



VIT

Vellore Institute of Technology
(Deemed to be University under section 3 of U.G. Act 1956)

REG.NO.:

SLOT: A1+TA1

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING
CONTINUOUS ASSESSMENT TEST - II
WINTER SEMESTER 2025-2026

Programme Name & Branch : B.Tech (CSE) & ALL branch
Course Code and Course Name : BCSE301L & Software Engineering
Class Number(s) : VL2025260501368, 1369, 1391, 1397, 1401, 1409, 1413, 1419, 1421, 1423, 1425, 1429, 1430, 1463, 1487, 2260, 4701, 6742
Date of Examination : 15-03-2026
Exam Duration : 90 minutes Maximum Marks: 50

Answer All Questions

- M - Max mark; CO – Course Outcome; BL – Blooms Taxonomy Level
- Course Outcomes: CO3 - Perform Requirements modelling and apply appropriate design and testing heuristics to produce quality software systems.

Q. No	Question	M	CO	BL
1	Consider the Swiggy Order Processing & Delivery Management System as given in the class model (Refer Figure 1). Analyse the model and answer the following: a. Tabulate the active classes and their collaborative classes of the scenario as given in the class model. [3M] b. Consider the payment processing of the Swiggy Order Processing & Delivery Management System, identify the classes that involves in the interactions relevant to the payment processing. Illustrate the interactions using sequence model notations[5M] c. Explain the implications of cardinality mapping in a class model during the implementation of an application. [2M]	10	3	4
2	Consider the Swiggy Order Processing & Delivery Management System architecture given in Figure 2, fill in the blanks. i. The Order Validation module performs a single unified purpose, therefore it exhibits _____cohesion. ii. When Order Validation passes validated details to the Restaurant Manager in a chained workflow, it demonstrates _____cohesion. iii. The Restaurant Manager processes order id, items, and restaurant id, all operating on the same data, showing _____cohesion. iv. The Delivery Partner Allocator tasks (select rider → check location → assign order) follow a fixed execution order, showing _____cohesion. v. The Real-Time Tracker groups GPS updates and ETA calculations because they fall under the same category of work, showing _____cohesion. vi. Notification generation (SMS/Email/Push) triggered when the order is updated reflects _____cohesion.	10	3	5

	vii. The Central Order Database groups orders, riders, restaurants, payments, and tracking based on shared data, showing _____ cohesion. viii. If unrelated tasks like analytics, rider assignment, and GPS tracking were placed in one module, it would result in _____ cohesion. ix. The Payment Gateway module having only one responsibility—authorizing transactions—illustrates _____ cohesion. x. Startup tasks like syncing restaurant data, refreshing rider availability, and preloading menus grouped together show _____ cohesion.			
3	a. Consider the swiggy order processing and delivery management system can be approached through client server architecture, if so, what are the advantages and disadvantages are foreseen? [4M] b. Generate an architecture diagram using a layered architecture and call return control. [6M]	10	3	5
4	a. Modern software teams increasingly rely on AI-assisted code generation and automated reviews. Specify any two benefits of manual inspections in this environment? Mention any four errors that inspections can find than automated testing or AI assisted testing. [5M] b. Imagine you work for a financial company that previously used structured peer reviews but now relies heavily on AI code generation tools. The generated code lacks comments, readability, and clear structure irrespective of its functionality. The company decides to cancel all manual inspections and depend solely on automated testing. Tabulate the advantages and disadvantages of this decision in terms of reliability, maintainability, and long-term risk? [3M] c. Tools such as collaborative review platforms, AI-assisted, or structured checklists generally helps to strengthen inspection effectiveness. According to you, which is most suitable for this company? [2M]	10	3	2
5	a. The Swiggy Order Processing and Delivery Management System: Design User Interface (UI) layouts for the following system screens: [6M] 1. Restaurant Order Management Screen 2. Delivery Partner Assignment Screen 3. Real-Time Order Tracking Screen b. Construct a comparative table that outlines key user interface design principles and demonstrates how these principles are concretely applied and satisfied in the developed screens. [4M]	10	3	6



