



CSE316 – Software Design with UML

Class: III CSBS (N) Semester: V Course Coordinator: Dr. G. Pradeep

Assignment

Submission Date: 07.08.2024 before 11.00 am

Use Case Diagrams:

1. Create a use case diagram for a system that allows users to order food online.
2. Develop a use case diagram for a ticket reservation system for a cinema.
3. Consider the policies maintained by an automobile insurance company. A Policy has a primary policy holder, set of auto insured and list of people who are converted by the insurance. From the knowledge of insurance, prepare use case scenarios / diagram for
 - a) creating a new policy
 - b) adding a new person to a policy
 - c) adding new vehicle to a policy
 - d) yearly renewal to a policy
 - e) record for a claim.

Sequence Diagrams:

4. Create a sequence Diagram that alerts a user when new email arrives
5. Develop a Sequence for a traffic light signal.
6. How would you represent the three-way handshaking mechanism of TCP with a sequence diagram?

Objective:

- Identify objects playing a role in the concerned events
 - Arrange events in time sequence of their execution
 - Use of synchronous message and response
7. Consider a Railway Reservation system. There are number of trains and each train stops in one or more stations. Each train has a predetermined number of seats available in each classes (First Class, First AC, Second AC, Third AC, Sleeper Class and so on) with normal booking, tatkal and premium tatkal booking. The fare between source and destination place is determined by the travel class and distance. Passengers can enquire about availability of seats

between any two stations and for any class. The railway Reservation System should be able to handle queries and perform necessary reservation / cancellation operations.

(Refer IRTC website for flow of events and Prepare accordingly)

Prepare Use case Scenarios using template, Class Diagram and Sequence Diagram for booking, cancellation and travel operations
