



CET-223

Web Technologies

Experiment # 13

Experiment Title

Building a Webpage with HTML, CSS, JavaScript, and Bootstrap

Assessment of CLO(s): 04

Performed on _____

Student Name:			
Roll No.		Group	
Semester		Session	

Total (Max)	Performance (03)	Viva (03)	File (04)	Total (10)
Marks Obtained				
Remarks (if any)				

Experiment evaluated by

Instructor's Name	Engr. Bilal Iqbal		
Date		Signature	

Objective:

Design a responsive and interactive website for a fictional software house that provides services like web development, digital marketing, app development, and consulting. The website should introduce the company, detail services offered, showcase completed projects, and include client testimonials and a contact form.

Requirements:

1. Page Structure:

- Use HTML to structure the page and Bootstrap for layout and responsiveness.
- Include the following main sections:
 - **Header** with navigation (Home, Services, Portfolio, Testimonials, Contact).
 - **Hero Section** with a large banner, a tagline, and a call-to-action button.
 - **About Us Section:** Brief introduction about the company's mission, values, and history.
 - **Services Section:** List core services, such as:
 - Web Development
 - Digital Marketing
 - App Development
 - IT Consulting
 - UI/UX Design
 - **Portfolio Section:** A gallery or carousel displaying completed projects with images and brief descriptions.
 - **Testimonials Section:** Carousel of client reviews.
 - **Contact Section:** Contact form for inquiries and social media links.

2. Styling:

- Use Bootstrap's grid system and utility classes for layout and responsiveness.
- Add custom CSS for colors, typography, hover effects, and branding.
- Use a professional color scheme, fonts, and hover effects to align with the company's brand.

3. Interactivity:

- Implement JavaScript for interactivity:
 - Smooth scroll between sections when navigation links are clicked.
 - A modal for more details in the Portfolio section, displaying project images, descriptions, and technologies used.
 - A "Back to Top" button that appears when the user scrolls down.

4. Components:

- Use Bootstrap's **Card** component for the Services section.
- Use Bootstrap's **Carousel** component for the Testimonials section.
- Use Bootstrap's **Form** components in the Contact section for form fields.

Instructions:

1. Setup:

- Link Bootstrap CSS and JavaScript libraries in the HTML file.
- Create separate CSS and JavaScript files for custom styles and interactive elements.

2. **HTML:**

- Structure the HTML file with semantic elements for easy accessibility.
- Use Bootstrap classes to create a responsive layout across all sections.

3. **CSS:**

- In the CSS file:
 - Define a color palette and typography for a professional look.
 - Add hover effects to service cards, portfolio images, and buttons.
 - Style the Contact form with clear fields, buttons, and error messages.

4. **JavaScript:**

- Implement smooth scrolling functionality for navigation links.
- Add a modal popup for each portfolio item to show additional details when clicked.
- Write JavaScript for a "Back to Top" button that appears on scroll.

5. **Testing:**

- Test the website's responsiveness across various screen sizes and devices.
- Check the functionality of all JavaScript features, including modals and smooth scroll.
- Validate the Contact form to ensure it functions properly, displaying error messages if required fields are left blank.

Optional Enhancements:

- Add animations to the Hero section for a dynamic entry effect.
- Include an FAQ section with collapsible answers.

Submission:

Submit the complete code which contains the following and attach the screen shots of the websites.

1. **HTML File** (index.html)
2. **CSS File** (style.css)
3. **JavaScript File** (script.js)
4. A brief document describing the design choices, challenges, and any special functionality.