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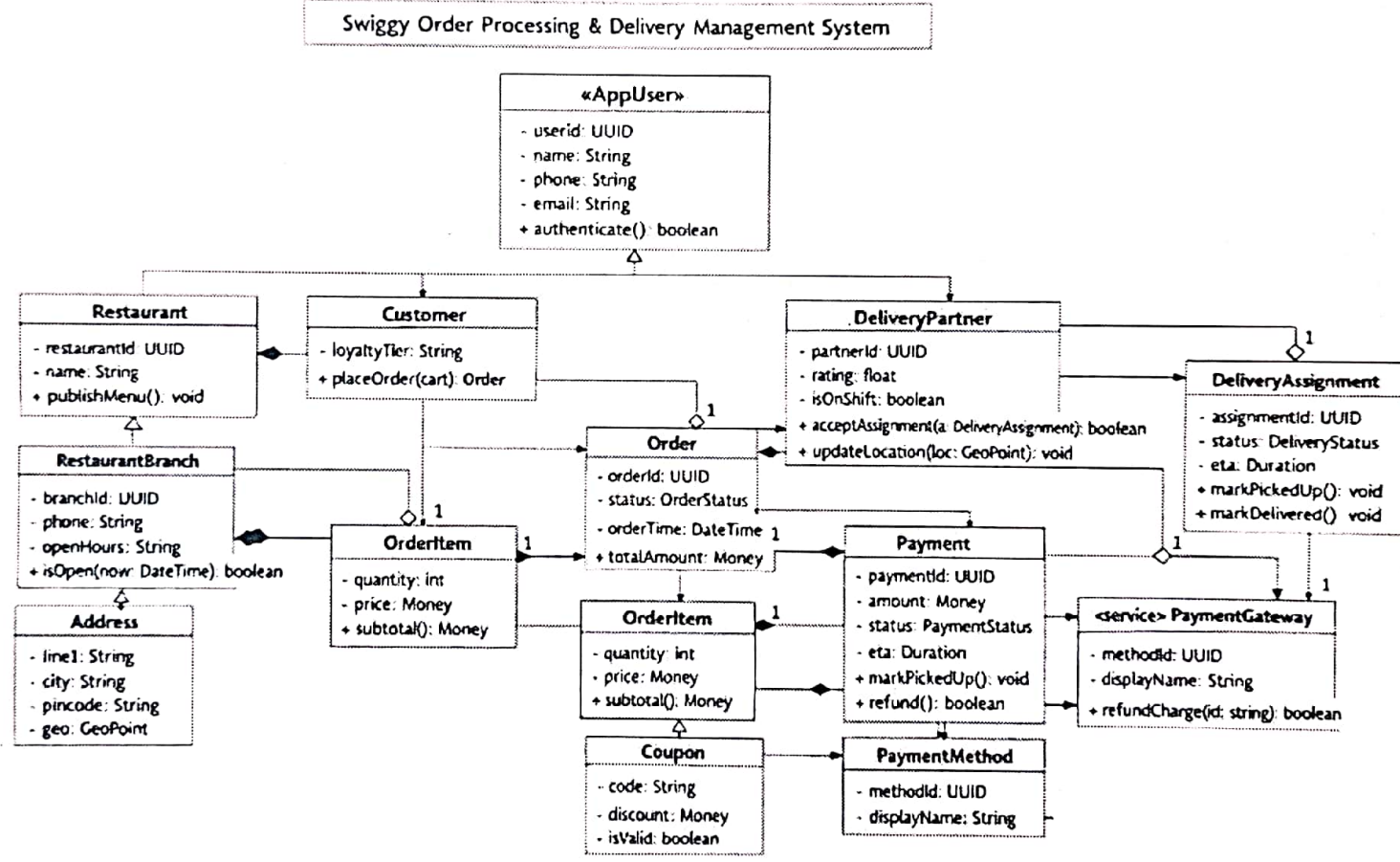


Figure 1: Swiggy Order Processing & Delivery Management System (class model)

