# College Examination Management System

PL3

## Team Members:


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# OVERVIEW:

This system is a college system that contains users, each one has his job, and they are: the admin, the lecturer, and the student. The lecturer has one or more subject, where the lecturer sets the exams and their answers, deletes them, or Updates them, and also makes a report on the students' grades for each subject. Secondly, the student may register for more than one subject and have the authority to access the exam, solve it, submit it, and see his grade and the correct answers to it. Third, the admin adds, deletes, and edits students and lecturers. It is also possible to make a list of them and search for a specific person. He also manages the Subjects that are presented to students and lecturers.

# Functional Requirements

## Admin Requirements

1. Admin has username and password and can alter them.
2. Admin manages students and lecturers (Add, Delete, update, List, search).
3. Admin manages Subjects and assign them for students and lecturers.

## Lecturer Requirements

1. Lecturer manages and designs his exams (Add, Delete, update, List).
2. Lecturer puts the exam of the subject and its duration and true answer for some questions like single and multiple choice.
3. System calculates the final degree for each student.
4. Lecturers can make reports about students and their degrees.

## Student Requirements

1. Students can access only exams for his registered subjects.
2. Students can enter the exam for once.
3. Student can see his degree and the corrected exam.

## User Requirements

1. All Users can login and logout.
2. Users can update their Information except ID.

# Non-Functional Requirements

## Performance

1. The system should be easy to use.

2. The written language must remain in the application Simple and easy to understand by the audience.

3. The system should be compatible with all modern browsers.

4. The system should be reliable.

## Safety & Security

1. The system must handle safe login and logout.

2. It must be protected to avoid any data breach.

3. User passwords must be protected.

4. The system must be secure.

## Reliability

1. Should be reliable and provide catching of exceptions so that unlimited sent do not occur such as system crashes, or data validation failures.

2. Unlike the system of borrowing books from the library, the system offers flexibility.

3. Uses minimal processing / computing power.

4. It provides an easy way to enter and review data through an easy-to-use interface.

5. Increases productivity.

## Usability

1. The system should have user-friendly interface.

## Availability

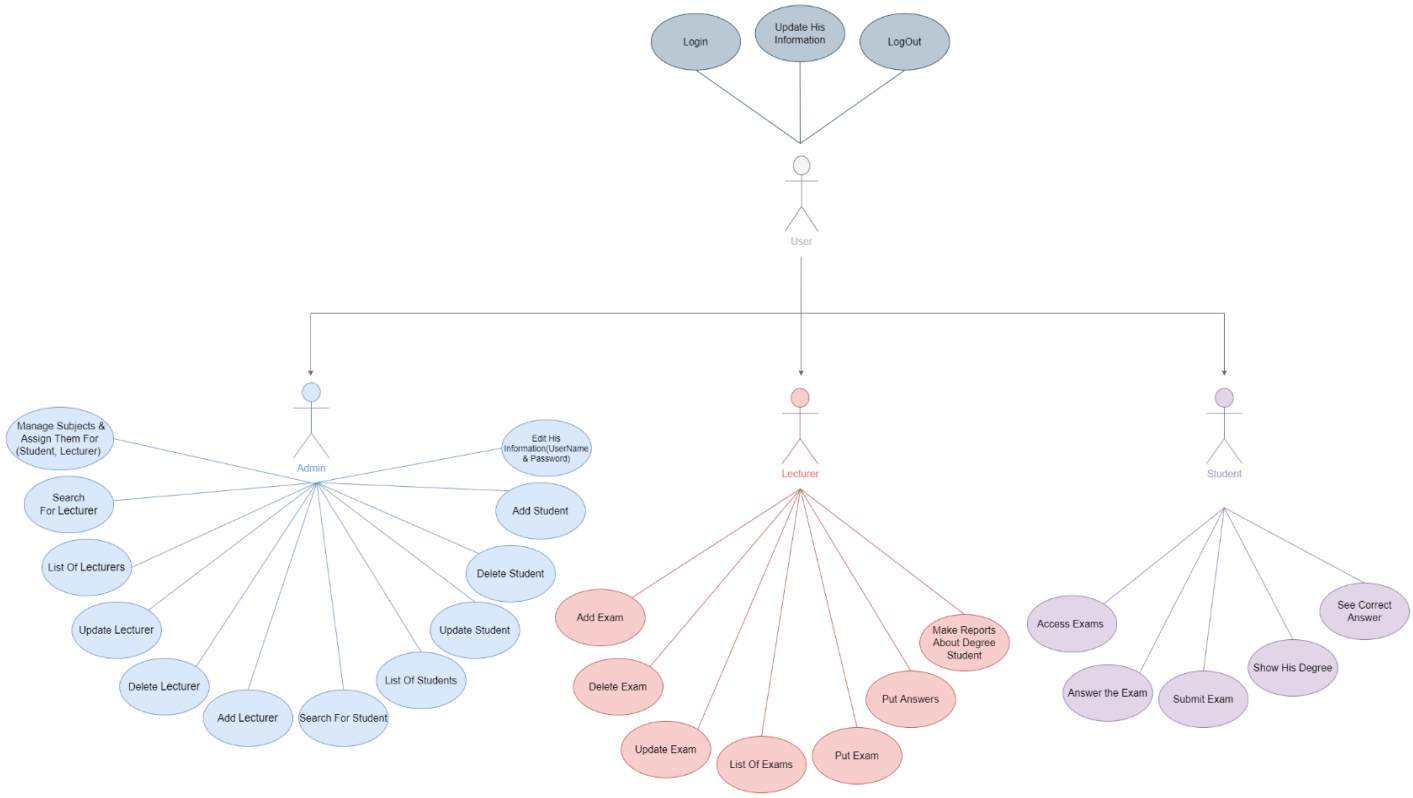
1. The system must be available 24/7.

