



TCP2201 Object Oriented Analysis and Design

Trim 1 2022/2023

Title : MMU Online Mini-project Management System

Tutorial Group : TT3L

Tutor's Name : Ms Ku Day Chi

Group 35

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| Lingkeswari Ponnusamy | 1201101292 | | |
| Total: | | | |

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1.0 System Overview

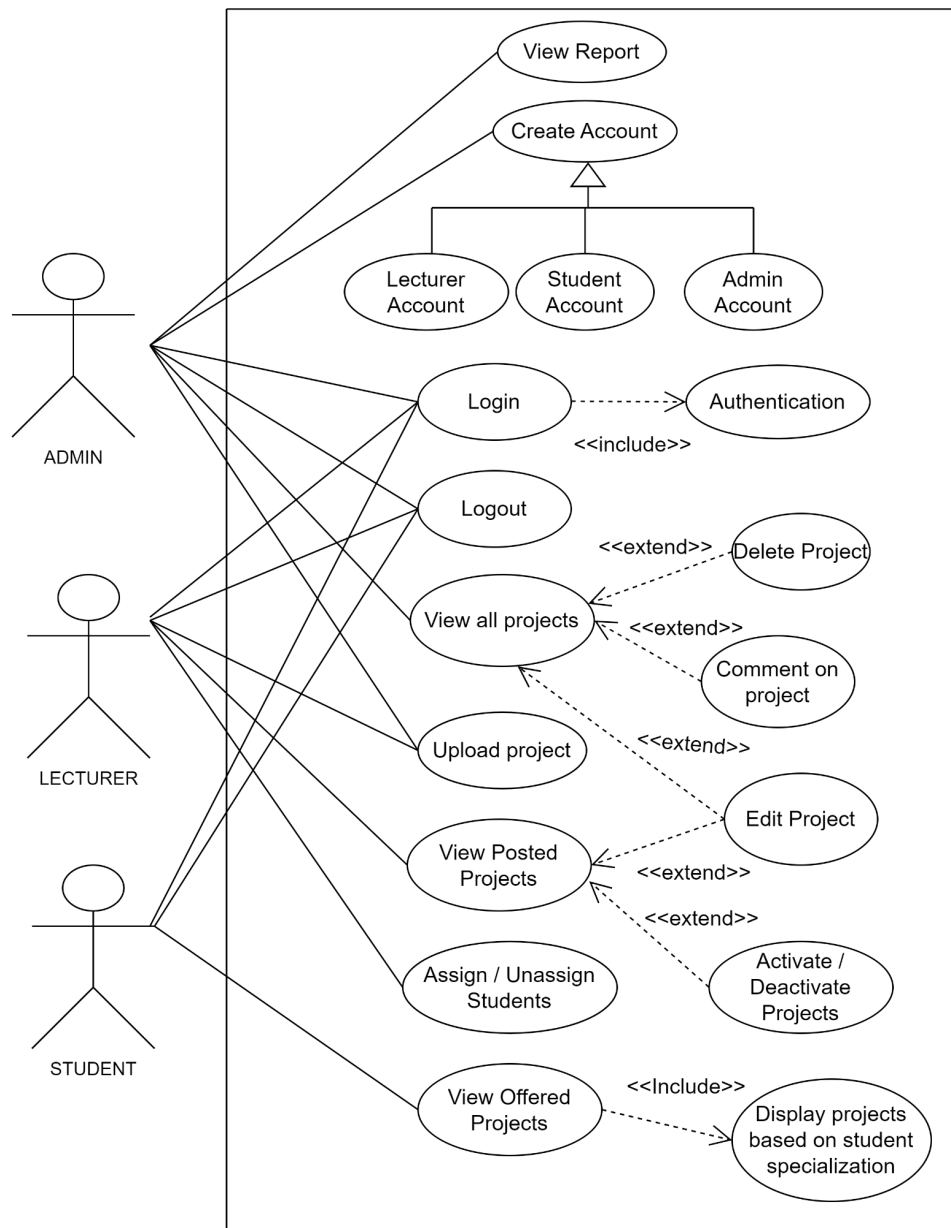
1.1 Introduction

The Mini-project management system is an online tool for MMU lecturers and students who registered with the mini-project subject. The system consists of 3 main users : Admin, Lecturer, Student. Admin will provide the lecturers and students with their own username and password. Admin can add, delete and comment on projects whereas lecturers can upload the content of mini- projects to the system and assign it to the students according to their specialisation. Students are divided according to their specialisation and students are only allowed to access projects under their specialisation only.

1.2 Assumptions (Optional)

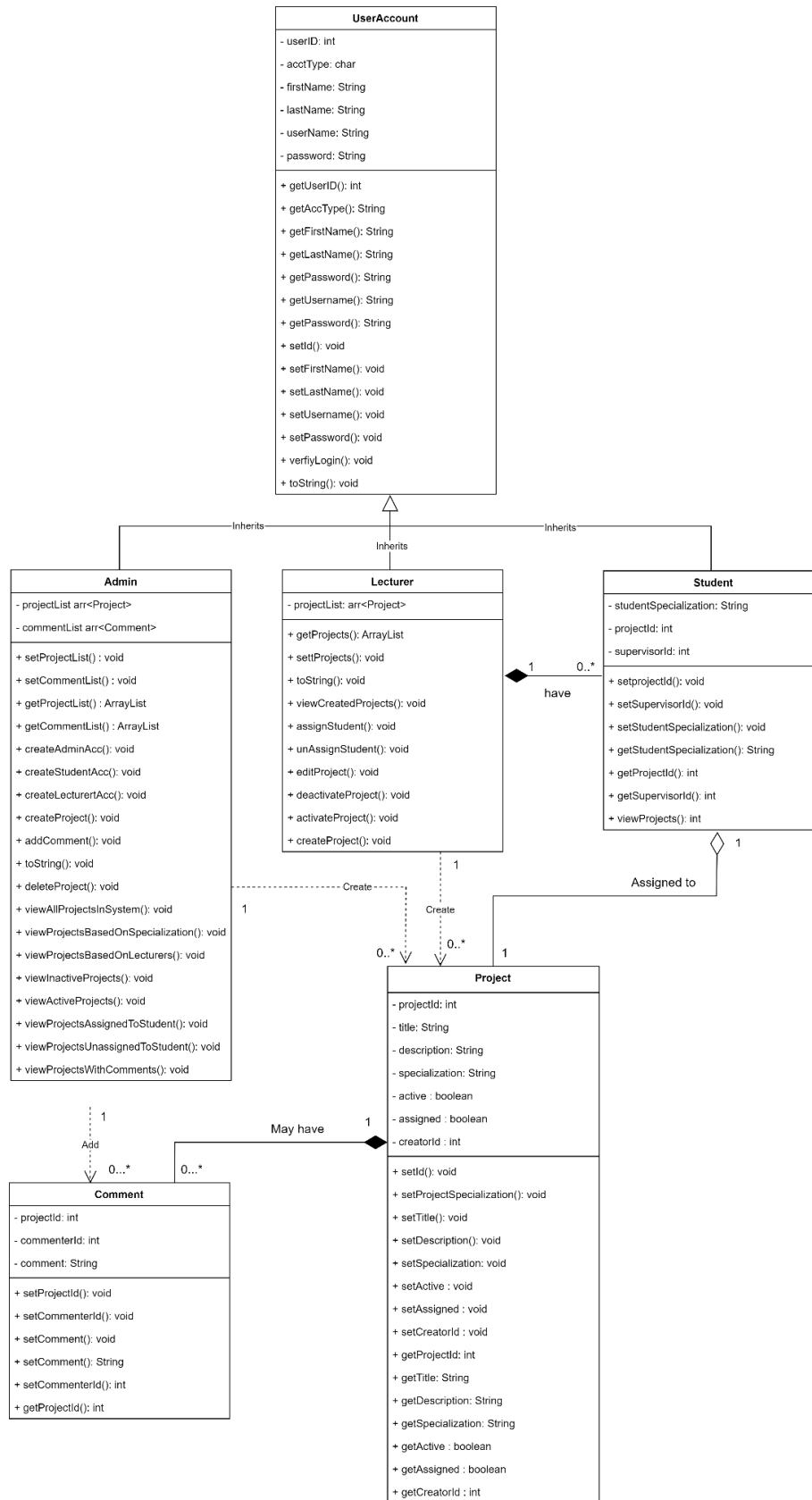
A) There can be multiple projects with the same name.

