# SUMMARY OF THE PROJECT

# METHODOLOGY AND WORKING

### Requirements Gathering:

- Identify core features needed for the e-commerce system. In this case, we can focus on the following:
  - User authentication (login/registration)
  - Product listing and browsing
  - Cart management (adding/removing products)
  - Checkout process
  - Order history (simple record-keeping)

### **System Design:**

- •The system will have a simple text-based interface that allows the user to interact with the system.
- •We'll use data structures like arrays or linked lists to store user information, product information, and order details.
- •We'll avoid complex database systems and instead store data temporarily (in memory) during the session.
- •Functions and modularity will be important in organizing the code.

### 1. User Interface:

- 1. The system will have a text-based menu to navigate between different functionalities such as login, view products, add to cart, view cart, checkout, etc.
- 2. Input validation will be essential to ensure the system behaves as expected.

### 2. Data Storage:

- 1. User details, product details, and order history can be stored in arrays or structs.
- 2. We can keep product inventory and order history in memory (in arrays, structs, or linked lists) to simulate the database.

# 3. Implementation Plan:

- 1. Start with the basic structure and define functions for adding/removing products, registering users, adding to cart, etc.
- 2. Later, handle order processing and display a summary of the order.

## User Registration and Login:

- •The user registers by providing basic details (e.g., username, password).
- •On the login screen, the user is authenticated by matching the username and password against stored data.

## •Product Listing:

- •Once logged in, the user can view available products.
- •Each product has a name, ID, price, and description.
- •Cart Management:
- The user can add products to their cart by specifying the product ID.
- •The cart will store product IDs and quantities.
- The user can view the cart at any time and remove products if needed.

### •Checkout Process:

- •At checkout, the system will calculate the total price of all items in the cart.
- •The user confirms the order, and the system records the order.

# Order History:

- Once an order is placed, it's saved to an order history list.
- •The user can view their past orders.