2. It must work continuously at any time during the 24 hours.

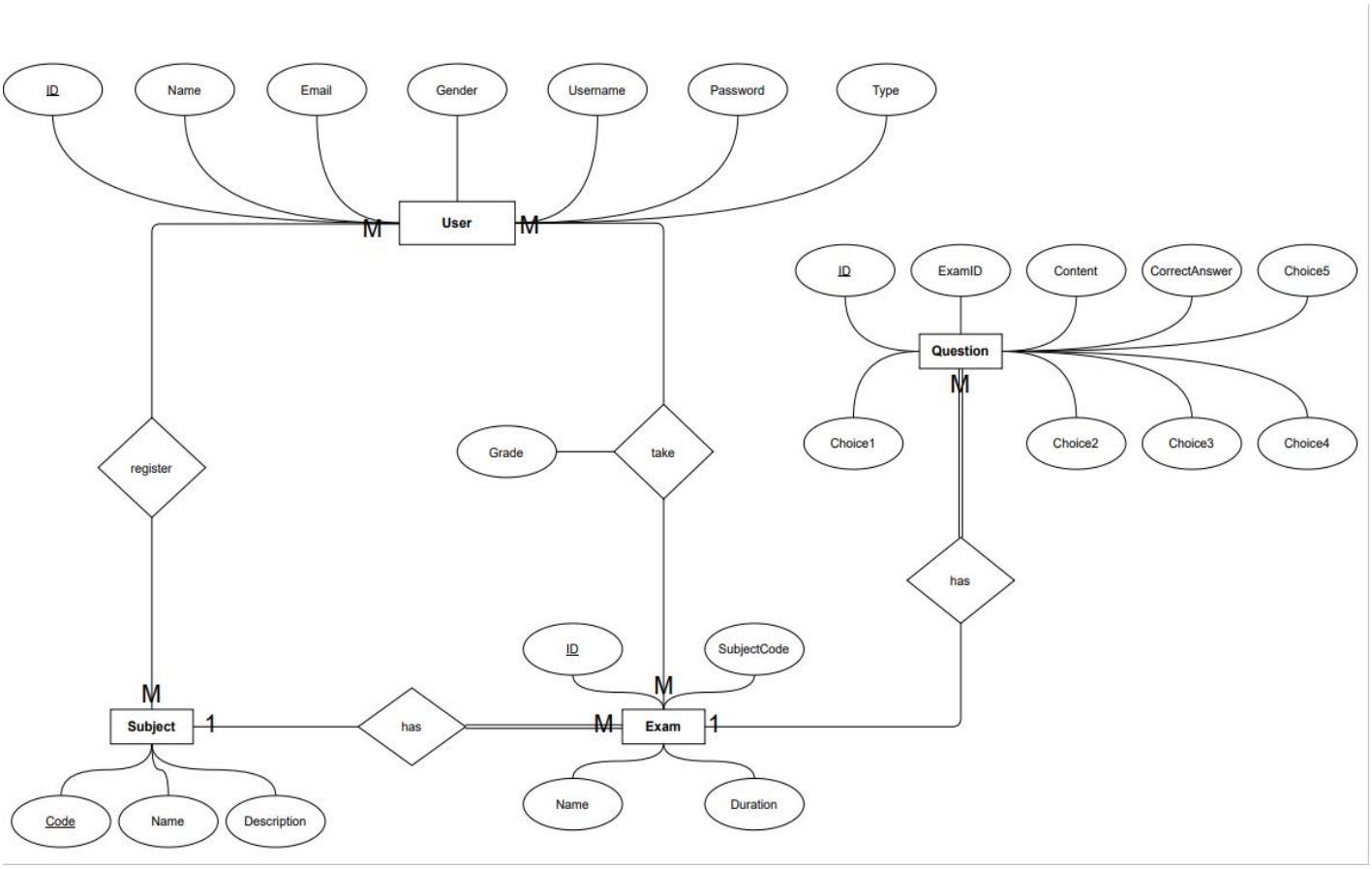
# Diagrams design

1. Use Case Diagram
2. ERD Diagram
3. Class Diagram
4. Architecture Diagram
5. Sequence Diagram

# Use Case Diagram



# ERD