2.0 Use Case Diagram



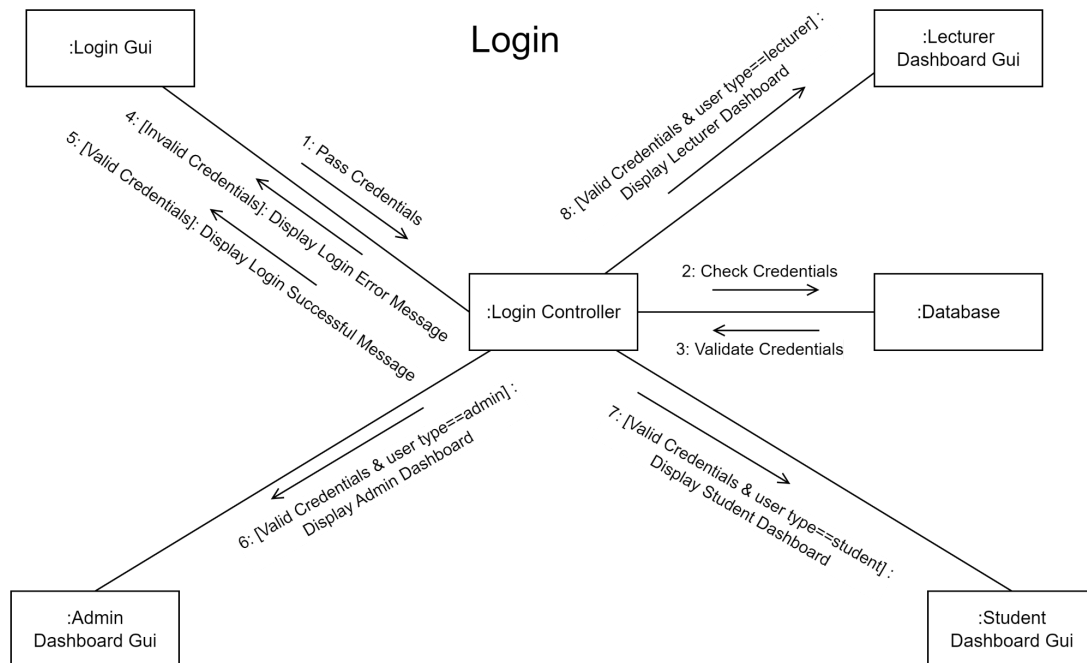
Shown above is the Use Case Diagram of the system which consists of three main actor : Admin, lecturer, student

3.0 UML Class Diagram



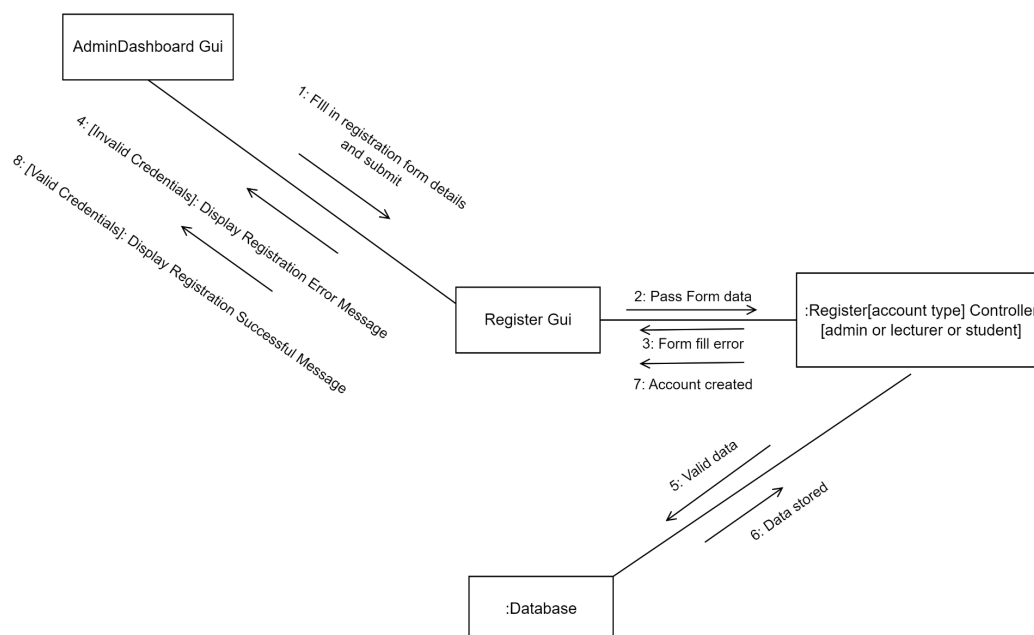
4.0 Collaboration Diagram

4.0.1 User Login

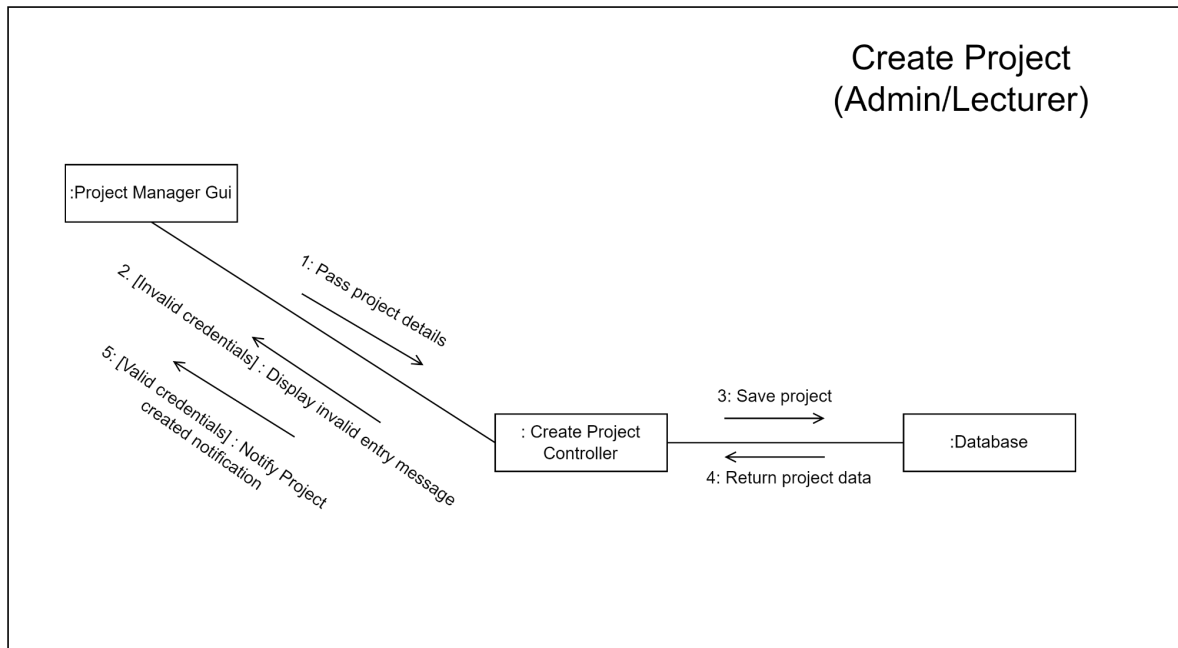


4.0.2 Create User Account (Admin)

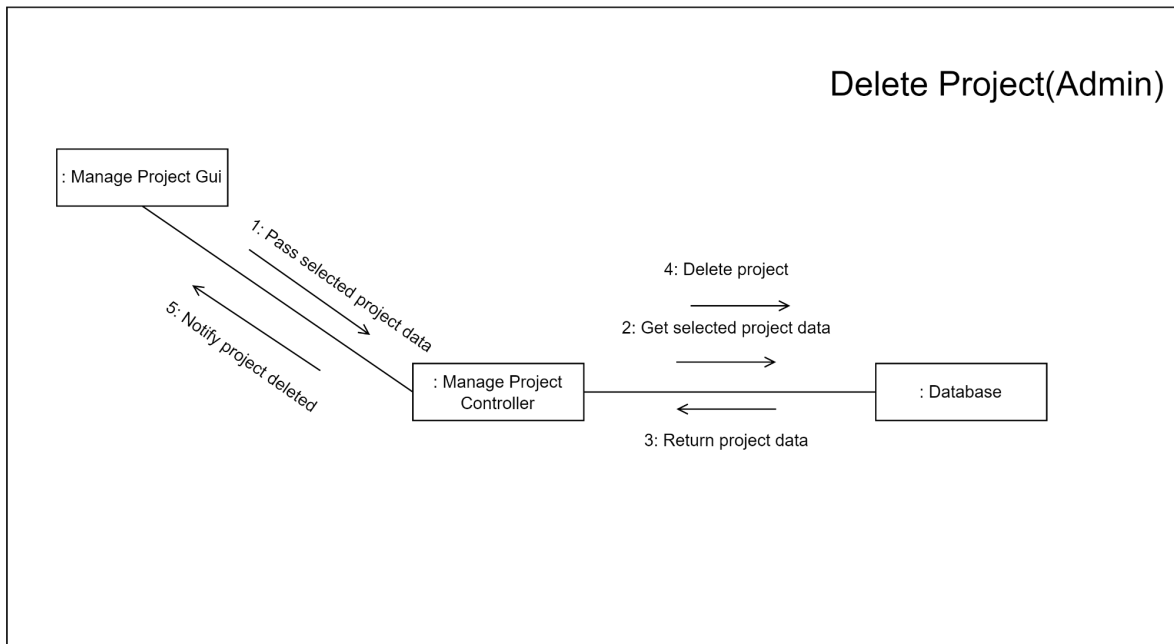
Create User Account (Admin)



