

Web Design & Development

Lab-Manual

Department of Computer Science University of Baltistan, Skardu

**LAB#01: A basic HTML page showcasing structured content**

**Objective:** Learn the basics of HTML and structure a simple web page.  
**Task:**

1. Set up a basic HTML document.
2. Add elements like headings, paragraphs, images, and lists.
3. Practice with DOCTYPE, <html>, <head>, and <body> tags.

**Solution:**

**Output:**

**LAB#02: A webpage with links and embedded images.**

**Objective:** Understand linking and embedding images.  
**Task:**

1. Add internal and external links.
2. Embed images using the <img> tag.
3. Experiment with attributes like alt, target, and href.

**Solution:**

**Output:**

**LAB#03: A simple form for data entry.**

**Objective:** Learn to create interactive HTML forms for user input.  
**Task:**

1. Create a form with input fields, checkboxes, radio buttons, and a submit button.
2. Explore form attributes like action, method, and placeholder.

**Solution:**

**Output:**

**LAB#04: A styled HTML page with CSS applied to various elements.**

**Objective:** Apply CSS to style HTML content.  
**Task:**

1. Apply basic CSS rules using inline, internal, and external styles.
2. Style text, colors, and backgrounds.

**Solution:**

**Output:**

**LAB#05: A webpage that uses the Box Model to layout content neatly.**

**Objective:** Understand and utilize the CSS Box Model.  
**Task:**

1. Experiment with padding, margin, and border.
2. Adjust width and height for layout control.

**Solution:**

**Output:**

**LAB#06: A responsive layout using Flexbox.**

**Objective:** Implement CSS Flexbox for responsive layouts.  
**Task:**

1. Use Flexbox properties for organizing content in rows and columns.
2. Apply alignment properties like justify-content and align-items.

**Solution:**

**Output:**

**LAB#07: A structured page layout using CSS Grid.**

**Objective:** Create complex layouts using CSS Grid.  
**Task:**

1. Define grid containers and items.
2. Experiment with grid-template-rows, grid-template-columns, and gap.

**Solution:**

**Output:**

**LAB#08: A responsive webpage that adapts to various screen sizes.**

**Objective:** Apply media queries for responsive design.  
**Task:**

1. Create breakpoints for different screen sizes.
2. Adjust layouts and fonts for mobile, tablet, and desktop.

**Solution:**

**Output:**

**LAB#09: A page with simple JavaScript interactivity.**

**Objective:** Learn basic JavaScript and apply it to web pages.  
**Task:**

1. Add a script to display alerts and modify content.
2. Use console.log() for debugging.

**Solution:**

**Output:**

**LAB#10: Webpage with interactive buttons and form elements.**

**Objective:** Understand JavaScript functions and event handling.  
**Task:**

1. Write functions for basic calculations.
2. Use onclick, onmouseover, and onkeyup events.

**Solution:**

**Output:**