</body>
</html>
```

Output :-

ABC Coaching Institute

Home | Courses | Contact | About Us | Instagram

Welcome to Our Institute

We provide quality education for students.

About Us

ABC Coaching Institute offers professional training in programming, web development, and competitive exams.

ABC Coaching Institute

Home | Courses | Contact

Our Courses

- HTML & CSS
- JavaScript
- Python Programming
- Data Structures

Home | Contact

Contact Us

Email: support@example.com

Phone: +91 9876543210

Explanation :-

- This project creates three HTML pages: Home, Courses, and Contact.
- The `<nav>` element is used to build a navigation menu on every page.
- The `<a>` tag connects pages using relative paths so users can move between them.
- One internal anchor link (`#section`) helps jump to a specific part of a page, and one external link opens a social media page.

- The website uses only HTML5 and keeps the code simple, readable, and well-indented.

Problem 3

3. **Problem Statement** - Create a student registration form using HTML5 that includes input types (text, email, tel, number, date), uses built-in validation (required, min, max, pattern), proper `<label>` tags, and a submit button without using JavaScript.

Code :-

Registration Form Code :-

```html
<!DOCTYPE html>
<html>
<head>
    <title>Student Registration Form</title>
</head>
<body>

    <h2>Student Registration Form</h2>

    <form>

        <!-- Name -->
        <label for="name">Name:</label><br>
        <input type="text" id="name" name="name" placeholder="Enter your name"
required><br><br>

        <!-- Email -->
        <label for="email">Email:</label><br>
        <input type="email" id="email" name="email" placeholder="Enter your
email" required><br><br>

        <!-- Phone -->
        <label for="phone">Phone Number:</label><br>
        <input type="tel" id="phone" name="phone"
            placeholder="10 digit number"
            pattern="[0-9]{10}"
            required><br><br>
```

```
        <!-- Age -->
        <label for="age">Age:</label><br>
        <input type="number" id="age" name="age"
               min="18" max="60"
               required><br><br>

        <!-- Date of Birth -->
        <label for="dob">Date of Birth:</label><br>
        <input type="date" id="dob" name="dob" required><br><br>

        <!-- Submit Button -->
        <input type="submit" value="Register">

    </form>

</body>
</html>
```

Output :-

Student Registration Form

Name:

Enter your name

Email:

Enter your email

Phone Number:

10 digit number

Age:

Date of Birth:

dd - mm - yyyy

Register

Explanation :-

- This form collects student details like Name, Email, Phone Number, Age, and Date of Birth.
- Different HTML5 input types such as `text`, `email`, `tel`, `number`, and `date` are used.
- The `required` attribute ensures that users must fill all fields before submitting.
- The `min`, `max`, and `pattern` attributes restrict invalid values like incorrect age or phone number format.
- The browser automatically shows validation errors without using JavaScript.

Problem 4

4. **Problem Statement** - Create a multi-page website (Home, Courses, Web Development, HTML Course) using HTML5 with a semantic `<nav>` menu and breadcrumb navigation (Home > Courses > Web Development > HTML) using relative paths and hierarchical linking.

Code :-

Training portal :-

```html
<!DOCTYPE html>
<html>
<head>
    <title>Home</title>
</head>
<body>

<nav>
    <a href="training portal.html">Home</a> |
    <a href="courses.html">Courses</a>
</nav>

<h2>Home</h2>

<p>Welcome to Training Portal</p>

</body>
</html>

Couses code:-
<!DOCTYPE html>
```

```
<html>
<head>
    <title>Courses</title>
</head>
<body>

<nav>
    <a href="training portal.html">Home</a> |
    <a href="courses.html">Courses</a>
</nav>

<p>
    <a href="training portal.html">Home</a> >
    Courses
</p>

<h2>Courses</h2>

<a href="web-development.html">Web Development</a>

</body>
</html>
```

Web development course code:-

```
<!DOCTYPE html>
<html>
<head>
    <title>Web Development</title>
</head>
<body>