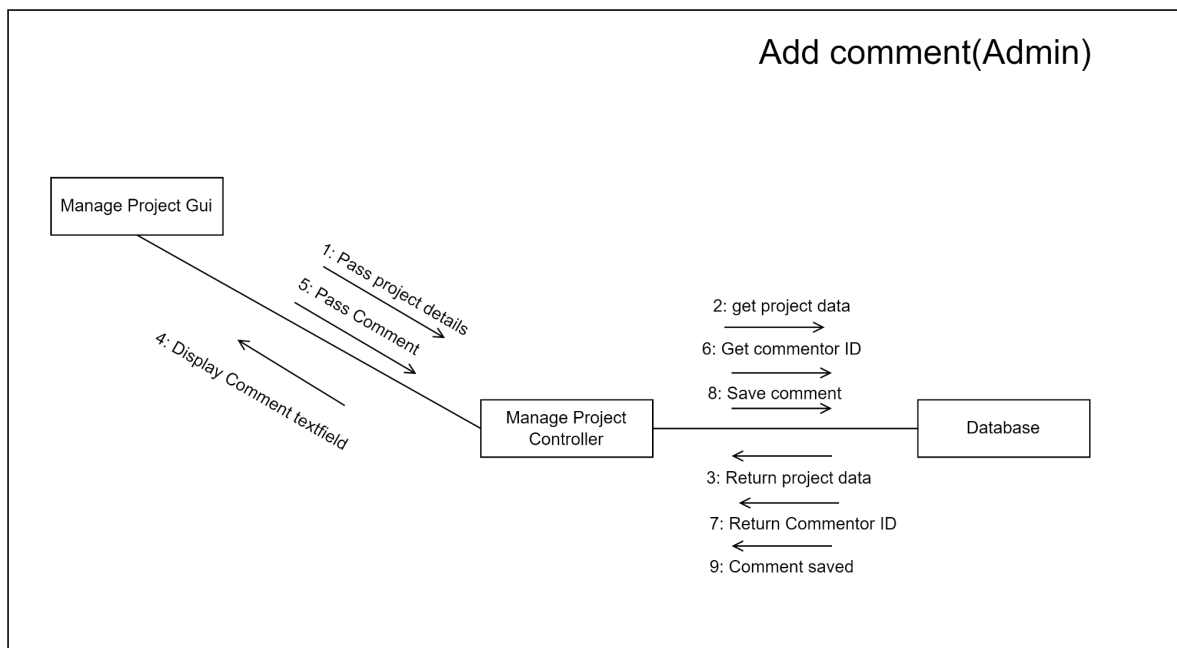
4.0.3 Create Project (Admin)



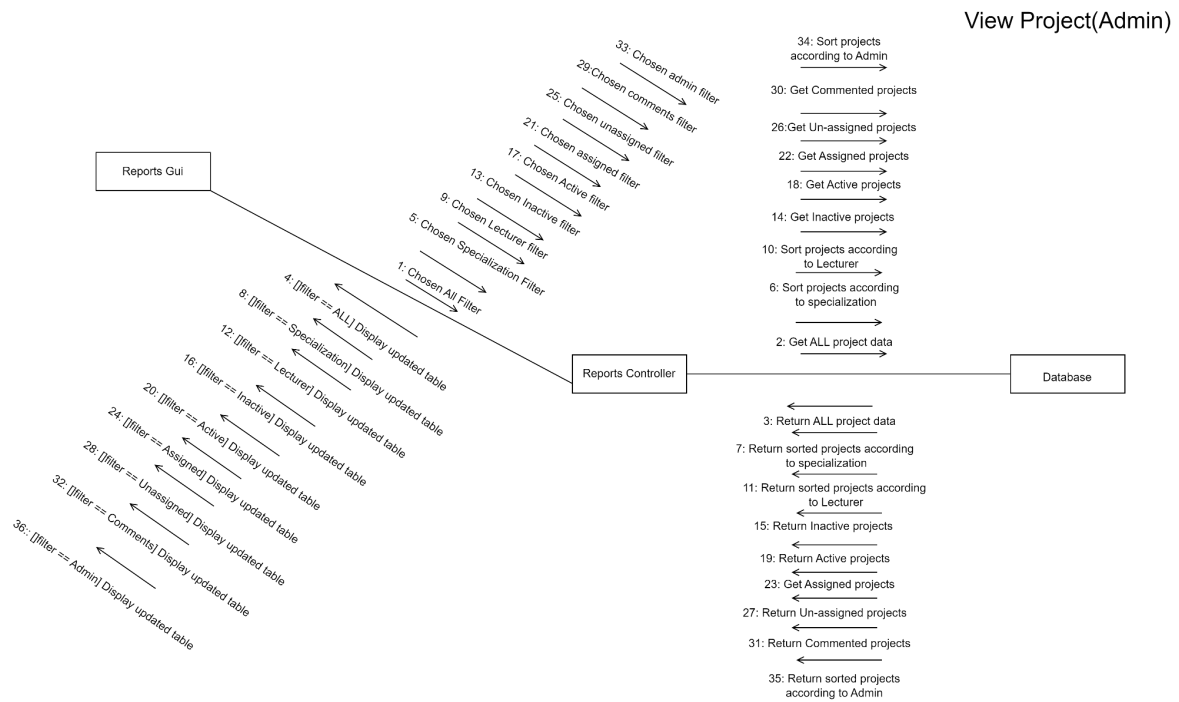
4.0.4 Delete Project (Admin)



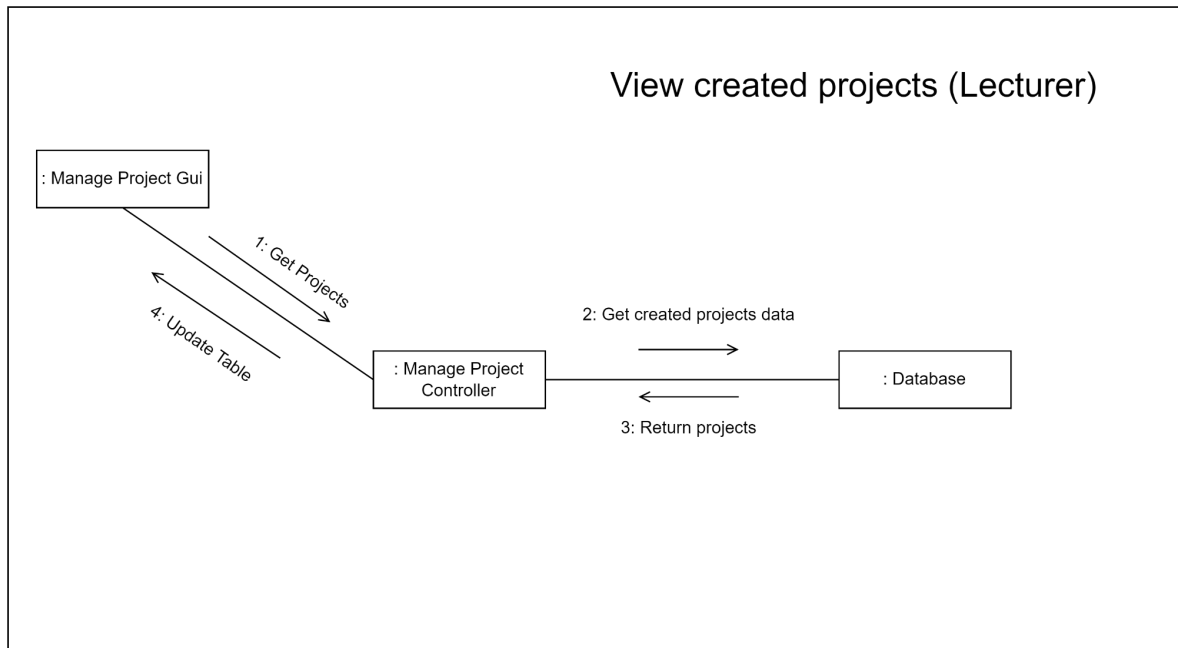
4.0.5 Add Comment (Admin)