Diagram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Choice4
register
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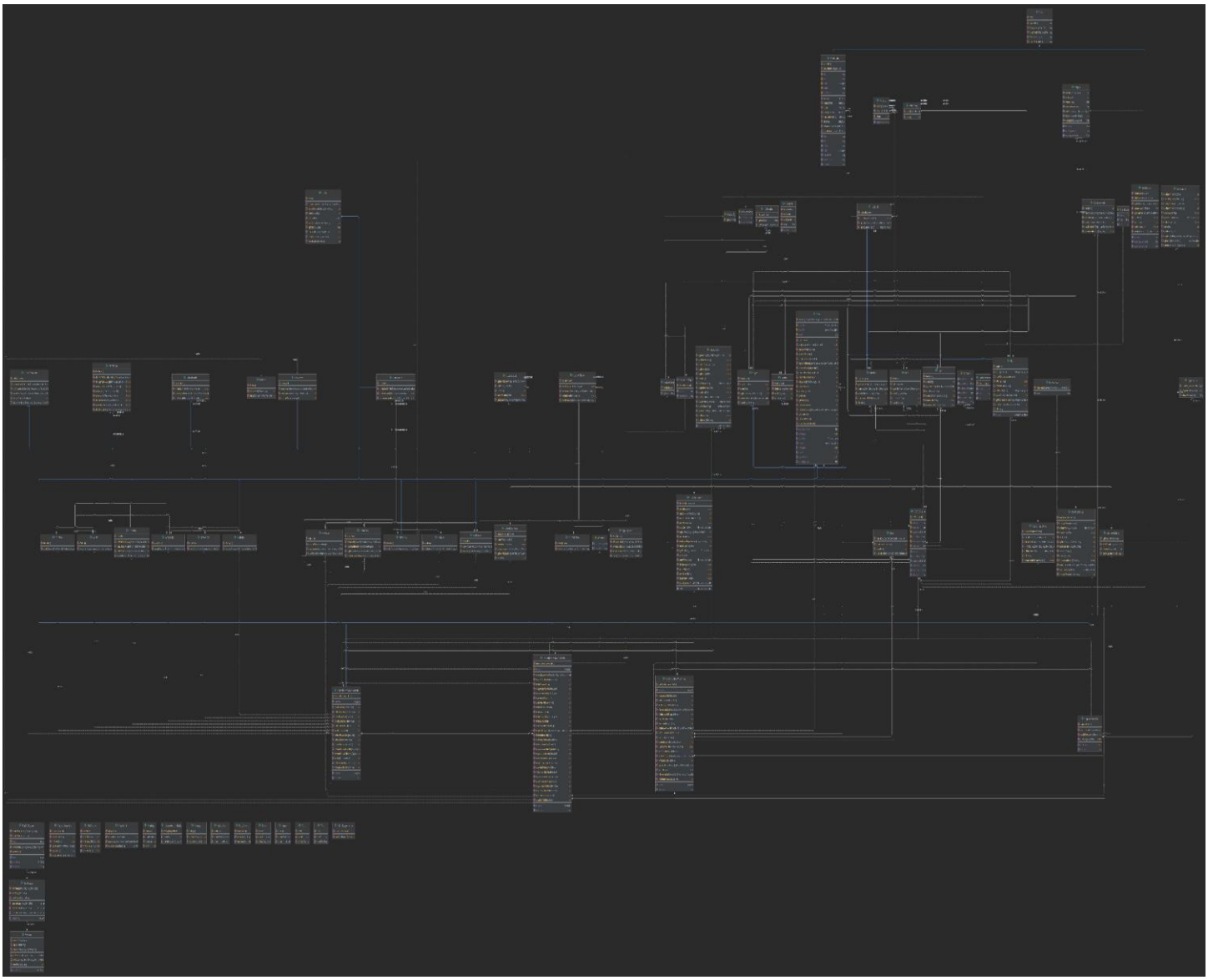
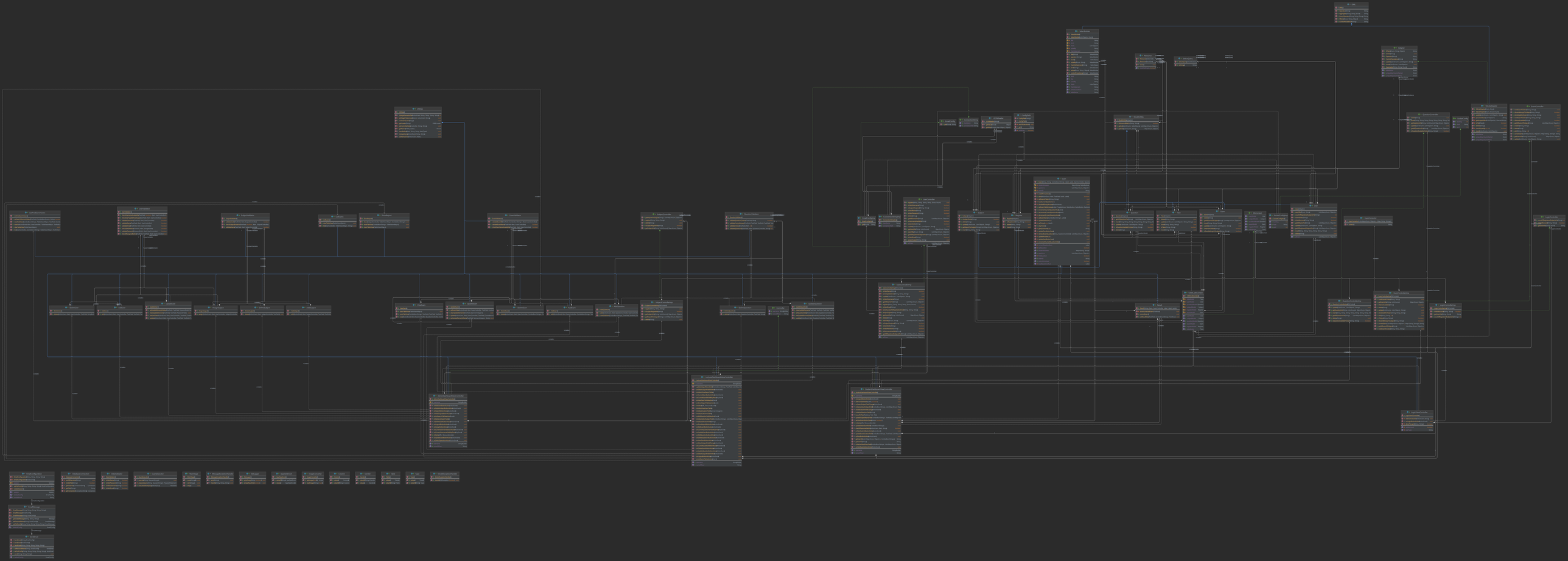
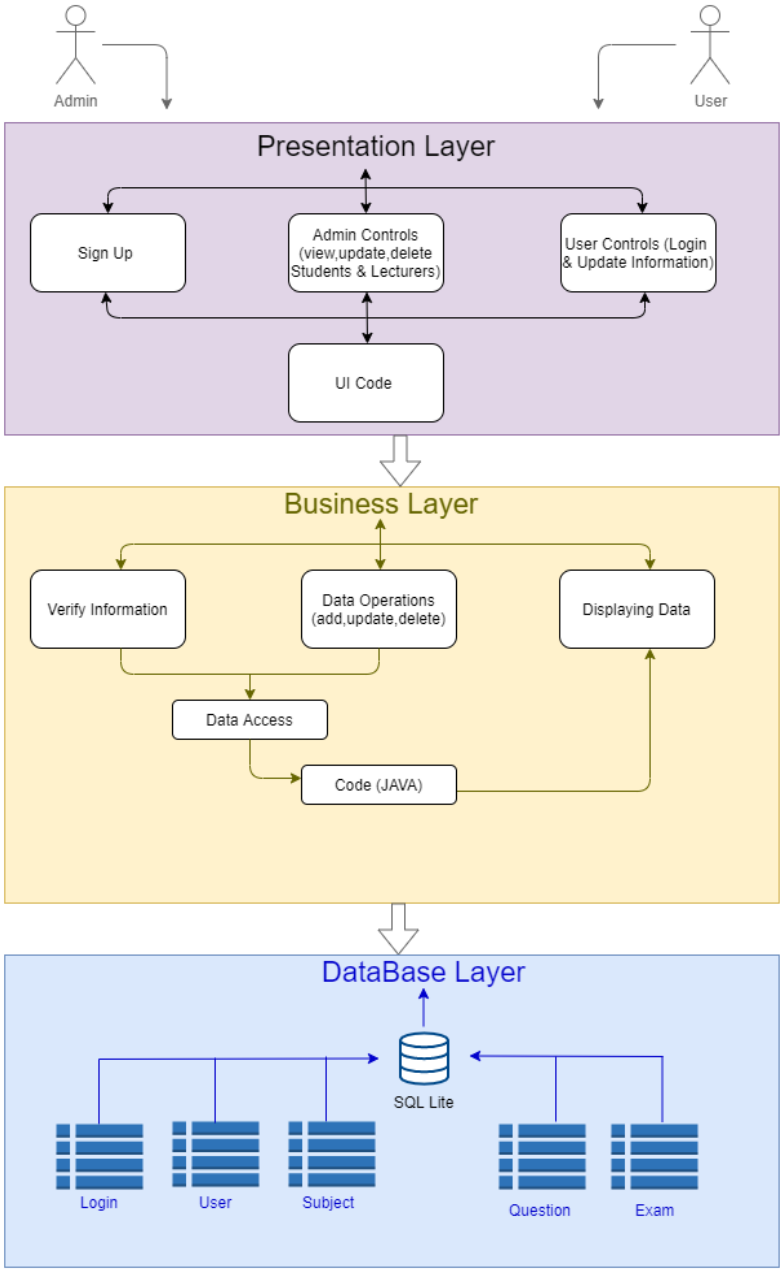
Description
Name
Duration

