NORTH AMERICAN UNIVERSITY
INSPIRATION INNOVATION GLOBAL COMPETENCE

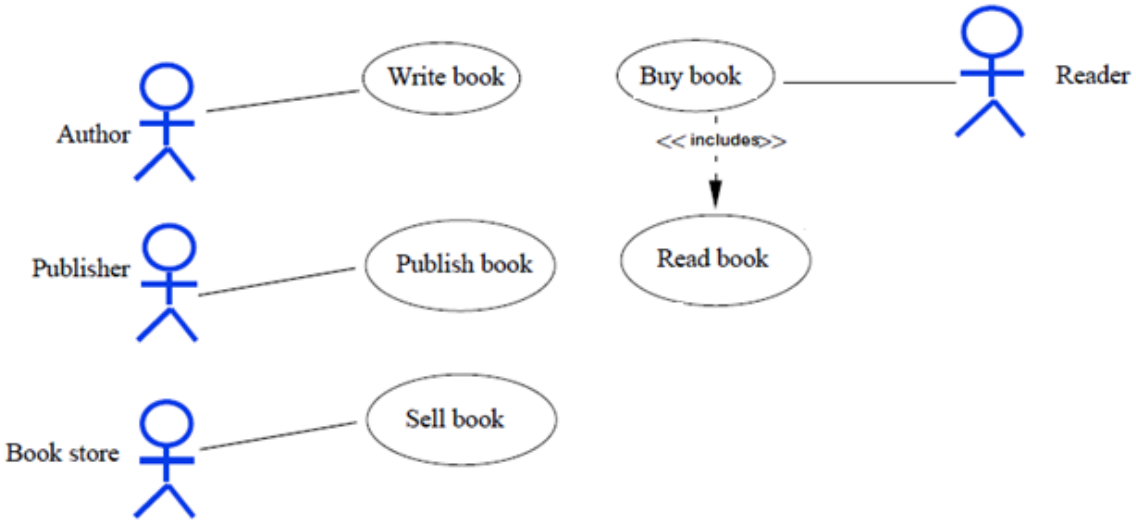
COMP 4339
Software Analysis & Design

Midterm Exam Revision

Name: _____ Grade: _____

I. Use Case Diagram

A book is written by an author, published by a publisher, sold by a book store, and read by a reader. Moreover, for a reader to read a book, he/she must buy the book from a bookstore that is selling it. Draw a use case diagram for this scenario, showing relationships between different use cases.



II. Use Case Details

Fill in the following detail cases, using 2 use cases from question II.

Use Case Name:	
Actors:	
Brief Description:	
Two Pre-conditions:	
Two Post-conditions:	
Two Flow of Activities:	

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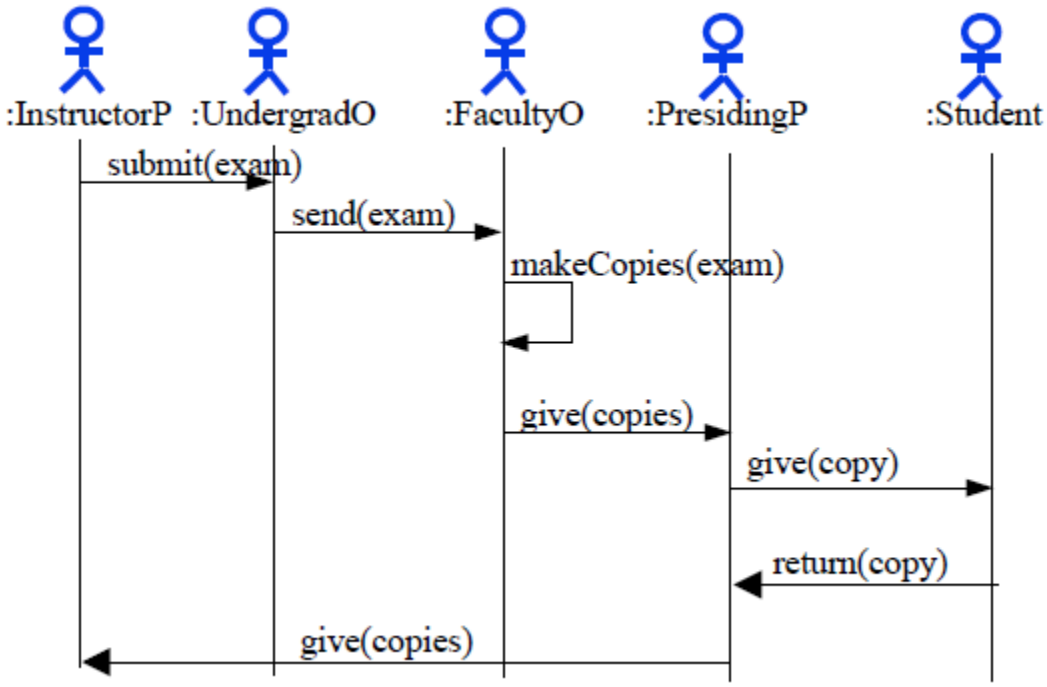
III. Sequence Diagram