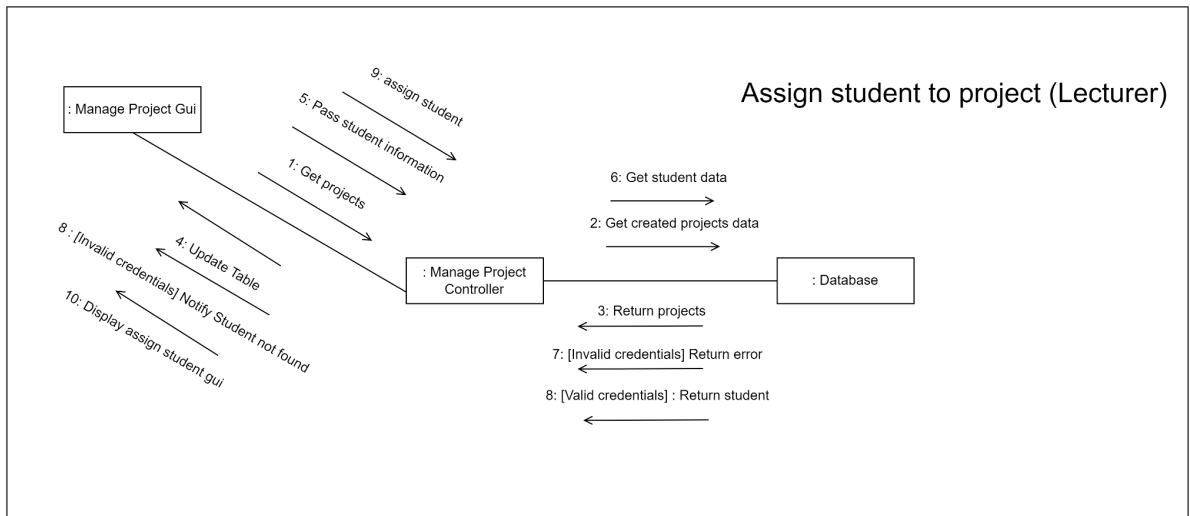
4.0.6 View Report (Admin)



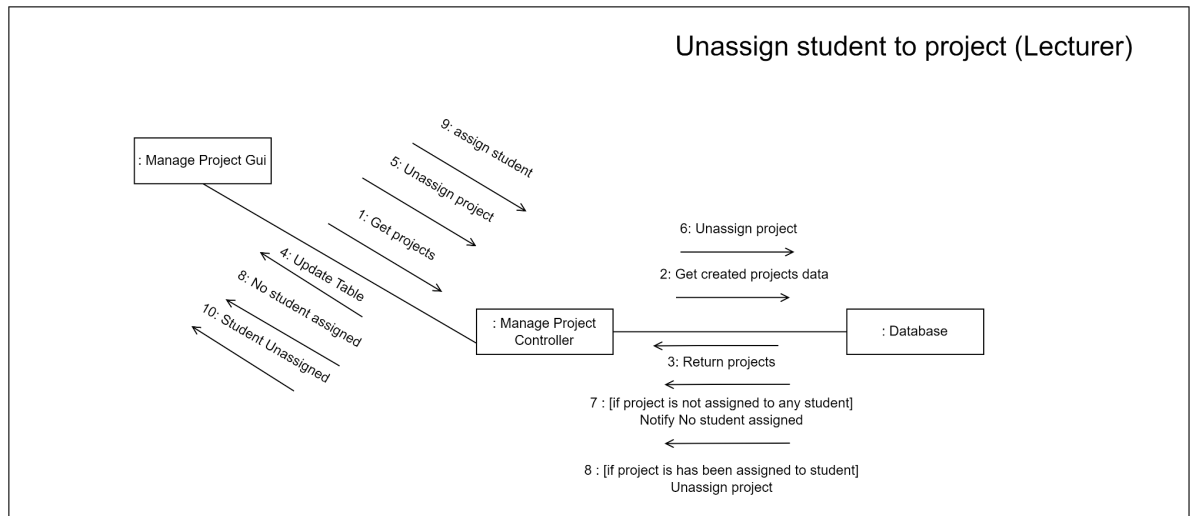
4.0.7 View created projects (Lecturer)



4.0.8 Assign student to project (Lecturer)

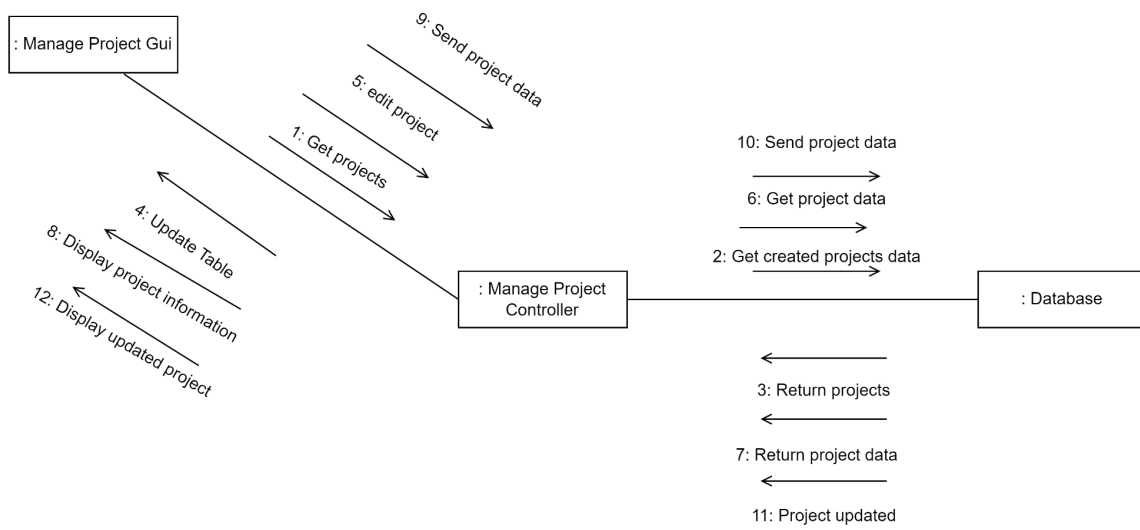


4.0.9 Unassign student to project (Lecturer)



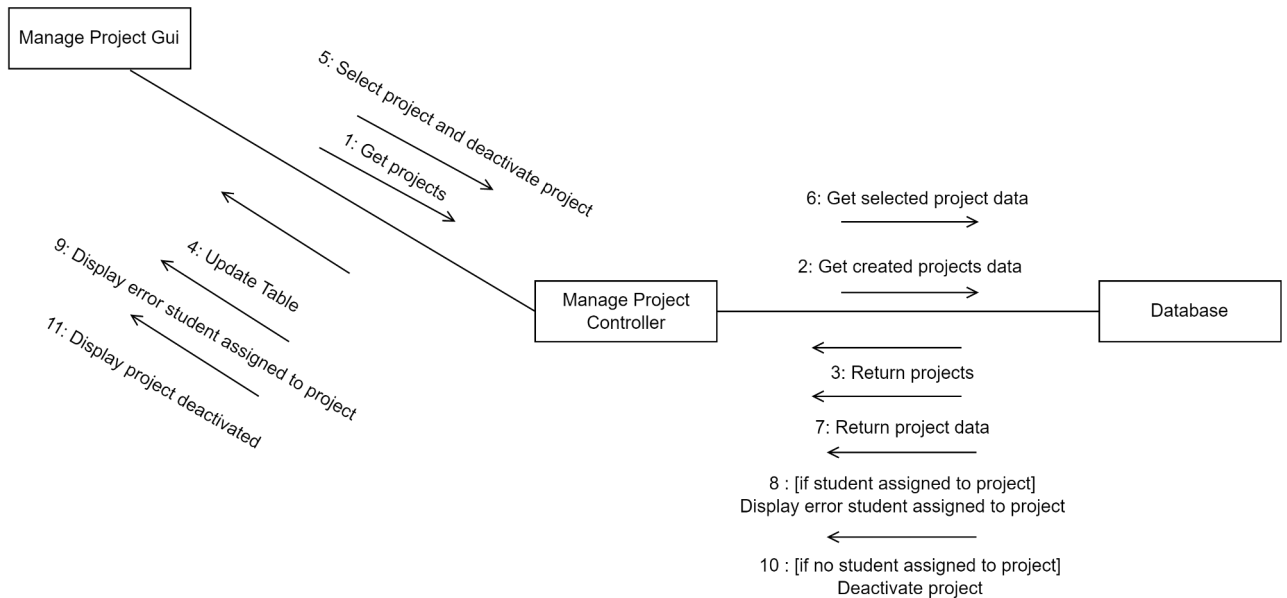
4.0.10 Edit project (Lecturer)

Edit project (Lecturer)



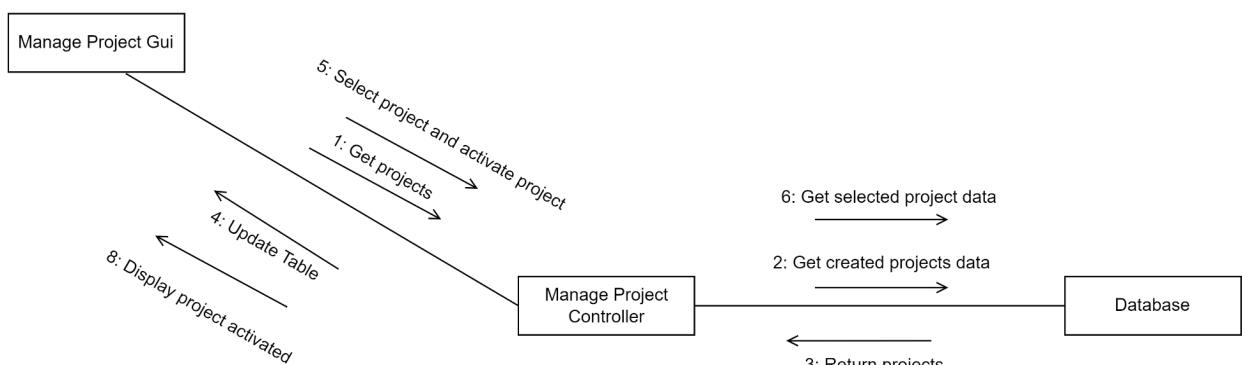
4.0.11 Deactivate project (Lecturer)

Deactivate project (Lecturer)

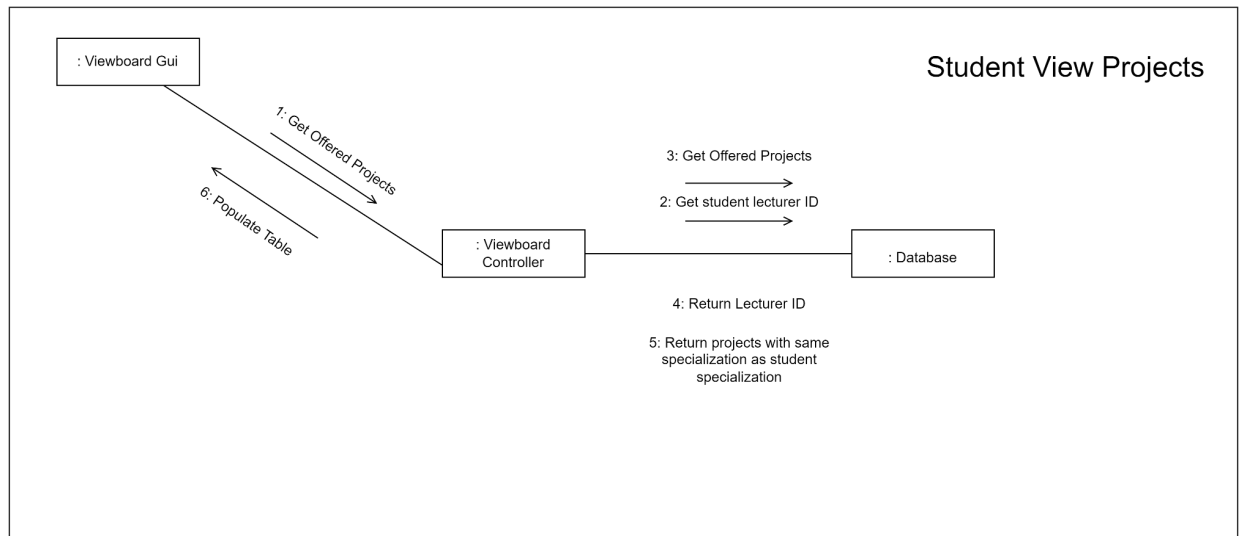


4.0.12 Activate project (Lecturer)

Activate project (Lecturer)