# Class Diagram



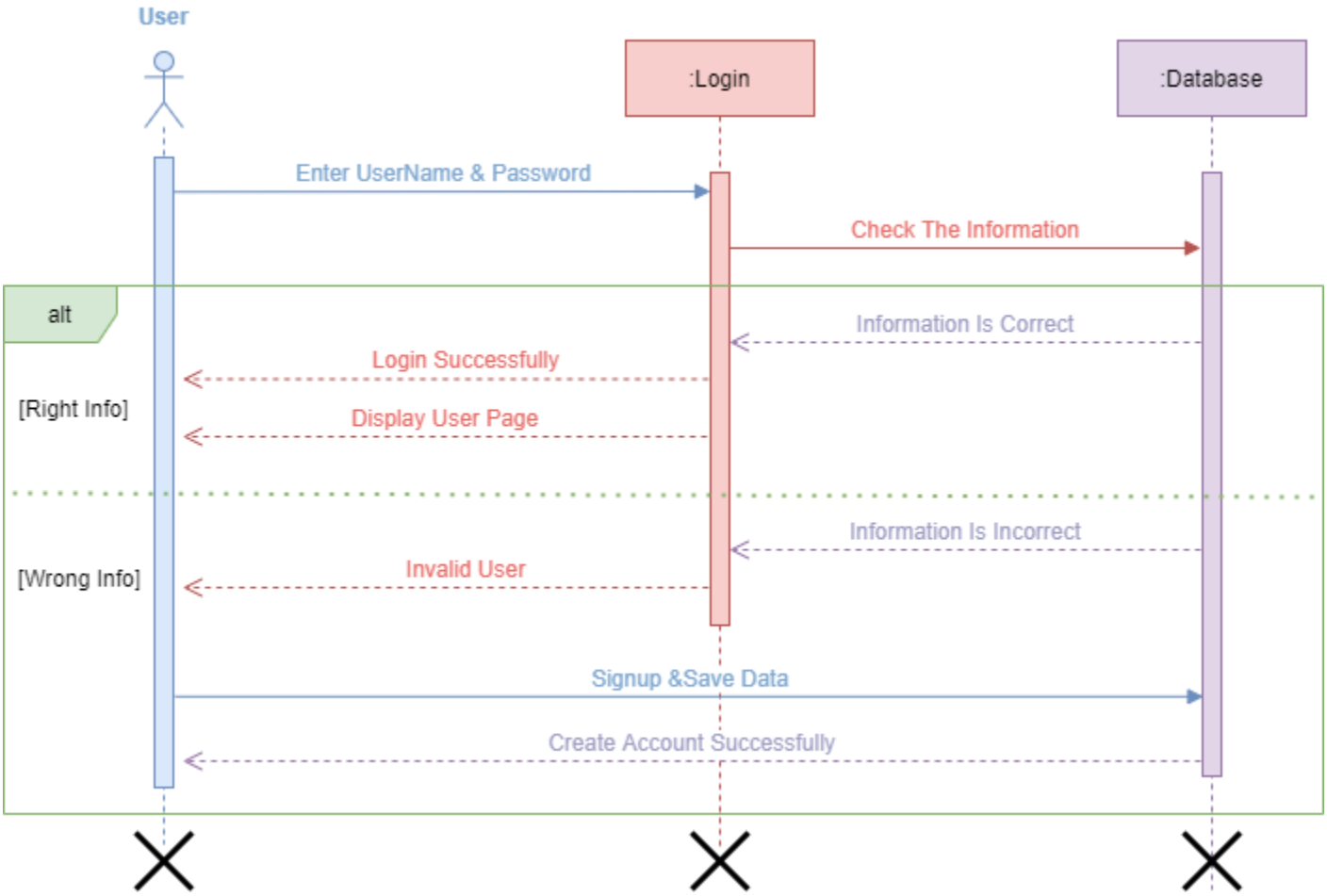


# Architecture Diagram

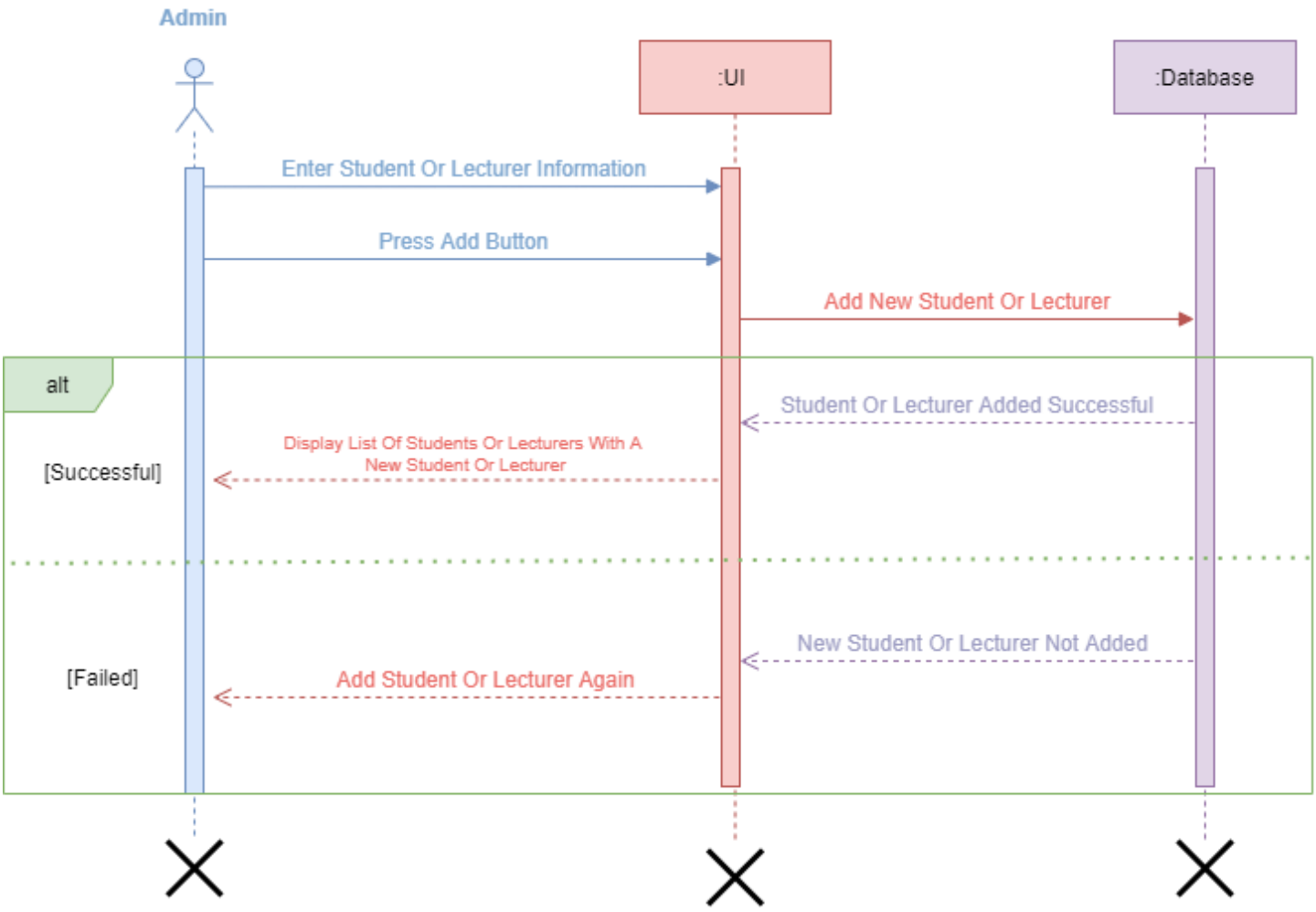


# Sequence Diagram

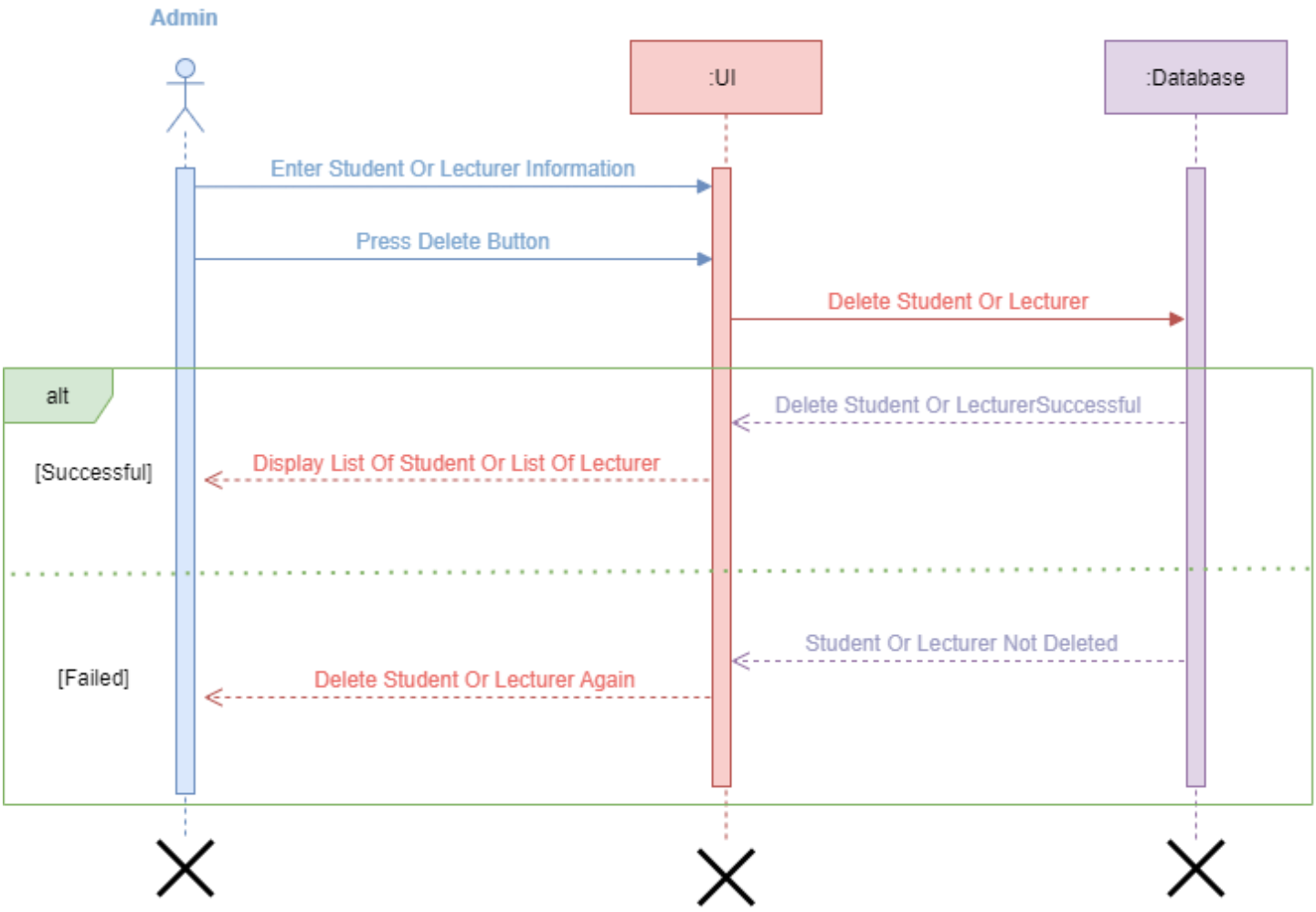
