



# Assignment#2

Course Name: 966121 Digital Industry Process 1

Division of Digital Industry Integration (DII)

College of Arts, Media and Technology

Chiang Mai University

---

## Group Assignment (2 – 3 members)

### 1. Learning Outcome

- Students will be able to use a website template to develop an e-commerce website using HTML, CSS, and JavaScript.
- Students will be able to develop dynamic web pages using Asynchronous JavaScript (AJAX), JSON, Node.js + Express, and SQLite.

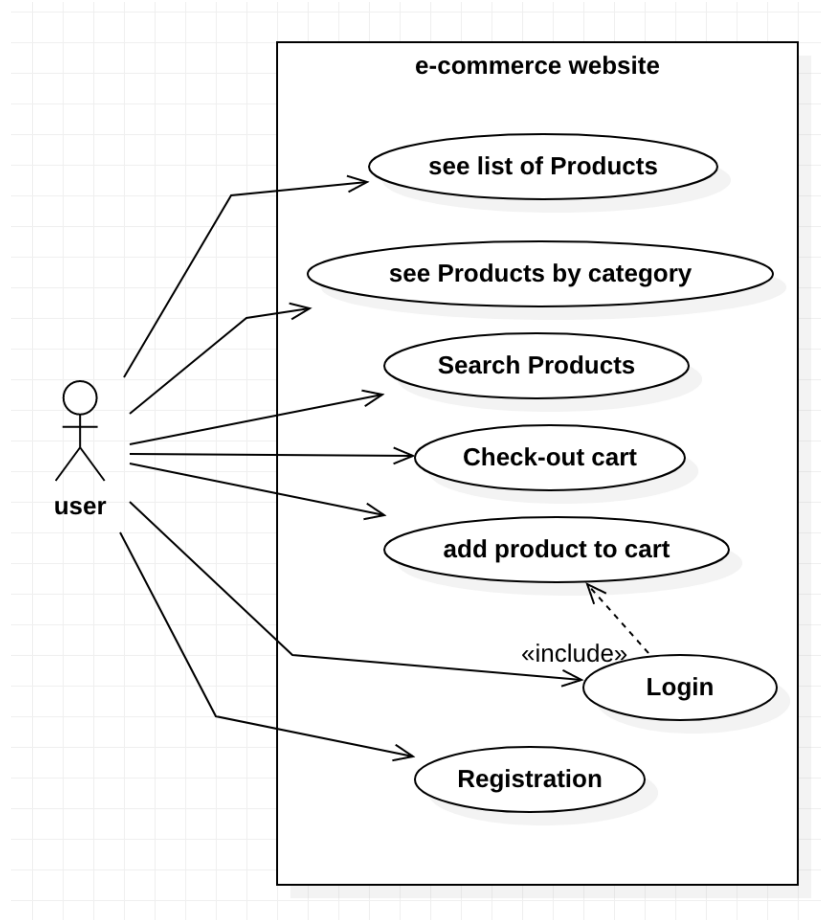
### 2. Descriptions

- Work as a team to brainstorm and decide on a product idea for your online sales project.
- Develop an e-commerce website using a “Free Business Website Template” downloaded from the internet.
- Integrate the following web development technologies and frameworks into your project:
  1. HTML
  2. CSS
  3. JavaScript
  4. JS library (such as jQuery)
  5. AJAX and JSON
  6. Bootstrap
  7. Node.JS + Express
  8. SQLite
  9. Responsive web design
  10. API and Microservice concepts
  11. MVC

**Remark:** You are not required to use all the technologies listed—use what is appropriate for your project scope and objectives.

### 3. Features to develop

- Implement at least three of the most important and required features for e-commerce, for example:



#### A. Product Catalog by Category

- Functionality: System displays products by category
  - User Action:
    - o The users clicks on list/tap/menu of product categories.
  - System Response:
    - o The system retrieves products from database based on the selected product category.
    - o The system displays a list of corresponding products.
- Functionality: Search Products (by product name, description, etc.)
  - User Action:
    - o The user enters a search keyword.
    - o The user clicks on the search button.
  - System Response:
    - o The system retrieves products from database based that match the search keyword.
    - o System displays a list of matching products.

## **B. Add Product to Cart**

- Functionality: The user can select products and add them to the cart.
- User Action:
  - o The user clicks the “add to cart” button.
- System Response:
  - o The system adds the selected product into the CART table in the database.
  - o The system notifies the user that the product has been successfully added to the cart.

## **C. Check out Cart**

- Functionality: The user can proceed to check-out the items in the cart.
- User Action:
  - o The user clicks the “check-out cart” button.
- System Response:
  - o The system displays the checkout page with a list of products added to the cart, including the total price.
- User Action:
  - o The user can remove items from the checkout list.
  - o The user clicks the “Pay” button.
- System Response:
  - o The system displays the confirmation of the total price before initiating the payment process.

## **Optional Features (To Ensure Application Logic Completeness)**

### **D. User Registration/Member Login**

- Functionality:
  - o The system may require users to register or login before they can add products to their cart.
- Purpose:
  - o This allows the system to associate cart activity with specific users or members.
  - o It enables tracking and management of user-specific products.

### **E. Backend System for Product Management**

- Functionality:
  - o Develop a simple administrative page to input and manage product information into database.
- Purpose:
  - o Enables product data maintenance by administrators of staff.
  - o Supports adding, updating, or removing product details.

#### **4. Scoring Criteria**

- Core Features (24 points total)
  - 8 points for each of the three implemented core features.
    - Product Catalog by Category
    - Add Product to Cart
    - Check Out Cart
  - Evaluation Criteria:
    - Completeness – Quality of both design and implementation.
    - Complexity – Level of difficulty in implementation.
    - Technique and Technologies – Appropriateness and effectiveness of tools, frameworks, or methods used.
- Optional Features (6 points total)
  - 3 points for each implemented optional feature:
    - User Registration / Member Login
    - Backend System for Product Management
- Presentation (6 points)
  - Clarity, organization, and overall effectiveness of the project presentation.

#### **5. Advice and Support**

- Chat Support via MS Teams:
  - Students can ask questions or seek guidance through the MS Teams chat.
  - Note: Screenshots of code and program outputs are required when asking for support.
- Office Hours:
  - Available from 9:00 AM to 12:00 PM, Monday to Friday.
  - Appointment required prior to visiting.

#### **6. Project Presentation**

- Presentation Requirement:
  - Students must present their mini project in class.
- Schedule:
  - Date: **June 28, 2025**
  - Time: **9.00 AM – 12.00 AM**
  - Room: T/B