Mirpur University of Science and Technology (MUST), Mirpur-10250 (AJK), Pakistan

Department of Software Engineering

Course Title	Web Engineering Theory		
Program Title	B.Sc. Software Engineering	Instructor	Dr. Shamila Nasreen
Examination	Assignment-1	Max Marks	20
Date	21-Nov-2025	Deadline	28-Nov-205
CLO	2	PLO	3
Domain	Cognitive	BTL	3

Lab Assignment 01: Build a Complete Webpage Using HTML, Semantic Tags, CSS, Flexbox, Grid & Tables and

Scenario: "**Student Resource Portal**" Web Page

Overview

You are hired as a junior web designer to create a **Student Resource Portal** for a fictional institute called **BrightFuture Learning Center**. The institute wants a simple webpage layout showcasing student resources, announcements, and course details. The purpose of this assignment is to ensure you apply **HTML structure**, **semantic tags**, **CSS rules**, and **layout techniques** including **Flexbox**, **Grid**, and **HTML Tables**.Top Navigation Bar

Instructions

1. HTML Structure & Semantic Tags

Your webpage must use the following semantic elements:	Also use standard HTML tags such as:
`<header>` `<nav>` `<main>` `<section>` `<article>` `<aside>` `<footer>`	- Headings (`h1–h4`) - Paragraph (`<p>`) - Lists (`<ul>` or `<ol>`) - Images (`<img>`) - Links (`<a>`)

2. Header Section

*   Contains the site name and logo

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- Includes a navigation bar using `<nav>` that include links such as Home, Features, courses, Announcements, and contact. Top Navigation Bar: Include links to different sections of the page (e.g., Home, Features, Announcements, courses, Contact).

- **Logo Creation:** Use an online tool to create a logo for your company. There are various free tools available that can assist you in designing a professional logo.

3. Main Section

Main content must be divided into two columns using **CSS Grid**:

- **Left Column (Main Content Area)** containing:
  - A hero section with heading (Welcome to Your Learning Dashboard) + paragraph (e.g Access important resources, stay updated, and manage your academic journey seamlessly.) + an image kind of banner showing students group or learning environment.
  - A features section using **Flexbox** to align feature cards looks like below:
  - Create a **Features Section** where three feature boxes are aligned horizontally using `display: flex;`.


Key Features

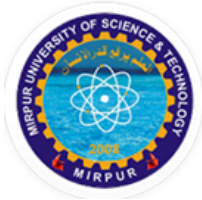| Online Courses | Student Forums | Download Notes |
| Access recorded lectures and study materials anytime. | Engage in discussions and collaborate with peers. | Get lecture slides, notes, and additional resources. |

  - A resources table using (`<table>`) that include following:
    - Course Name
    - Duration
    - Instructor
    - Mode (Online/Hybrid)

Available Courses

Course Name	Duration	Instructor	Mode
HTML & CSS Fundamentals	6 Weeks	Dr. Shamila Nasreen	Online
JavaScript Basics	8 Weeks	Engr. Asim Javaid	Hybrid
Data Structures	10 Weeks	Ms. Anum Tariq	Online

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- **Right Column (Sidebar)** using `<aside>`:
    - Announcement list such as:
        - New semester starts on March 1st.
        - Mid-term exams begin next week.
        - Submit assignments by Friday.
    - A small profile card (image + text) that is an image of the student itself and his/her details like BSc software Engineering and Name: Sohail Ahmed

4. Footer

- Contact information
- Copyright
- Social links (using `<a>` tags)

5. CSS Rules

    Your CSS file must include:

- Styling for header, main, footer
- Flexbox styling for features section
- Grid styling for main layout
- Table styling (border, padding)
- Sidebar styling
- Basic colors, fonts, margins, and padding

6. Project Naming:
    Name your project folder with your company name followed by your student ID, using the format:
    CompanyName_FA23-BSE-XXX
    (e.g., Student_Portal_FA23-BSE-001).

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Grading Rubric for Lab Assignment 01

Rubric Table

Criteria	Excellent	Satisfactory	Needs Improvement	Marks
1. HTML Structure & Semantic Accuracy (6 Marks)	Uses all required semantic tags correctly: `<header>`, `<nav>`, `<main>`, `<section>`, `<article>`, `<aside>`, `<footer>`. Proper use of headings, paragraphs, lists, images, links, and tables. *(5–6 marks)*	Mostly correct structure; minor errors or missing semantic tags. *(3–4 marks)*	Incorrect or minimal use of semantic elements; poor structure. *(1–2 marks)*	____ / 6
2. CSS Styling, Flexbox & Grid Implementation (7 Marks)	External CSS used correctly. Main layout uses Grid for two columns. Flexbox applied properly to features. Good visual presentation. *(6–7 marks)*	CSS mostly correct; layout works with minor issues. Flexbox/Grid partially implemented. *(4–5 marks)*	Weak or missing CSS; Flexbox/Grid incorrect or not used. *(1–3 marks)*	____ / 7
3. Completion of Required Content (5 Marks)	All required sections present: Header + logo, Navigation, Hero section, Features (Flexbox), Course table, Sidebar with announcements + profile card, Footer with social links. *(4–5 marks)*	Most sections included but with missing details or weak content. *(2–3 marks)*	Several sections missing OR irrelevant content. *(1 mark)*	____ / 5
4. Project Naming & File Organization (2 Marks)	Correct naming format: **CompanyName_FA23-BSE-XXX**. Files organized (HTML + CSS separate). *(2 marks)*	Minor naming or organization issues. *(1 mark)*	Incorrect naming; disorganized files. *(0 marks)*	____ / 2

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