4.0.13 View Projects(Student)

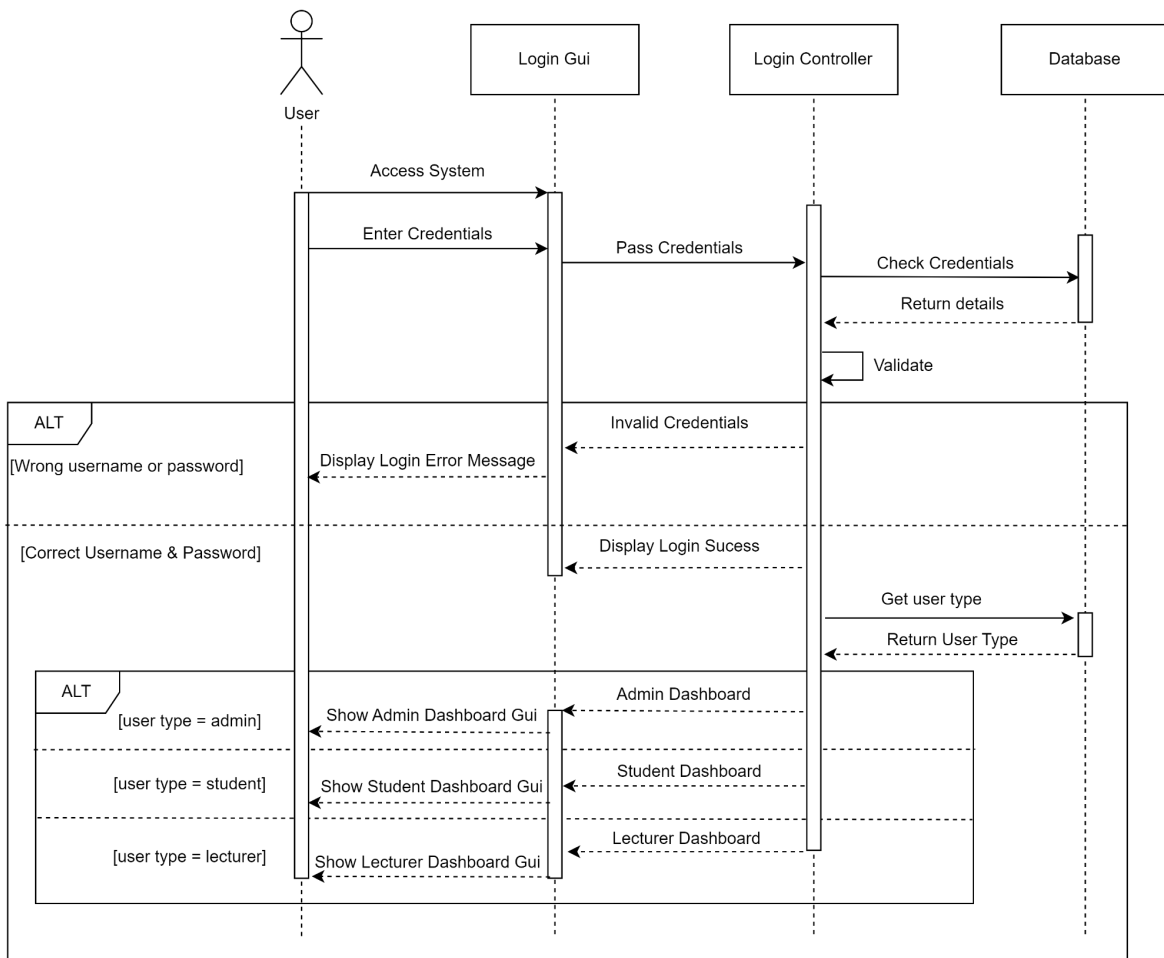


5.0 Behavioural & Flow Models

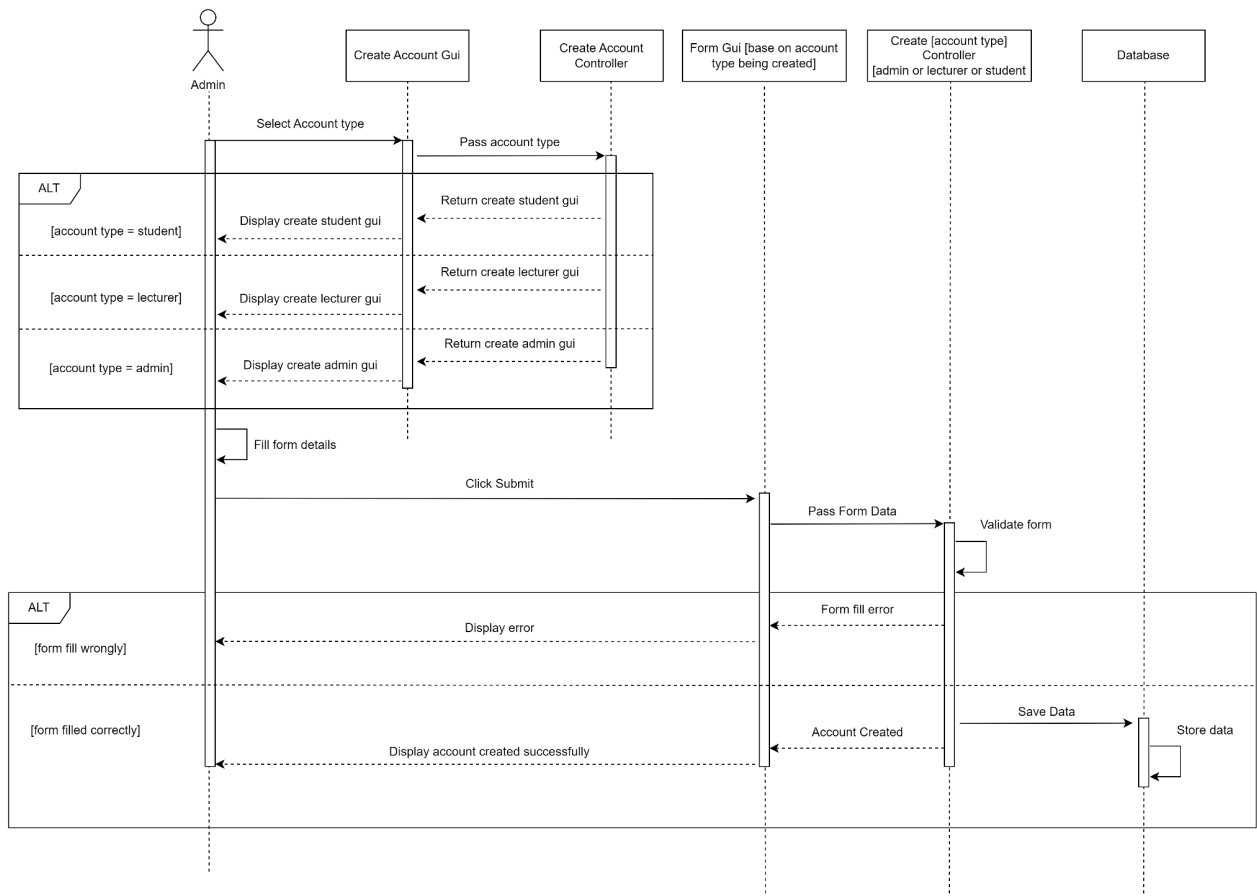
5.1 Sequence Diagram

5.1.1 User Login

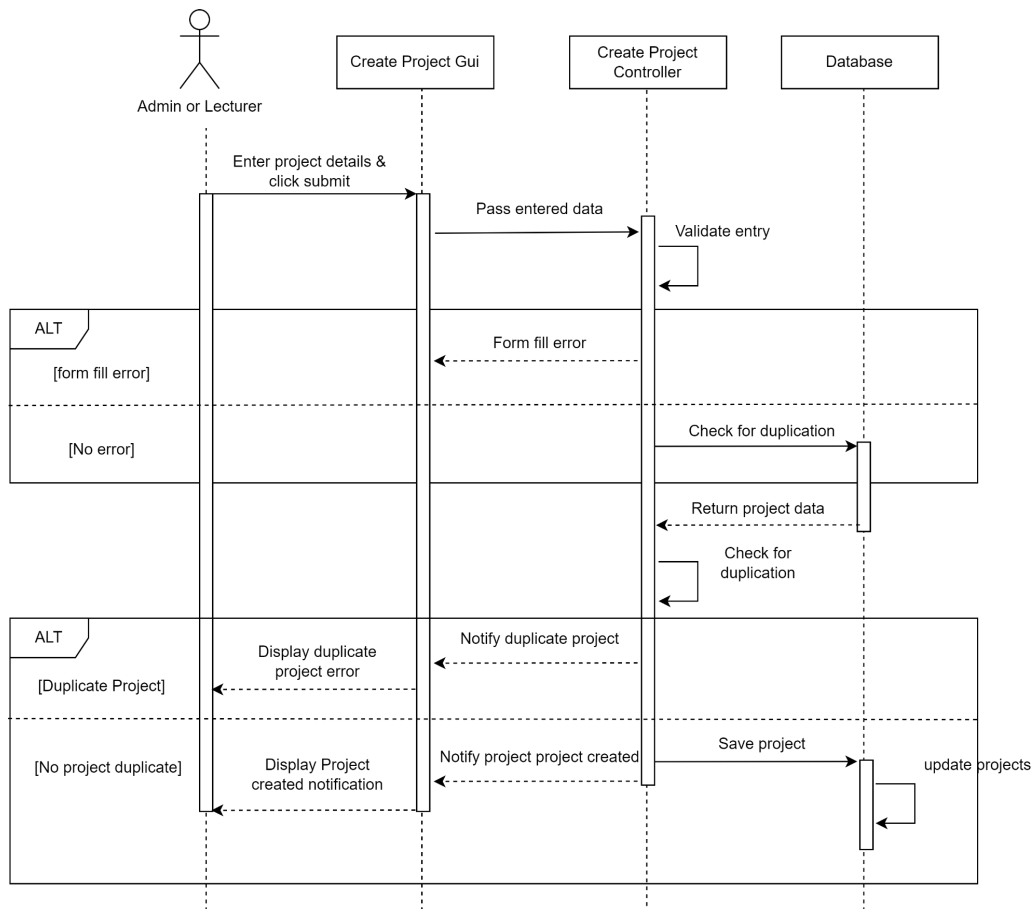
Login



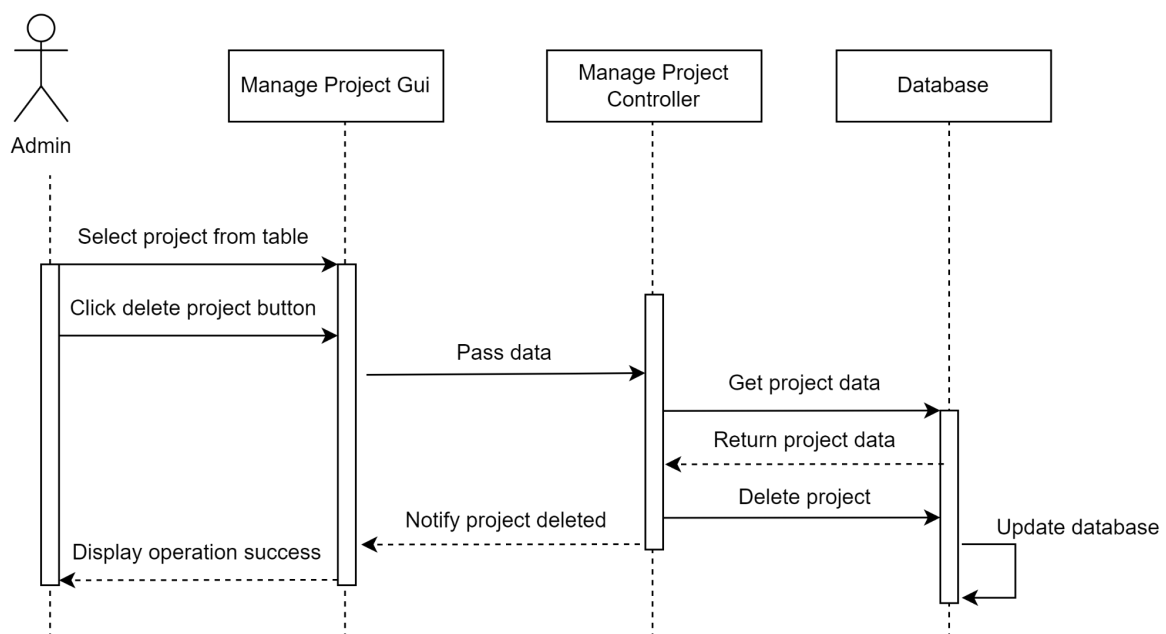
5.1.2 Create User Account (Admin)



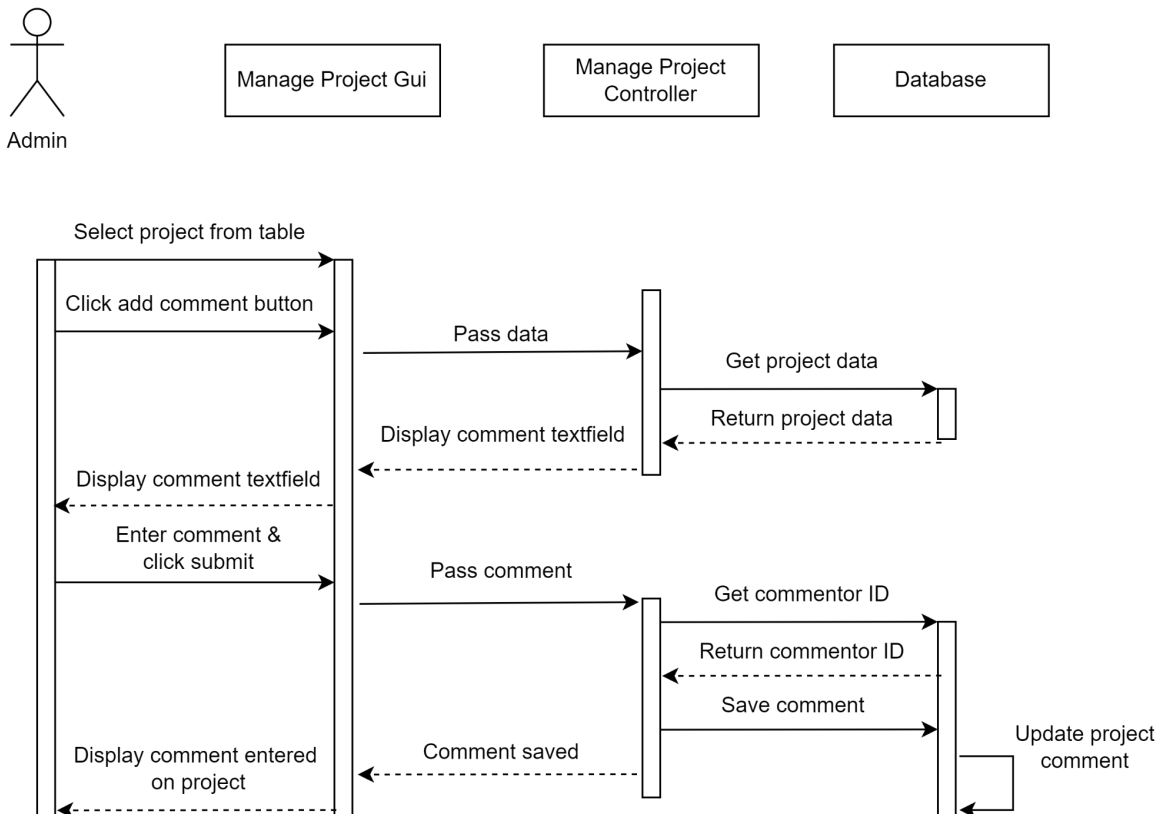
5.1.3 Create Project (Admin/Lecturer)



