

**WEB PROGRAMMING (100458-11001)**  
**PROJECT BRIEF**

<b>ASSESSMENT DETAILS</b>	
<b>TITLE/NAME</b>	GROUP PROJECT
<b>WEIGHT</b>	20%
<b>DATE/DEADLINE</b>	Please refer below
<b>INSTRUCTIONS</b>	Please refer below
<b>DELIVERABLES</b>	Written Report (Final Report) - Individual Presentation

## GROUP PROJECT: WEB PROGRAMMING

### Project Idea: Development of an Interactive E-commerce Website

#### Project Description:

Each group of students will design and develop a fully functional e-commerce website. The website should allow users to browse products, add items to a cart, proceed through a checkout process, and manage their accounts. The project should incorporate both front-end and back-end technologies, covering the key concepts taught in the course.

#### Key Features:

1. Homepage: A landing page with featured products, promotions, and a navigation menu.
2. Product Catalog:
  - Display products with images, descriptions, and prices.
  - Implement search and filtering options.
  - Implement product categorization.
3. Shopping Cart:
  - Allow users to add, remove, and update items in their cart.
  - Calculate the total cost, including taxes and shipping.
4. User Authentication:
  - User registration and login functionality.
  - User profile management.
5. Checkout Process:
  - Secure checkout process.
  - Integration with a mock payment gateway.
6. Admin Panel (Optional):
  - Ability to add, edit, and remove products.
  - Manage user accounts and orders.

#### Technology Stack:

- Front-end: HTML, CSS, JavaScript
- Back-end: A server-side language.
- Database: MySQL or similar

**Project Deliverables:**

1. Functional Website: A fully operational e-commerce website.
2. Source Code: Well-documented code.
3. Project Report:
  - Project overview and objectives.
  - Description of the architecture and design.
  - Explanation of key features and technologies used.
  - Challenges faced and solutions implemented.
  - Individual contributions of each team member.
4. Presentation: A presentation showcasing the website's features and functionality.

**Assessment Guidelines:**

Contribution of marks to coursework:

The project deliverables\* contribute 20% to the coursework component as shown below:

Tasks	Marks
1. <b>Functional Requirements:</b> <ul style="list-style-type: none"><li>a. Completeness and correctness of implemented features.</li><li>b. Smooth and error-free user experience.</li><li>c. Adherence to project specifications.</li></ul>	30
2. <b>Technical Design and Code Quality:</b> <ul style="list-style-type: none"><li>a. Proper database design and implementation.</li><li>b. Clean, well-documented, and maintainable code.</li><li>c. Use of appropriate data structures and algorithms.</li><li>d. Security considerations (e.g., input validation, password hashing).</li></ul>	30
3. <b>User Interface and Design:</b> <ul style="list-style-type: none"><li>a. Visually appealing and user-friendly design.</li><li>b. Responsive layouts that adapt to different screen sizes.</li><li>c. Effective use of HTML, CSS, and JavaScript.</li></ul>	20
4. <b>Project Report</b> <ul style="list-style-type: none"><li>a. Clear and concise project report.</li></ul>	10
5. <b>Presentation</b> <ul style="list-style-type: none"><li>a. Well-organized and engaging presentation.</li><li>b. Demonstration of teamwork and individual contributions.</li></ul>	10
<b>Total Marks</b>	<b>100</b>

### Group Formation

Students will be assigned to groups of four members. Each member is expected to actively contribute and participate throughout the project. Team members are required to share ideas and assist each other in completing the project.

### Important Deliverables Timeline

Item Submission	Deadline	
Group Formation and Propose Title	Week11	<b>14<sup>th</sup>. May 2025</b>
Final Report	Week 14	<b>4<sup>th</sup>. June 2025</b>
Project Presentation	Week 14	<b>4<sup>th</sup>. June 2025</b>