## Login



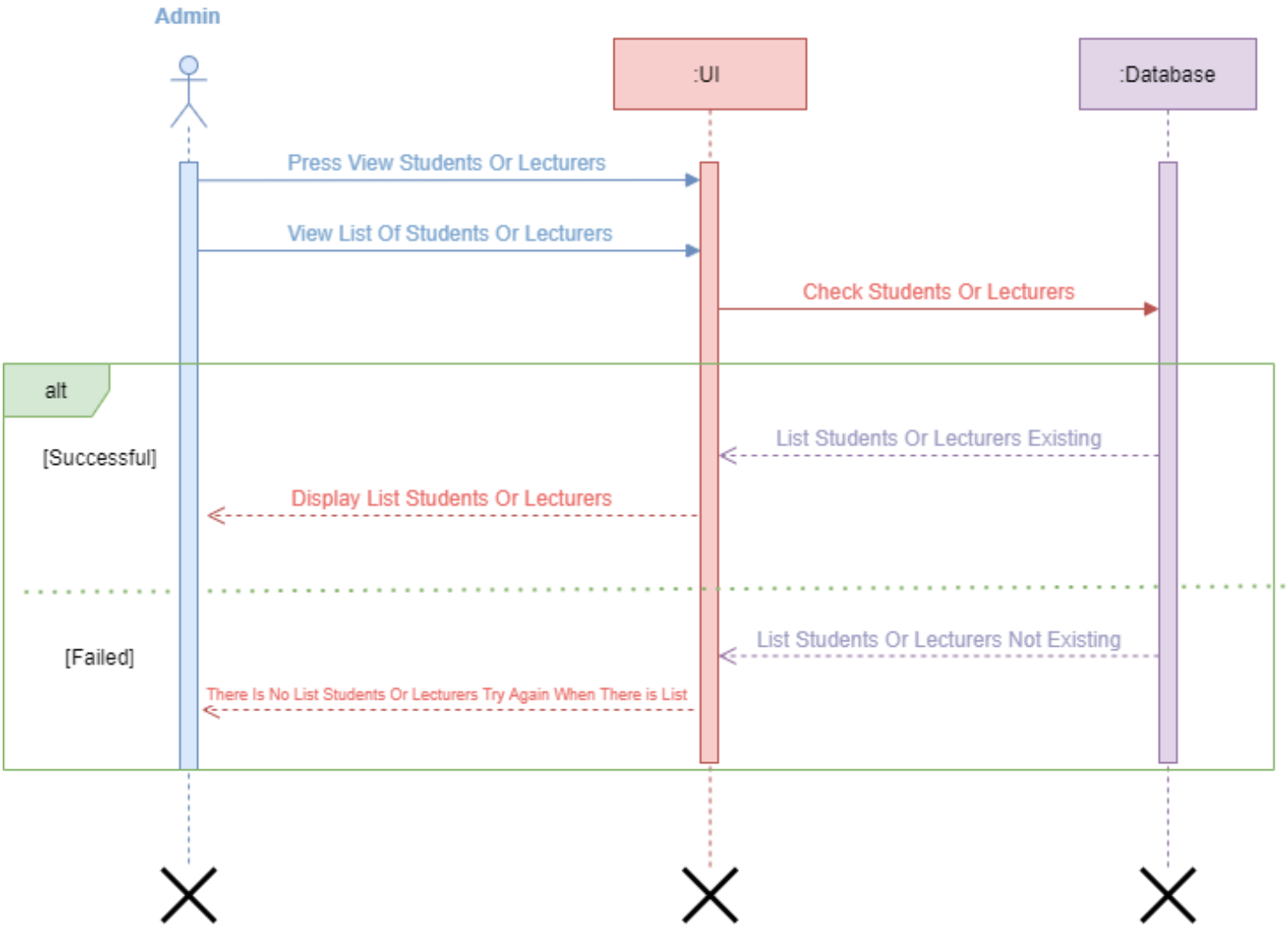
Admin: Add Student & Lecturer



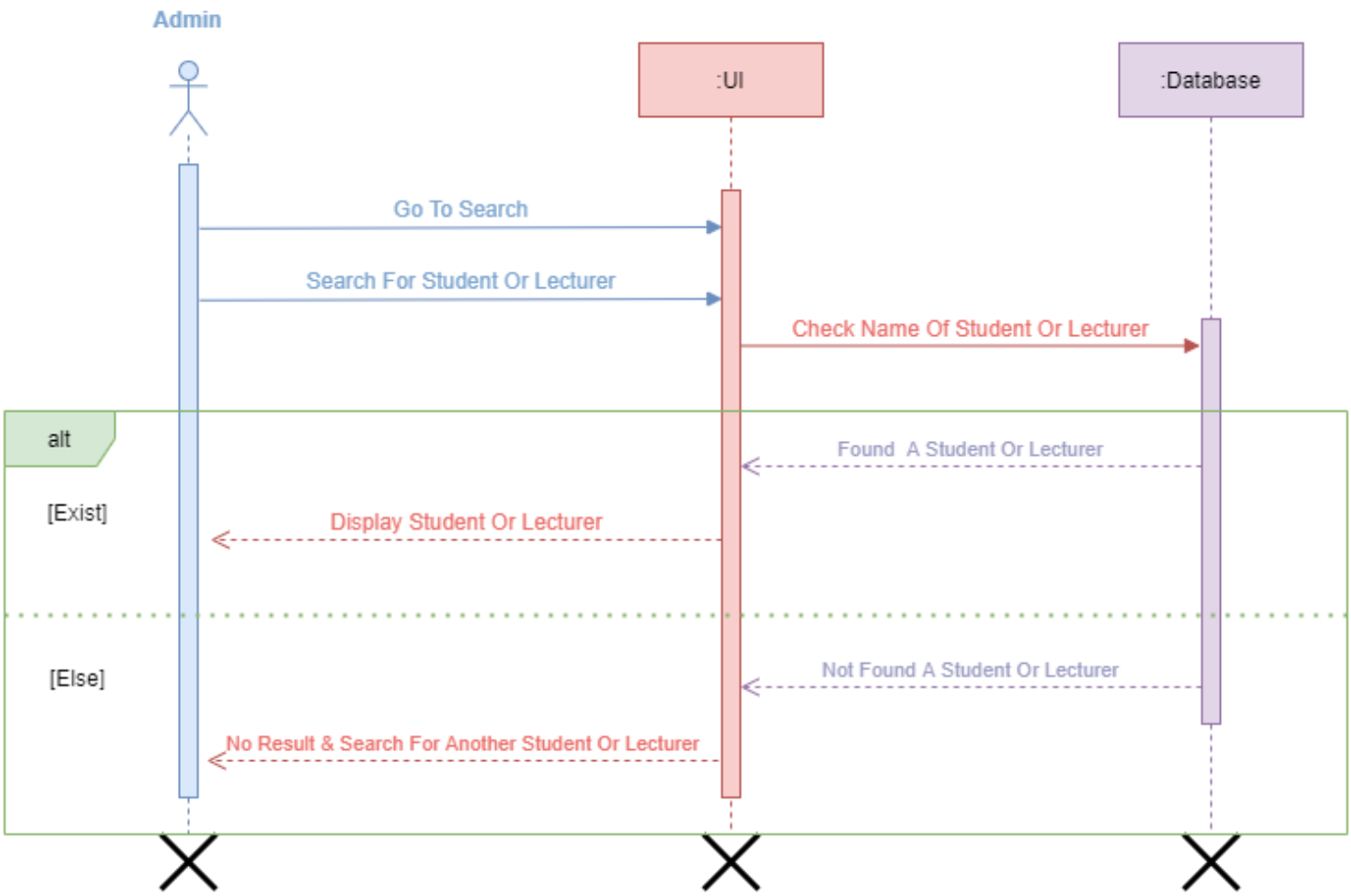
Admin: Delete Student & Lecturer



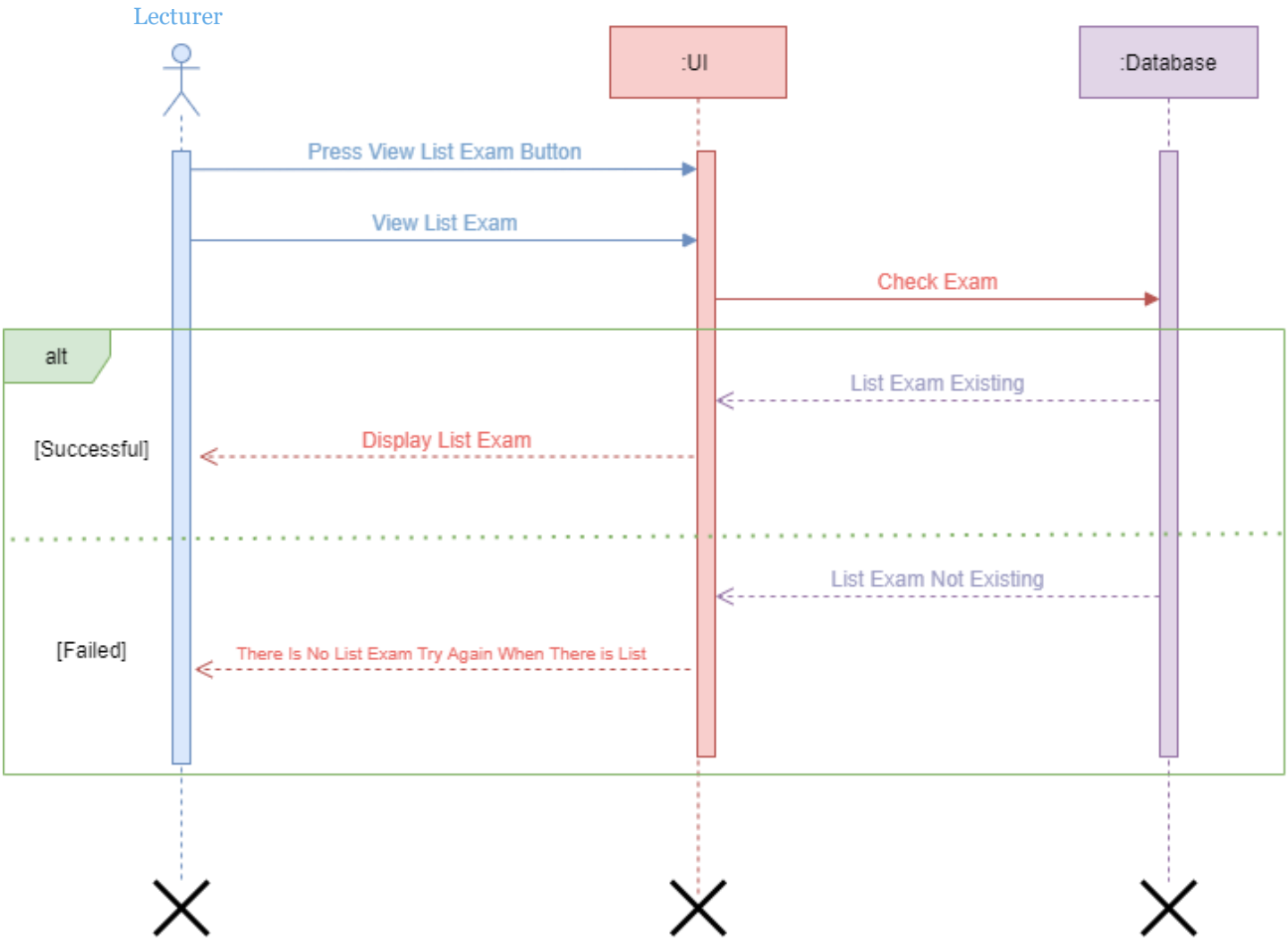