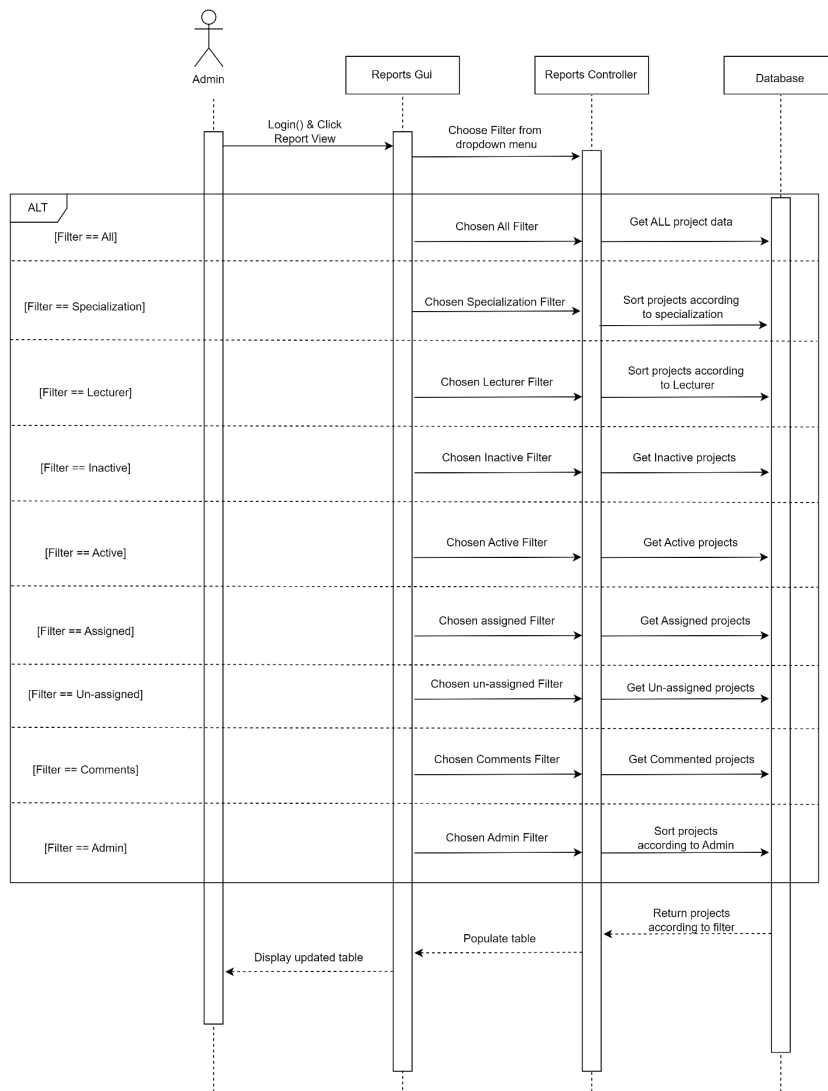
5.1.4 Delete Project (Admin)



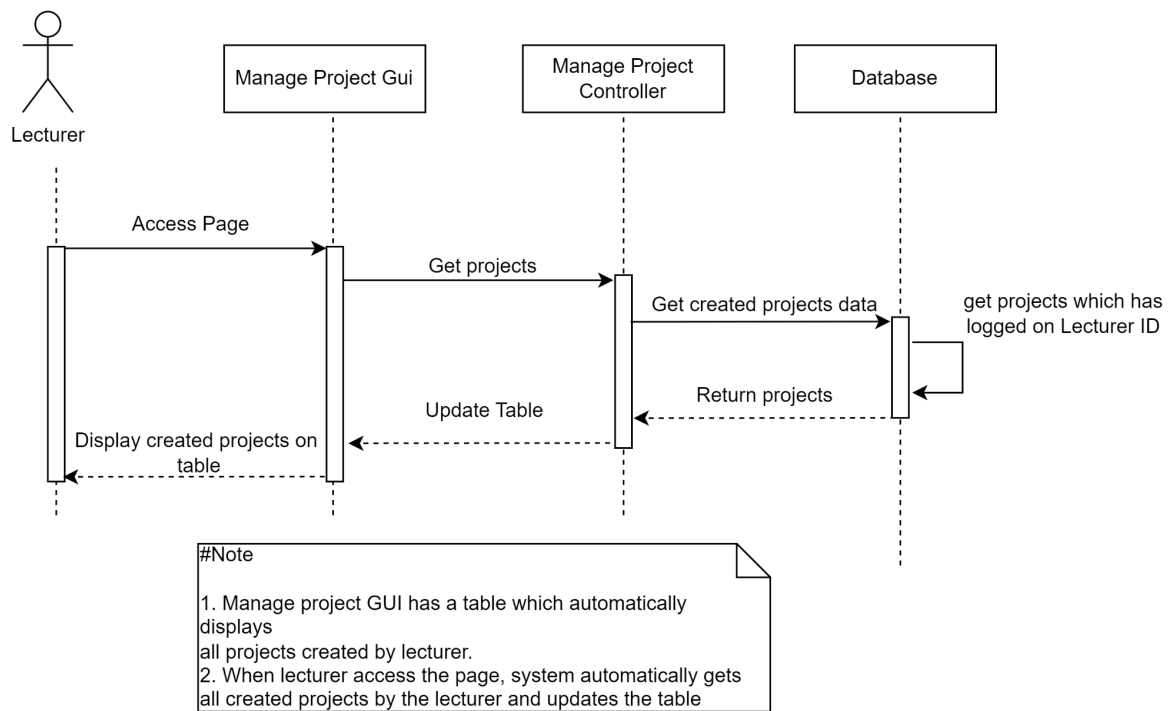
5.1.5 Add Comment (Admin)



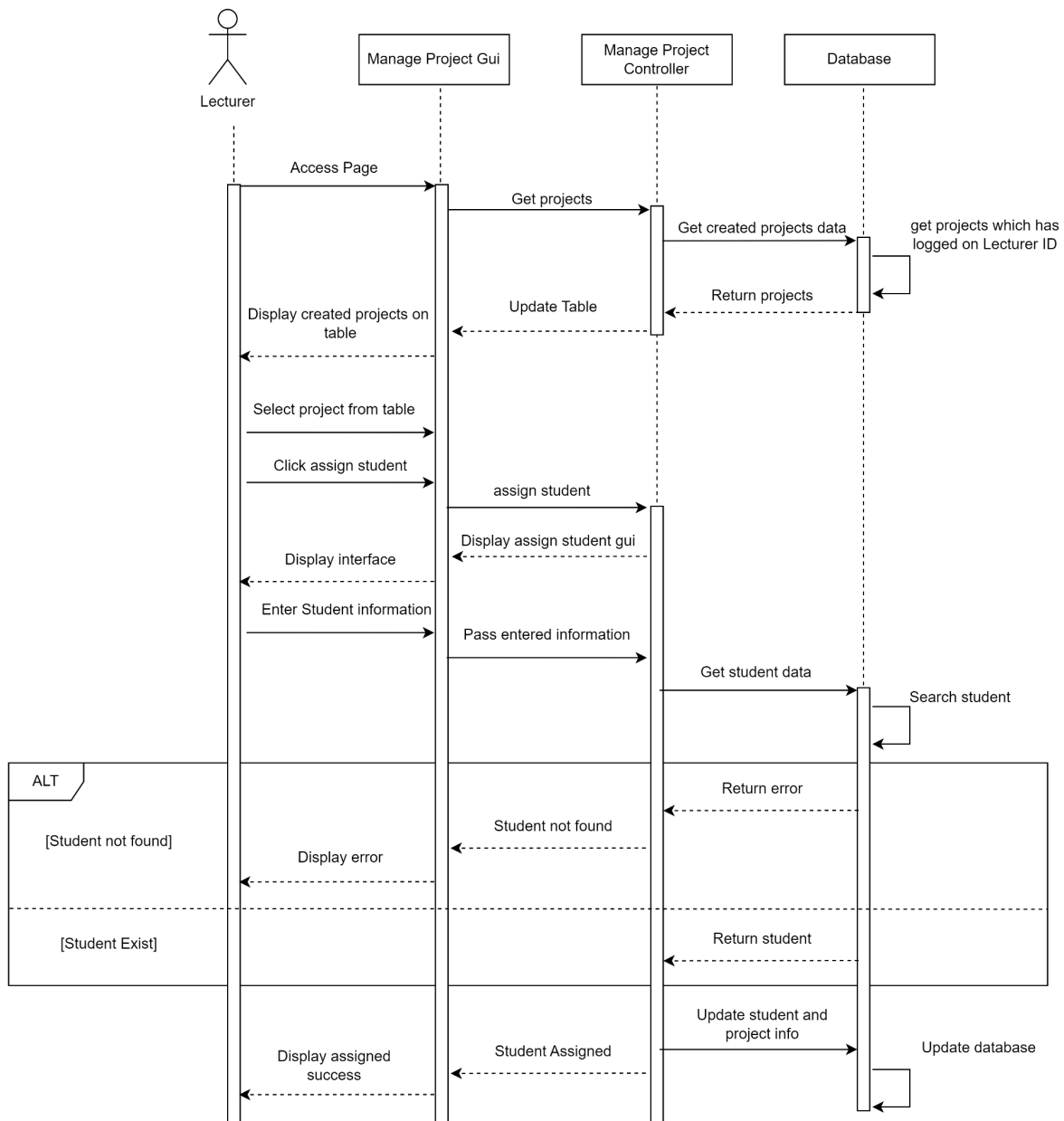
5.1.6 View Report (Admin)



