

# Bangladesh Open University School of Science & Technology Bachelor of Science in Computer Science and Engineering

# **Laboratory Report**

Course Title: System Analysis & Design Lab

Course Code: CSE22P5

Lab Report No.: 03

Lab Report Name: Create a class diagram of an online processing system

# Submitted by

Md. Nazmul Huda Alamin

Student Id No.: 20-0-52-801-031

Session: 2020-2021

2nd Year 2nd Semester 2022

Term: 222

Dhaka Regional Center

Submitted to

Samrat Kumar Dey

Lecturer

School of Science and Technology

Bangladesh Open University

Date of Submission

29 March 2024

Lab Report No.: 03

Lab Report Name: Create a class diagram of an online processing system.

#### Instrument:

- Computer
- EdrawMax Software, etc.

#### Procedure:

- At first, we have to learn about online processing system.
- Now we have to power on the computer.
- When the computer is ready to use, we have to open EdrawMax software.
- After opening EdrawMax software, we have to create the class diagram of online processing system.
- Finally, after drawing the class diagram, we have to ensure the class diagram is correct.

## Online Processing System:

- 1. Admin: Represents an administrator of the online processing system.
  - Attributes
    - i. adminId: Unique identifier for the admin.
    - ii. email: Email address of the admin.
    - iii. password: Password of the admin.
    - iv. username: Username of the admin.
- 2. User: Represents a user of the online processing system.

#### Attributes

- i. Address: Address of the user.
- ii. Email: Email address of the user.
- iii. Password: Password of the user.
- iv. Payment Methods: Array of payment methods associated with the user.
- v. Phone: Phone number of the user.
- vi. User Id: Unique identifier of the user.
- vii. User Name: Username of the user.
- 3. Product: Represents a product available for purchase in the system.

#### Attributes

- i. Description: Description of the product.
- ii. Name: Name of the product.

- iii. Price: Price of the product.
- iv. Product Id: Unique identifier of the product.
- v. Quantity: Quantity of the product available in stock.
- 4. Cart Item: Represents an item added to the user's shopping cart.

#### Attributes:

- i. Product Id: Unique identifier of the product.
- ii. Quantity: Quantity of the product added to the cart.
- 5. Order: Represents an order placed by a user.

### Attributes:

- i. Items: Array of items included in the order.
- ii. Order Id: Unique identifier of the order.
- iii. Status: Status of the order (e.g., processing, shipped).
- iv. Total Amount: Total amount of the order.
- v. User Id: Unique identifier of the user who placed the order.
- 6. Payment: Represents a generic payment made for an order.

## Attributes:

- i. Amount: The amount of the payment.
- ii. Order Id: Unique identifier of the associated order.
- iii. Payment Id: Unique identifier of the payment.
- iv. Status: Status of the payment (e.g., pending, completed).
- 7. Shipping: Represents the shipping process for an order.

## Attributes:

- i. Order Id: Unique identifier of the order being shipped.
- ii. Shipping Address: Address to which the order will be shipped.
- iii. Status: Status of the shipping process (e.g., pending, shipped).
- 8. Review: Represents a review submitted by a user for a product.

#### Attributes:

- i. Comment: Textual comment or review content.
- ii. Product Id: Unique identifier of the product being reviewed.
- iii. Rating: Numeric rating given by the user for the product.
- iv. Review Id: Unique identifier of the review.
- v. User Id: Unique identifier of the user who submitted the review.

# Class Diagram:

