

**Assignment No. 02**

**Course title:** *Object Oriented Analysis and Design*

**Course code:** CSE-314

**3<sup>rd</sup> Year 1<sup>st</sup> Semester Examination 2023**

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**Submitted to-**

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## 1. Key parts of the sequence diagram:

### 1. Teacher Actions:

- Logs in, selects a class, marks attendance, and submits it.

### 2. Student Actions:

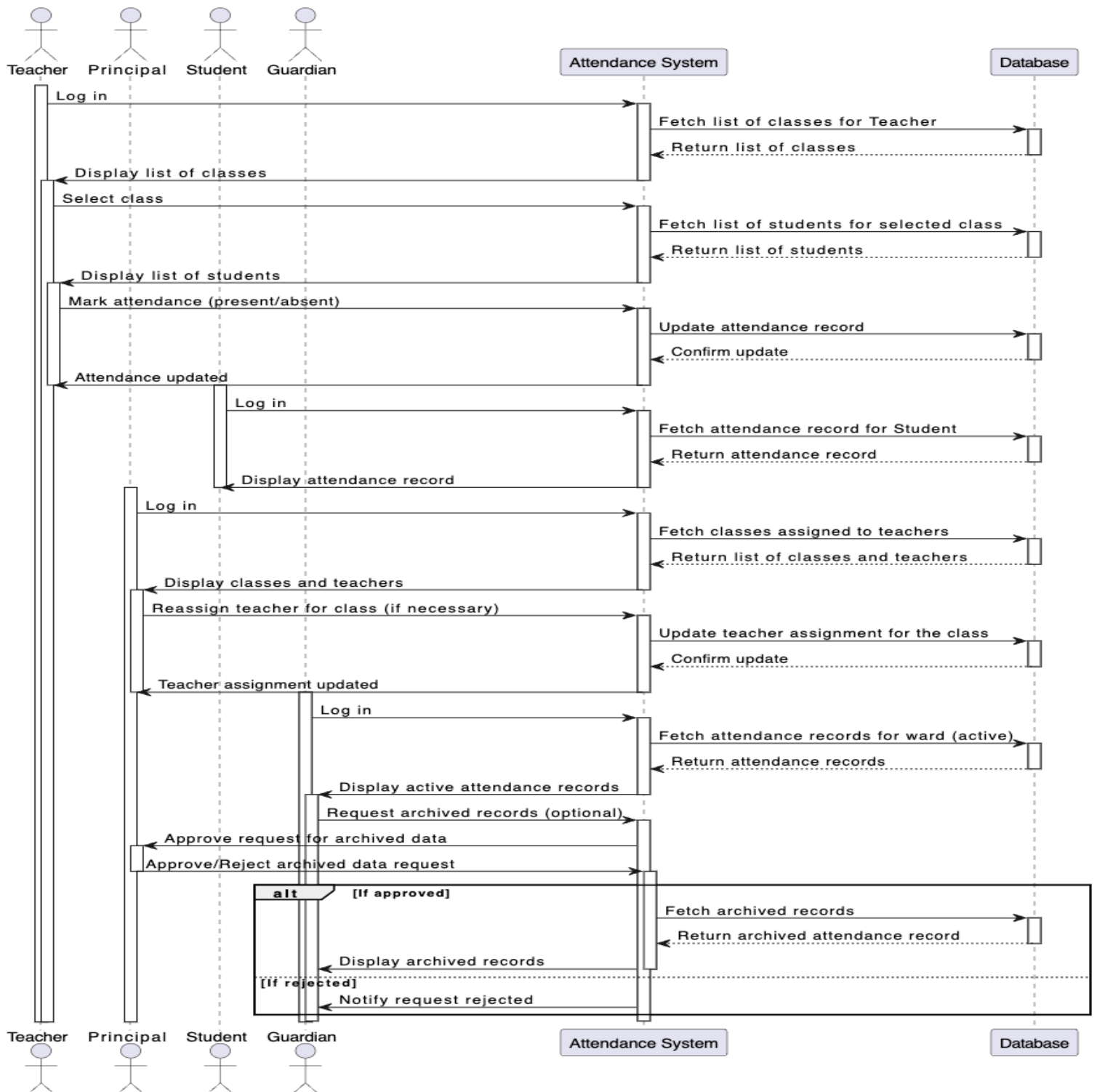
- Logs in and checks attendance records.

### 3. Principal Actions:

- Reassigns teachers, when necessary, approves requests for archived attendance.

### 4. Guardian Actions:

- Views active attendance and requests archived attendance data.



## 2. Key parts of the sequence diagram:

### 1. Instructor Actions:

- Notifies students about the exam date and material.
- Prepares the exam paper and sample solutions.
  - Ensures the exam is copied and distributed to students on the designated date.