A final exam for a given course is prepared by the instructor of the course and submitted to the DCS undergraduate office by March 20. The undergraduate office sends all exams to the Faculty of Arts & Science office where copies are made. On the day of the exam, copies are given to the presiding officer who takes them to the room where the exam is given. The students write the exam on an exam copy, and return to the presiding officer at the end of the exam. The written exam copies are given to the instructor for marking.

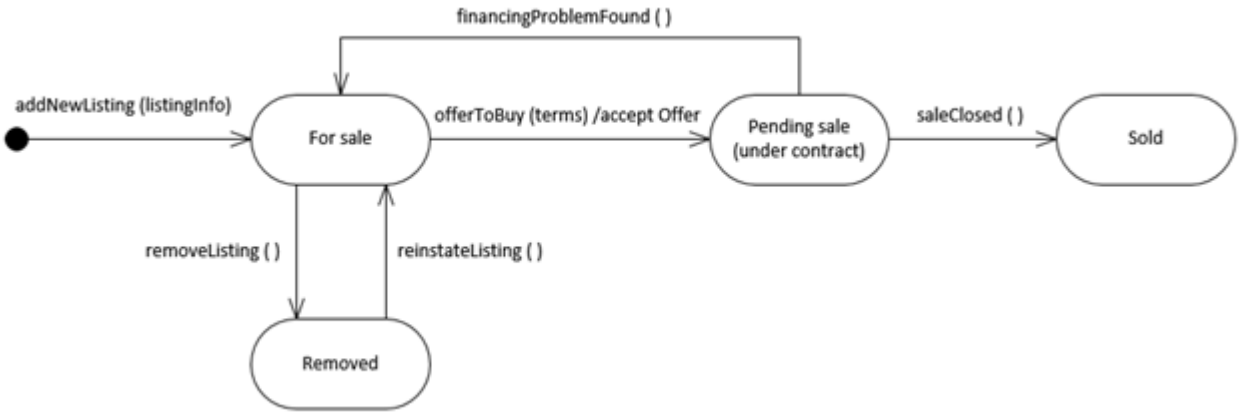
Draw a sequence diagram that captures this description.



IV. State Machine Diagram

Consider that a real estate listing goes through several different states over time. For example, it might be a new listing, a mature listing, a revised listing, an under contract listing, and a sold listing. Draw a state machine diagram for a listing object based on this information. Include transition names and be sure to consider all of the possible transitions.

Answer May Varies



V. Domain Class Diagram

A university offers degrees to students. The university consists of faculties each of which consists of one or more departments. Each degree is administered by a single department. Each student is studying towards a single degree. Each degree requires one to 20 courses. A student enrolls in 1-5 courses (per term.) A course can be either graduate or undergraduate, but not both. Likewise, students are graduates or undergraduates but not both.

Draw a class diagrams which represents the generic objects and relationships described above. Make sure to specify multiplicities for all associations shown in your diagrams.