**MEAN STACK DEVELOPMENT**

**ASSIGNMENT – 1**

**226M1A0507**

**PROBLEM – 1(507\_1):** Creating a basic **Cat App Interface** using **HTML 5**.

**DESCRIPTION:**

1. **Basic Setup:**
   * **“DOCTYPE”** declaration.
   * Opened the main HTML document with the language set to English.
   * The **<head>** Section contains meta tags for character encoding and viewport settings, and set the title of the document to **Assignment–1** that will be displayed in the browser’s tab.
2. **Body Content:**

* The “**body”** consists of semantic tags like **header** and **footer**.
* The **“header”** contains the main title (CatPhotoApp) of the page.
* The **“body”** again contains three different sections (Cat Photos, Things that cat love & hate).
* **CatList** shows the two sections that what a cat loves or hates.
* Created **unordered** and **ordered** lists and also included **figures** along with their caption describing what cats love and hate respectively.

1. **Form Section:**

* Created a form inside the footer using the **<footer>** and **<form>** tags.
* Grouped related form elements within **<fieldset>** tags to create visual boxes.

**Within the field sets, we have**

* Radio buttons for indoor/outdoor cat type.
* Checkboxes for the cat's personality traits.
* A text input for a placeholder cat photo URL.
* A submit button to send the form data.

**TAGS USED IN THE CODE:**

* **<!DOCTYPE html>:** This declaration defines the document type and version of HTML. It's important to place this at the beginning of your HTML document to ensure proper rendering.
* **<html lang="en">:** This tag indicates the beginning of an HTML document. The lang attribute specifies the language of the document's content (in this case, English).
* **<head>:** This element contains meta-information about the document, such as the character set, viewport settings, and title.
* **<meta charset="UTF-8">:** This meta tag specifies the character encoding for the document, ensuring it correctly displays characters from different languages.
* **<meta name="viewport" content="width=device-width, initial-scale=1.0">:** This meta tag sets the viewport to make the website responsive, ensuring it looks good on all devices.
* **<title>Assignment-1</title>:** This tag sets the title of the document, which is displayed in the browser's title bar or tab.
* **<body>:** This element contains the content of the HTML document that will be displayed on the web page.
* **<header>:** This tag represents the introductory content, typically a group of introductory or navigational aids. Here, it contains the main heading of the page.
* **<h1>:** This heading tag represents the main title of the page. It's used for the highest-level heading.
* **<section>:** This element defines sections in a document, such as chapters, headers, footers, or any other thematic grouping of content.
* **<h2>:** This heading tag represents a second-level heading. It's used to define sub-sections under the main heading.
* **<p>:** The paragraph tag defines a paragraph of text.
* **<a href="URL">:** This tag creates a hyperlink, which is used to link from one page to another. The href attribute specifies the URL of the page the link goes to.
* **<img src="URL" alt="Description" width="300" height="200">:** This tag embeds an image in the document. The src attribute specifies the URL of the image, the alt attribute provides alternative text for the image, and the width and height attributes set the dimensions of the image.
* **<ul>:** This tag defines an unordered list. It's used to group a set of items that have no particular order.
* **<li>:** This tag defines a list item within an unordered or ordered list.
* **<figure>:** This tag is used to encapsulate media content, such as images, diagrams, or code snippets, along with a <figcaption>.
* **<figcaption>:** This element represents a caption or legend for the content of the <figure> element.
* **<ol>:** This tag defines an ordered list. It's used to group a set of items that have a specific order.
* **<footer>:** This tag represents the footer for its nearest sectioning content or sectioning root element. It typically contains information about the author, copyright information, or links to related documents.
* **<form>:** This element defines an HTML form for user input.
* **<fieldset>:** This tag is used to group related elements within a form. It creates a box around the grouped elements.
* **<legend>:** This element represents a caption for the content of its parent <fieldset>.
* **<input type="radio">:** This input element defines a radio button, allowing users to select one option from a set.
* **<input type="checkbox">:** This input element defines a checkbox, allowing users to select one or more options from a set.
* **<input type="text" placeholder="Cat photo URL">:** This input element defines a single-line text input field. The placeholder attribute specifies a short hint that describes the expected value of the input field.
* **<input type="submit" value="Submit">:** This input element defines a button for submitting the form. The value attribute specifies the label on the button.