### 2. Student Actions:

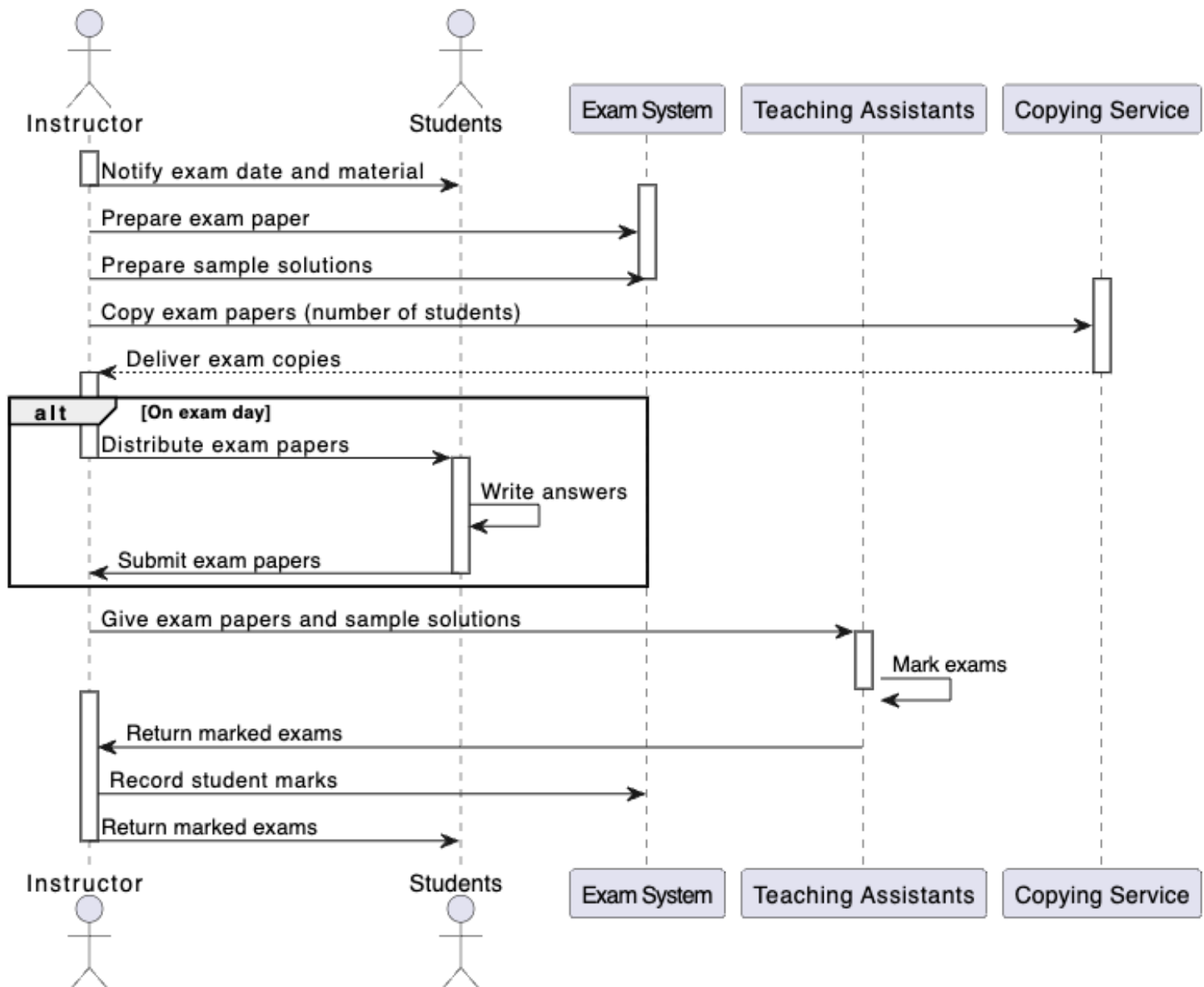
- Receives the exam notification.
- Writes answers during the exam and submits their papers.

### 3. Teaching Assistant (TA) Actions:

- Receives the exam papers and sample solutions from the instructor.
- Marks the exams and returns them to the instructor.