Admin: List of Student & Lecturer



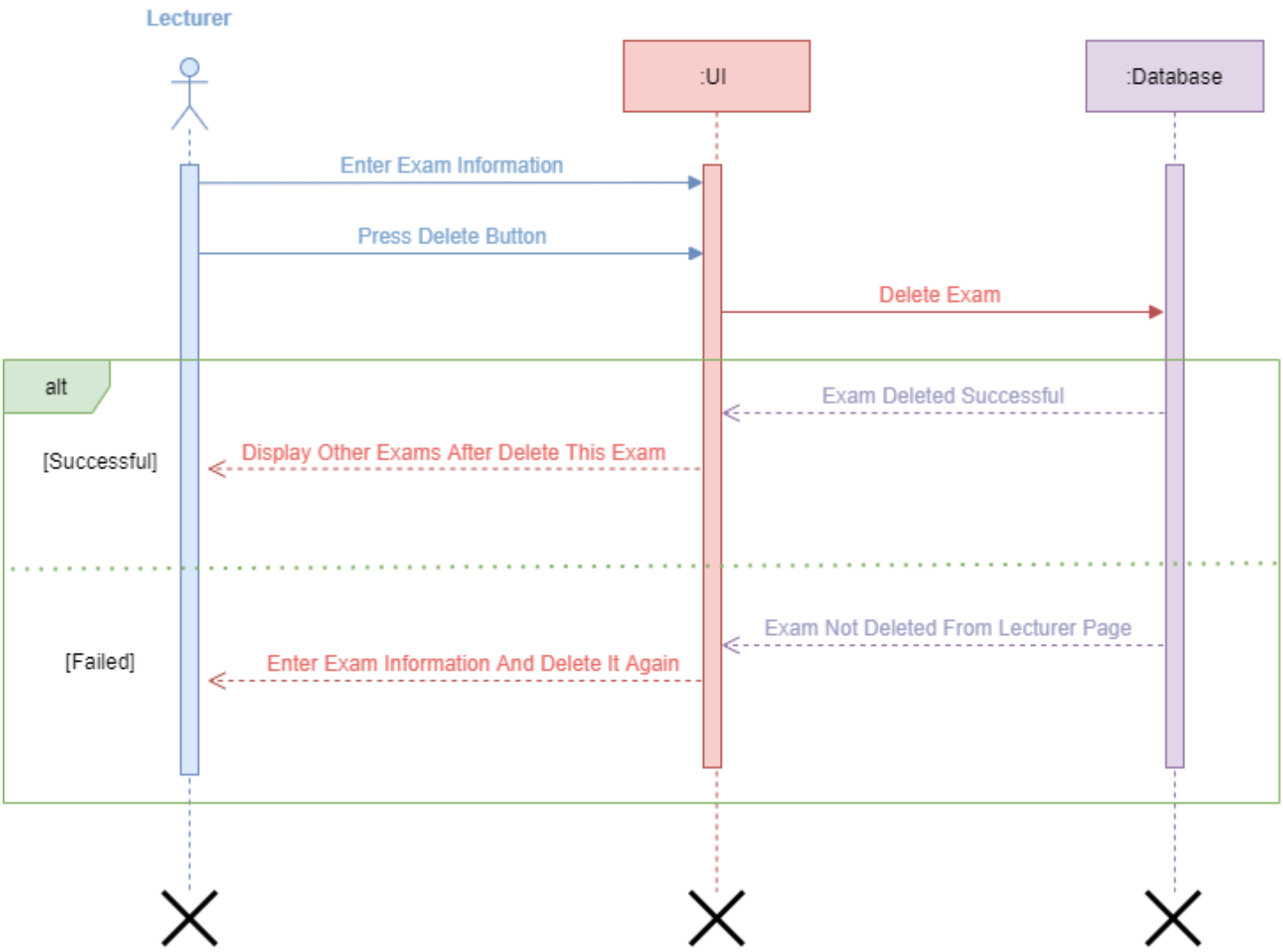
Admin: Search for Student & Lecturer



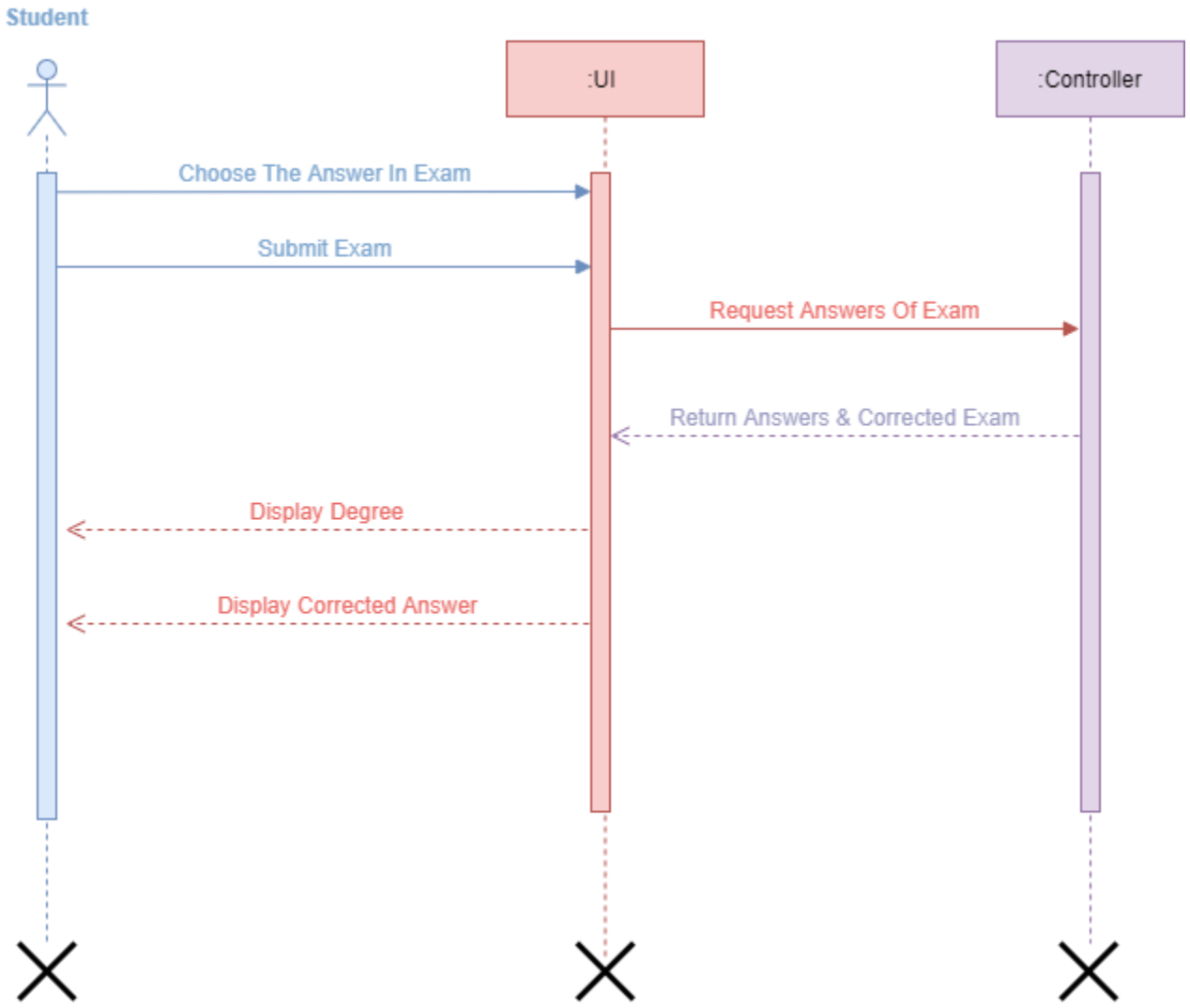
Lecturer: List of Exams



