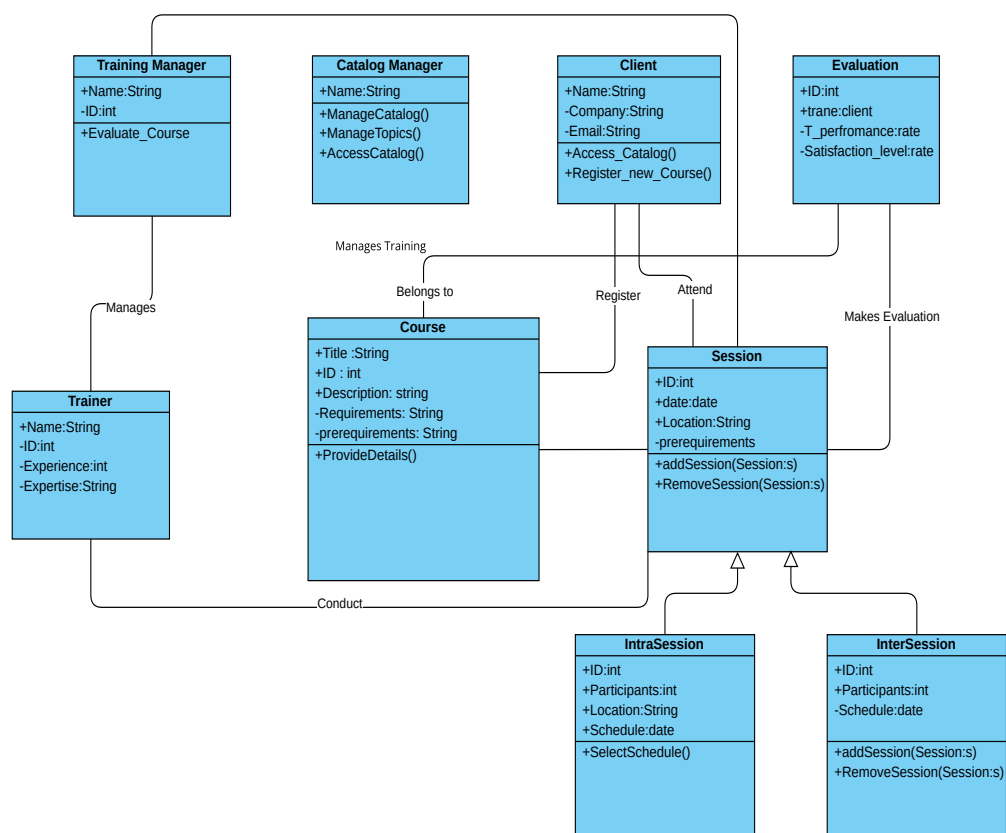


Software Design Architecture
Assignment 4
BSSE-4-A

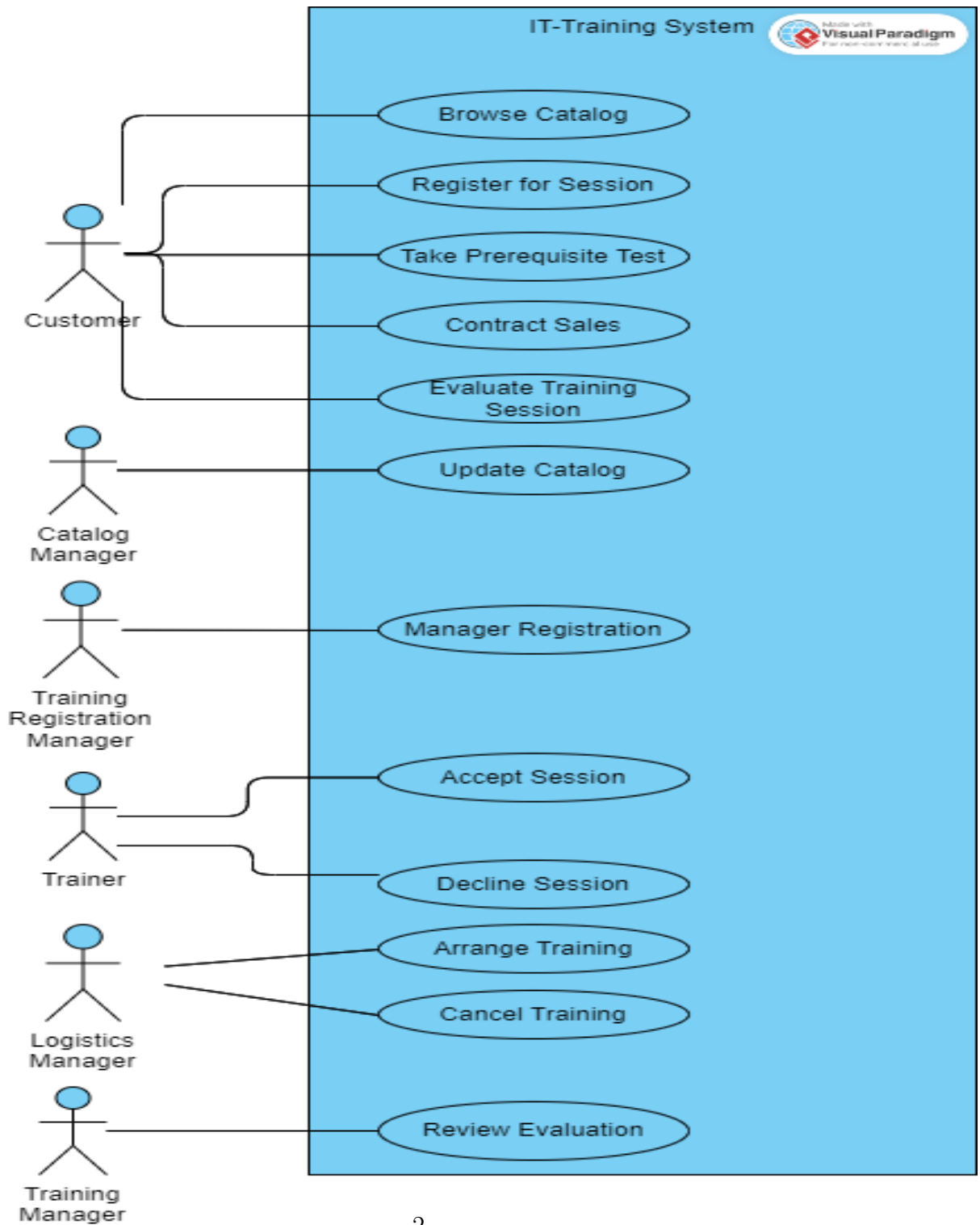
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Question 1: Draw a Class diagram for the described scenario. Your model should reflect all design elements of a class diagram. Provide justification of your solution.