<nav>
    <a href="training portal.html">Home</a> |
    <a href="courses.html">Courses</a>
</nav>

<p>
    <a href="training portal.html">Home</a> >
    <a href="courses.html">Courses</a> >
    Web Development
</p>
```

```
<h2>Web Development</h2>

<a href="html-course.html">HTML Course</a>

</body>
</html>
```

Html course code:-

```
<!DOCTYPE html>
<html>
<head>
    <title>HTML Course</title>
</head>
<body>

<nav>
    <a href="training portal.html">Home</a> |
    <a href="courses.html">Courses</a>
</nav>

<p>
    <a href="training portal.html">Home</a> >
    <a href="courses.html">Courses</a> >
    <a href="web-development.html">Web Development</a> >
    HTML Course
</p>

<h2>HTML Course</h2>

<p>Welcome to HTML Course Page</p>

</body>
</html>
```

Output :-

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

Home

Welcome to Training Portal

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

[Home](#) > Courses

Courses

[Web Development](#)

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

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

Web Development

[HTML Course](#)

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

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

HTML Course

Welcome to HTML Course Page

Explanation :-

- This project creates four connected HTML pages with different levels in a website structure.
- The `<nav>` element is used to build the main navigation menu on every page.
- Breadcrumb navigation shows the current page location using anchor (`<a>`) tags.
- Relative paths are used to link pages based on their hierarchy.

- Breadcrumb changes on each page to help users understand where they are in the website

Problem 5

5. **Problem Statement** - Create a Course Enrollment Form using HTML5 that includes `<datalist>` for course suggestions, `<progress>` to show enrollment completion, `<meter>` to display skill level (Beginner–Advanced), modern input types (email, range, number), and built-in validation without using JavaScript or CSS.

Code :-

Course Enrollment Form :-

```html
<!DOCTYPE html>
<html>
<head>
    <title>Course Enrollment Form</title>
</head>
<body>

<header>
    <h2>Course Enrollment Form</h2>
</header>

<main>
    <form>

        <!-- Name -->
        <label for="name">Full Name:</label><br>
        <input type="text" id="name" required><br><br>

        <!-- Email -->
        <label for="email">Email:</label><br>
        <input type="email" id="email" required><br><br>

        <!-- Course -->
        <label for="course">Select Course:</label><br>
        <input list="courses" id="course" required>

        <datalist id="courses">
            <option value="HTML">
```

```html
            <option value="CSS">
            <option value="JavaScript">
            <option value="Python">
        </datalist>
        <br><br>

        <!-- Skill Range -->
        <label for="skill">Skill Level:</label><br>
        <input type="range" id="skill" min="1" max="3" value="1">
        <span id="levelText">Beginner</span>
        <br><br>

        <!-- Meter -->
        <label>Skill Meter:</label><br>
        <meter id="skillMeter" min="1" max="3" value="1"></meter>
        <br><br>

        <!-- Progress -->
        <label>Progress:</label><br>
        <progress id="skillProgress" max="3" value="1"></progress>
        <br><br>

        <input type="submit" value="Enroll">

    </form>
</main>

<script>
    const skill = document.getElementById("skill");
    const meter = document.getElementById("skillMeter");
    const progress = document.getElementById("skillProgress");
    const levelText = document.getElementById("levelText");

    skill.addEventListener("input", function () {
        meter.value = skill.value;
        progress.value = skill.value;

        if (skill.value == 1) {
            levelText.textContent = "Beginner";
        } else if (skill.value == 2) {
            levelText.textContent = "Intermediate";
        } else {
            levelText.textContent = "Advanced";
```

```
        }
    });
</script>

</body>
</html>
```

Explanation :-

- The form collects user details like name, email, age, and selected course using modern HTML5 input types.
- The `<datalist>` element provides dropdown suggestions for course selection.
- The `<meter>` element visually shows skill levels such as Beginner, Intermediate, and Advanced.
- The `<progress>` element displays enrollment completion percentage as a progress bar.
- Built-in validation like `required`, `min`, and `max` ensures correct input without JavaScript.