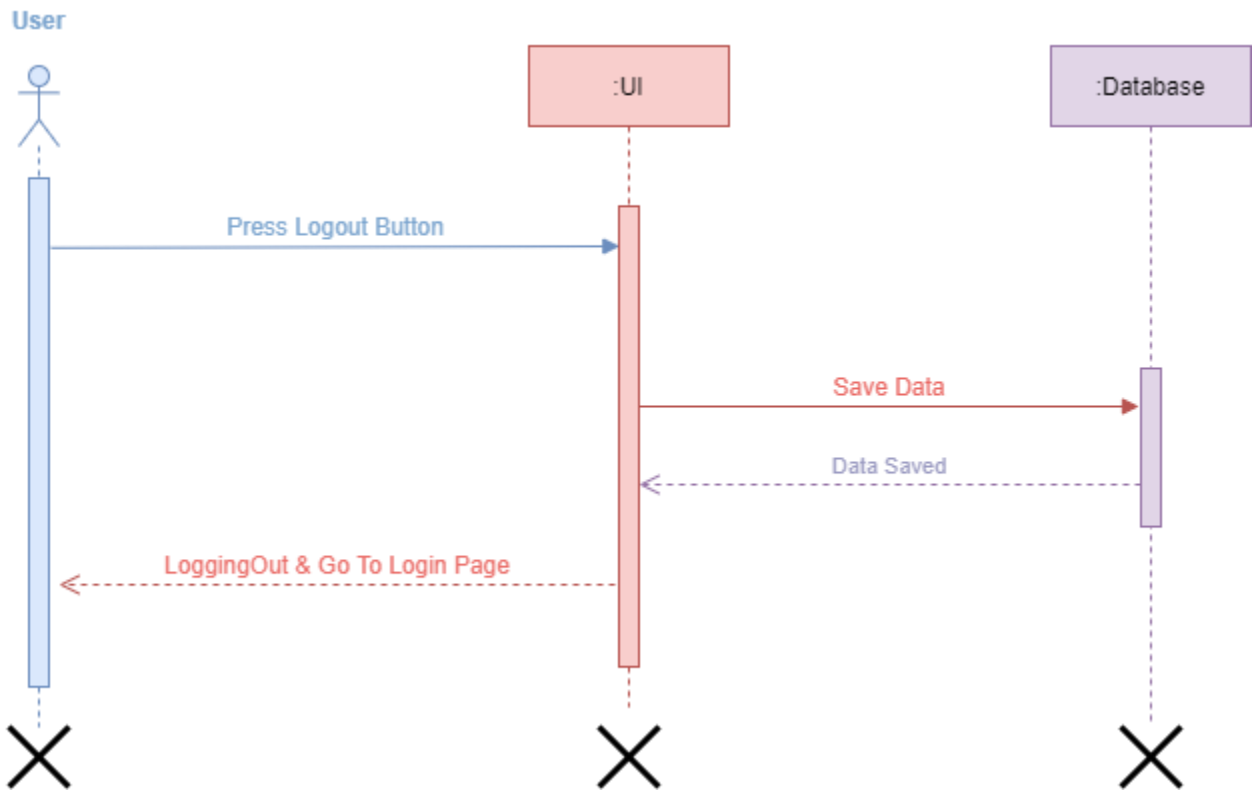
Lecturer: Delete of Exam



# Student


Student
:UI
:Controller
Choose The Answer In Exam
Submit Exam
Request Answers Of Exam
Return Answers & Corrected Exam
Display Degree
Display Corrected Answer

# Logout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:Database
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Save Data
Data Saved
LoggingOut & Go To Login Page