Question 2: Design a Use case diagram for the above scenario using proper notations



Question 3: Fully Dressed Use-case

Table 1: Use Case: Register Online for Session

Use Case: Register Online for Session	
Primary Actor: Customer	
Stakeholders and Interests:	
<ul style="list-style-type: none"> - Customer: Wants to know about the IT Training Course such as the requirements about the course. - Catalog Manager: Needs to ensure the training catalog is comprehensive, accurate, and current. - Trainers: Need accurate registration information for session planning. 	
Preconditions:	
<ul style="list-style-type: none"> - The customer must have access to the IT-Training web portal. - The Catalog Manager must have access to the IT-Training management system. 	
Main Success Scenario:	
1. Customer Action: <ul style="list-style-type: none"> - Initiates Registration: - Select Theme: - View Topics: - Selects Topic: - View Courses: - Selects Course: - Registers Online: 2. System Response: <ul style="list-style-type: none"> - Session Availability Check: - Confirmation: 	<ul style="list-style-type: none"> The customer navigates to the IT-Training web portal and selects the desired training session. The customer selects a specific theme of courses. The system displays the topics of the selected theme. The customer selects a specific topic. The system displays the list of courses under the selected topic. The customer selects a specific course and reviews the course details such as dates, locations, requirements, and prerequisites. The customer selects a session date and location, completes a prerequisite test if necessary, and fills in personal information and company details if he is a valid user. The system verifies session availability and customer eligibility. Upon successful registration, the system generates a confirmation number and sends an email confirmation to the customer.
Alternate Scenarios:	
1. Session Full: <ul style="list-style-type: none"> - Customer Action: - System Response: 2. Prerequisite Test Failure: <ul style="list-style-type: none"> - Customer Action: - System Response: 3. Intra-Company or Personalized Training Request: <ul style="list-style-type: none"> - Customer Action: - System Response: 	<ul style="list-style-type: none"> The customer selects a session that is already full. The system notifies the customer about the unavailability of the seats and provides an alternative course date. The customer fails the prerequisite test. The system provides the details of another course in which he fulfills the prerequisite test. The customer requests an intra-company training session. Special consultation is made with the Training Registration Manager for the Intra-Company training request.
Exceptions:	
1. Technical Glitch: <ul style="list-style-type: none"> - Customer Action: - System Response: 2. Cancellation Policy: <ul style="list-style-type: none"> - Customer Action: - System Response: 3. Trainer Unavailability: <ul style="list-style-type: none"> - Customer Action: - System Response: 	<ul style="list-style-type: none"> The customer faces technical issues during registration. The system prompts the customer to try again later or contact IT-Training support. The customer cancels registration within the specified timeframe. The system follows the cancellation policy regarding refunds or penalties. The customer selects a session lacking an available trainer. The system informs the customer about the unavailability of the course and provides information about an alternative course.