HW5-CS2365-OOAD-File-Spring2021

Question 1:

The use case description for the View Exam Grades use case is described below. According to object structuring criteria, determine classes that are needed to implement the use case. Object structuring criteria classify application classes as interface, entity, control, and application logic classes. Also, define each class's attributes and methods. Represent class and its attributes and methods using the UML class notation (5 pts)

Use case name: View Exam Grades.
Summary: The student looks at his/her exam grade of CS2365 OOP or CS3365 Software Engineering.
Actor: Student
Precondition: None.
Main sequence:
1. The student enters the student ID and password into the system.
2. The system checks if the student ID and password are valid.
3. The system displays the course numbers (e.g., CS2365 and CS3365) if the ID and password are valid.
4. The customer chooses only a course to view the grade.
5. The system displays the course grade to the student.

Alternative sequence:
- Step 3: If the student's ID and password are invalid, the system displays an error message and asks to enter another ID and password into the system. If the ID and password are valid, the system displays the course numbers and goes to step 4. Otherwise, the system terminates this use case.

Postcondition: The student has viewed course grades.

Question2:
Implement the View Exam Grades use case using the classes you determined. Each class must be implemented with the attributes and methods you defined. Assume that a file stores ten students' ID and password, and another file stores the students' ID, course number, and grade for both OOP and Software Engineering. (5 pts)