**PROBLEM – 2(507\_2):** Creating a **Registration Form** using **HTML 5**.

**DESCRIPTION:**

This HTML code represents a basic registration form that collects user information with a well-structured layout. The form includes text inputs for the user's first name, last name, email, and password, ensuring essential fields are marked as required. It allows users to select an account type (Personal or Business) using **radio** buttons, upload a profile picture, and input their age through a **number** field. A dropdown menu asks how the user heard about the service, and a **textarea** provides space for a brief bio. Users must accept the Terms and Conditions via a **checkbox** before submitting the form. A **submit button** enables the form submission. The page includes a **header** with a **title** and instructions, and a **footer** that provides links to privacy policies, contact information, and copyright details, including an author reference.

**PROBLEM – 2(507\_3):** Creating a Survey Form about a Web Page using HTML 5

**DESCRIPTION:**

This HTML code creates a **Survey Form** to collect user feedback about a web page, structured with clear and logical sections. The form begins by asking for the user's **name** and **email** (both required), with an optional field for age. A dropdown menu allows users to select their **current role**, such as student, job holder, freelancer, or other.

The form then asks if users would recommend the web page to friends using **radio buttons** with options like "Definitely," "Maybe," or "Not Sure." Another dropdown captures the user's **favorite feature** of the web page, offering choices such as "Projects," "Courses," "Community," or "Resources."

For improvements, users can check multiple options, ranging from front-end/back-end projects to additional courses, forums, or community meetups. A **textarea** at the end allows users to leave **comments or suggestions** for further improvements.

The form concludes with a **submit button**. A **footer** provides information about the creator, including links to policies, contact details, and the author’s LinkedIn profile. The page is simple, responsive, and user-friendly, ensuring effective feedback collection.

**PROBLEM – 4(507\_4):** Creating a basic **Café Menu Page** using **HTML 5.**

**DESCRIPTION:**

This HTML code showcases a simple Cafe Menu for "Chateau Cafe" with a clean and centered layout. The page begins with the cafe name and establishment year, followed by a horizontal line for separation.

**The menu is divided into two sections:**

1. **Coffee:** Lists various coffee options (e.g., French Vanilla, Caramel Macchiato, Mocha) with corresponding prices. A small coffee cup image is included for a visual touch.
2. **Desserts:** Features dessert options (e.g., Donut, Cherry Pie, Cheesecake) with their prices. A dessert-related image is added to complement the section.

At the bottom, a horizontal line separates the menu from the footer, which includes links to the cafe's policies, contact information, and copyright details. A hyperlink to a website image offers a visual experience of the cafe's entrance.

**PROBLEM – 5(507\_5):** Creating a basic **Quiz Page on HTML and CSS** using **HTML 5.**

**DESCRIPTION:**

This HTML code creates a simple quiz webpage on HTML and CSS. It starts with the DOCTYPE declaration for HTML5 and includes meta tags for character encoding and viewport settings. The **<header>** section contains the main title of the quiz. The **<main>** section includes a form for student information (name, email, and date of birth) and two sections for quiz questions on HTML and CSS. The HTML section has two true/false questions, while the CSS section has a dropdown question about the CSS margin property. There's also a **textarea** for additional questions and a submit button. The <footer> section provides links to "About Us," "Privacy Policy," "Contact Us," "FAQ," and "Terms & Conditions," along with contact information and a link to an external website. The code is well-structured and uses semantic HTML elements to organize the content effectively.