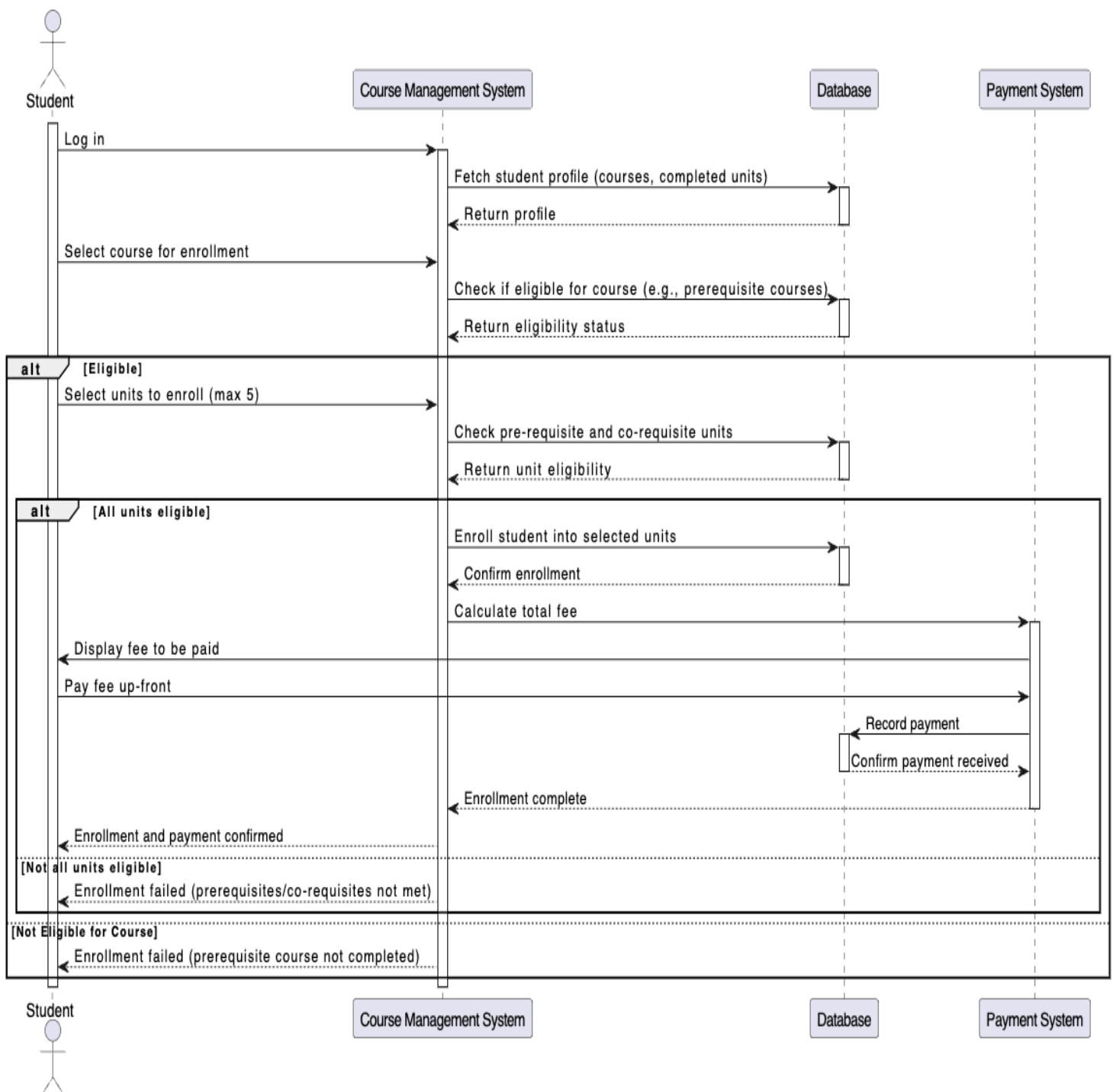
### 4. Marking and Returning:

- The instructor records the marks and returns the graded papers to the students.



### 3. Key parts of the sequence diagram:

1. **Student logs in** to the Course Management System (CMS) to enroll in a course.
2. **CMS checks** the student's profile to ensure they meet course eligibility requirements (e.g., previous course completions).
3. **If eligible**, the student selects up to 5 units for the semester, and the system checks for pre-requisites and co-requisites.
4. If all conditions are met, the student is **enrolled in the selected units**, and the total fee is calculated.
5. The student **pays the full fee up-front**, and the payment is confirmed.
6. If any pre-requisite or co-requisite conditions are not met, the enrollment fails, and the system notifies the student.



#### 4. Key parts of the sequence diagram:

##### 1. Customer Actions:

- Browses and adds items to the shopping cart, and optionally removes items.
- Proceeds to checkout, reviews the order, selects a payment method, and makes a payment.

##### 2. Payment Process:

- The payment gateway confirms the payment, and the system records the payment in the database.

##### 3. Sales Employee Actions:

- Receives the order and purchase confirmation.
- Sends the electronic order to the warehouse.

##### 4. Warehouse Actions:

- The warehouse employee updates the order status in the system.

##### 5. Customer Checks Order Status:

- The customer can check the order status at any time, and the system retrieves the latest status from the database.