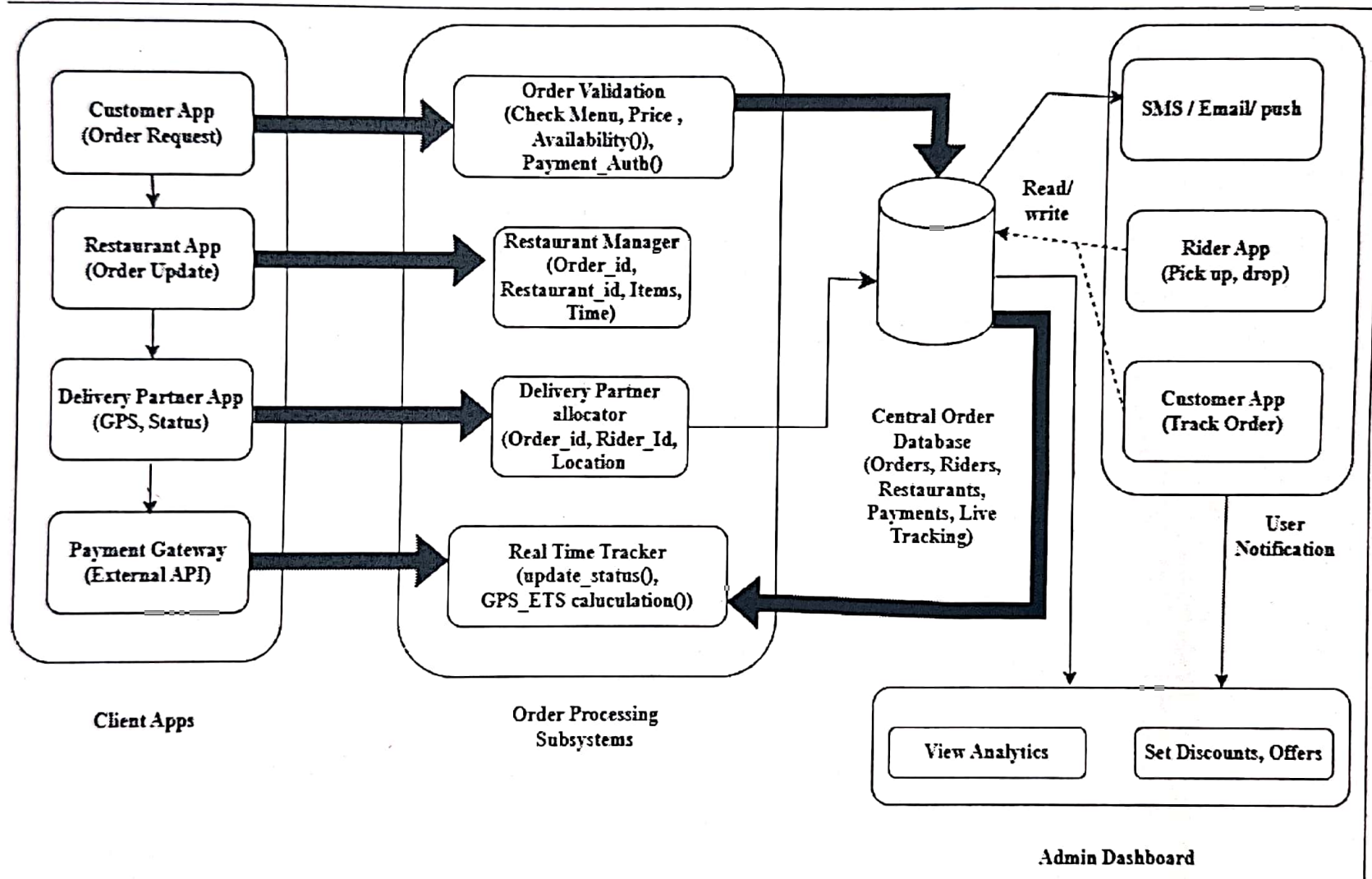


Figure 2: Swiggy Order Processing & Delivery Management System architecture