Web Programming – Practical Assignment

Design and Development of a Responsive Website

1. Assignment Overview

Group Size: 3 students

Technologies: HTML5, CSS3

2. Assignment Description

In this assignment, students are required to design and develop a small, responsive website based on a topic of their choice. The website should present a clear purpose, provide an appropriate user interface, and demonstrate the practical application of the HTML5 and CSS3 concepts covered during the course.

The assignment focuses on developing a functional, well-structured, and visually consistent website using fundamental web technologies, without relying on front-end frameworks or back-end services.

3. Functional Requirements

The website must include, at a minimum, the following pages and features:

3.1. Landing Page

- Introduce the selected topic, product, service, or initiative.
- Include a clear heading, relevant content, and appropriate images or other visual elements.
- Provide navigation links to the other pages.
- Include at least one call-to-action element, such as a button or link, that guides users to a relevant page or section.
- Organize the content using appropriate semantic HTML elements.

3.2. Sign-Up Page

- Provide a registration form containing appropriate input fields for the selected website concept.
- Include relevant form controls, such as text fields, email inputs, password fields, checkboxes, or selection lists, as appropriate.
- Use suitable HTML5 attributes to validate user input.
- Ensure that browser-based form validation provides appropriate feedback when the submitted data does not meet the specified requirements.
- Prevent form submission when required fields are missing or validation constraints are not satisfied.

3.3. Additional Content Page

- Include at least one additional page relevant to the chosen topic, such as an About, Services, Products, or Contact page.
- Ensure that the page contains meaningful content and follows the website's overall design.

3.4. Navigation

- Provide consistent navigation across the website.

Students are encouraged to extend their websites with additional pages or features that are relevant to their chosen topics.

4. Technical Requirements

HTML5

- Use semantic HTML elements where appropriate.
- Organize the content using a logical document structure.
- Use appropriate form elements, input types, and attributes.

CSS3

- Apply consistent styling, including colors, typography, spacing, and visual elements.
- Use CSS layout techniques such as Flexbox or Grid where appropriate.
- Ensure that the website is responsive and usable on different screen sizes.
- Avoid unnecessary repetition by organizing styles appropriately.

5. Implementation Constraints

- The website must be developed using HTML5 and CSS3.
- Front-end frameworks and libraries, such as Bootstrap, React, and jQuery, must not be used.
- No back-end implementation or database integration is required.
- All pages and features must be accessible through the website's navigation and work correctly in a modern web browser.

6. Assessment Criteria

The assignment will be assessed according to the following criteria:

Criterion	**Weight**
HTML structure and semantic markup	4 points
CSS styling, layout, and responsiveness	4 points
Functional completeness and usability	2 points
Total	**10 points**

7. General Instructions

- Students must work in groups of three.
- Each group must register its members' names with the respective instructor during the period from **November 15 to November 19**.
- Each group must select a distinct website topic and obtain the instructor's approval.
- The implementation must reflect the group members' understanding of the concepts covered in the course.
- All submitted code must be understandable, properly organized, and attributable to the group's own work.
- Each group member must be able to explain any part of the project implementation.

8. Discussion Schedule

- Project discussions will take place during the period from **November 29 to December 3**.
- Each group must attend its discussion session within its **designated time slot and assigned category only**.
- All group members must attend the discussion and be prepared to present their project and explain its implementation.