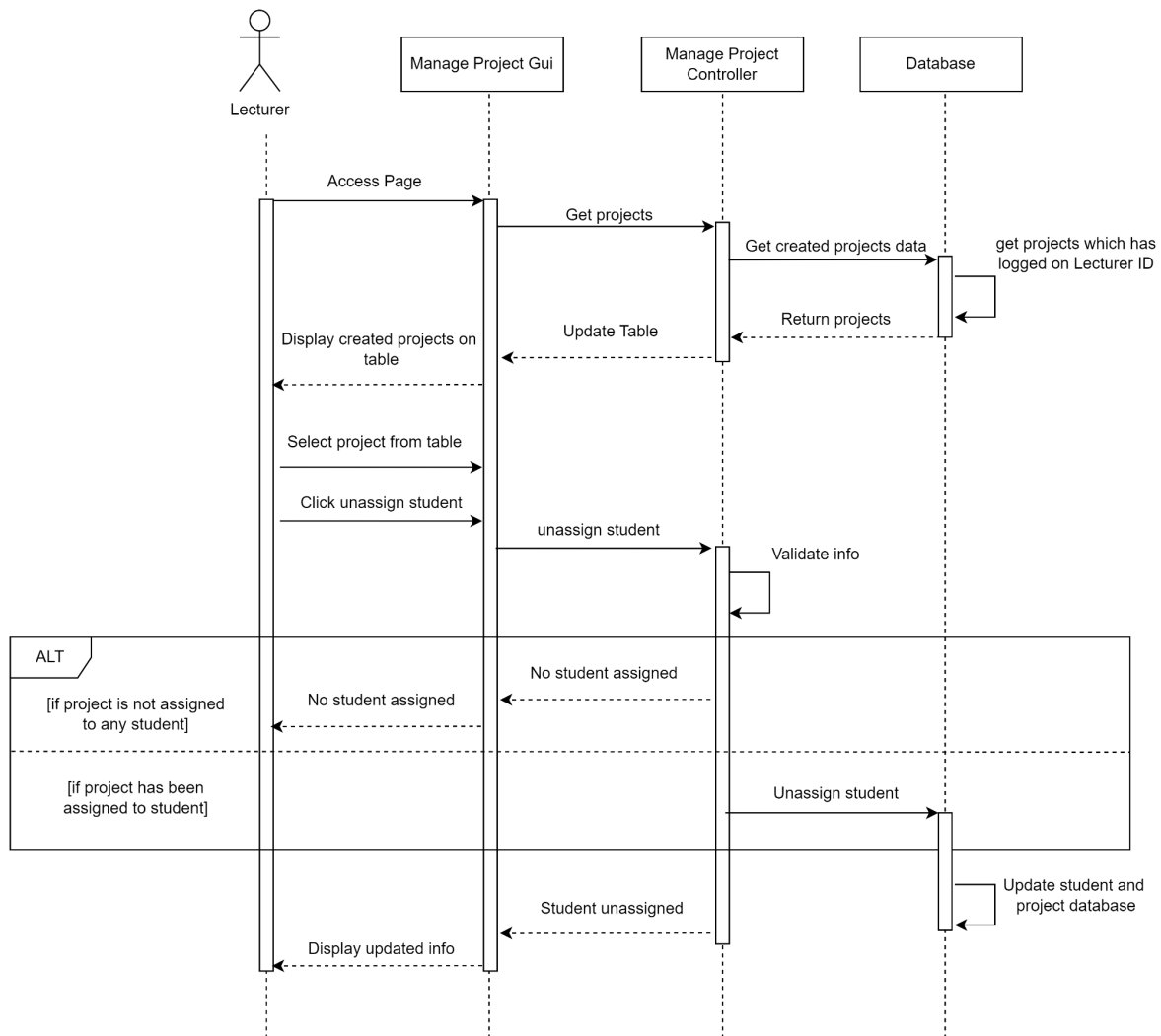
5.1.7 View created projects (Lecturer)



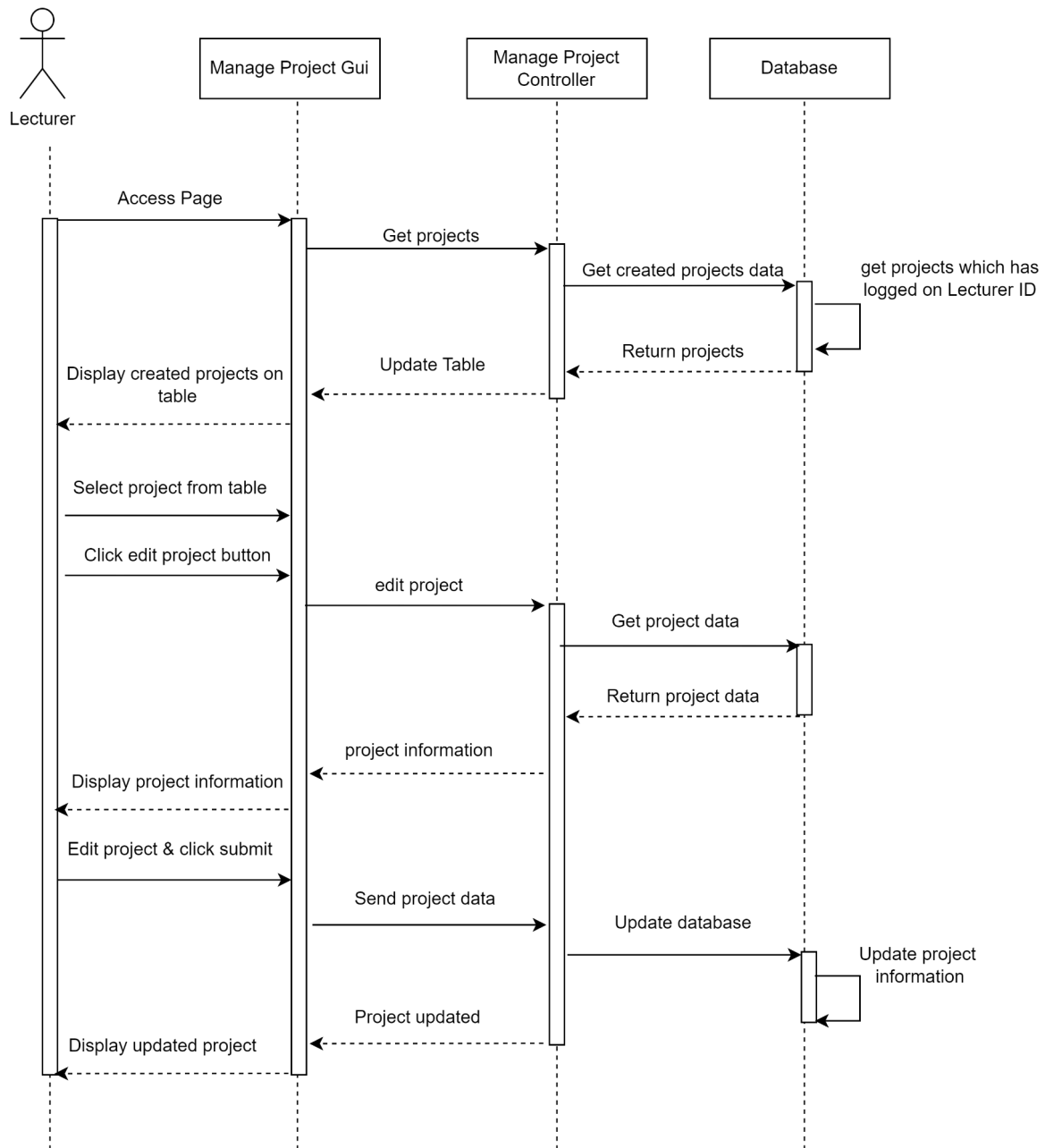
5.1.8 Assign student to project (Lecturer)



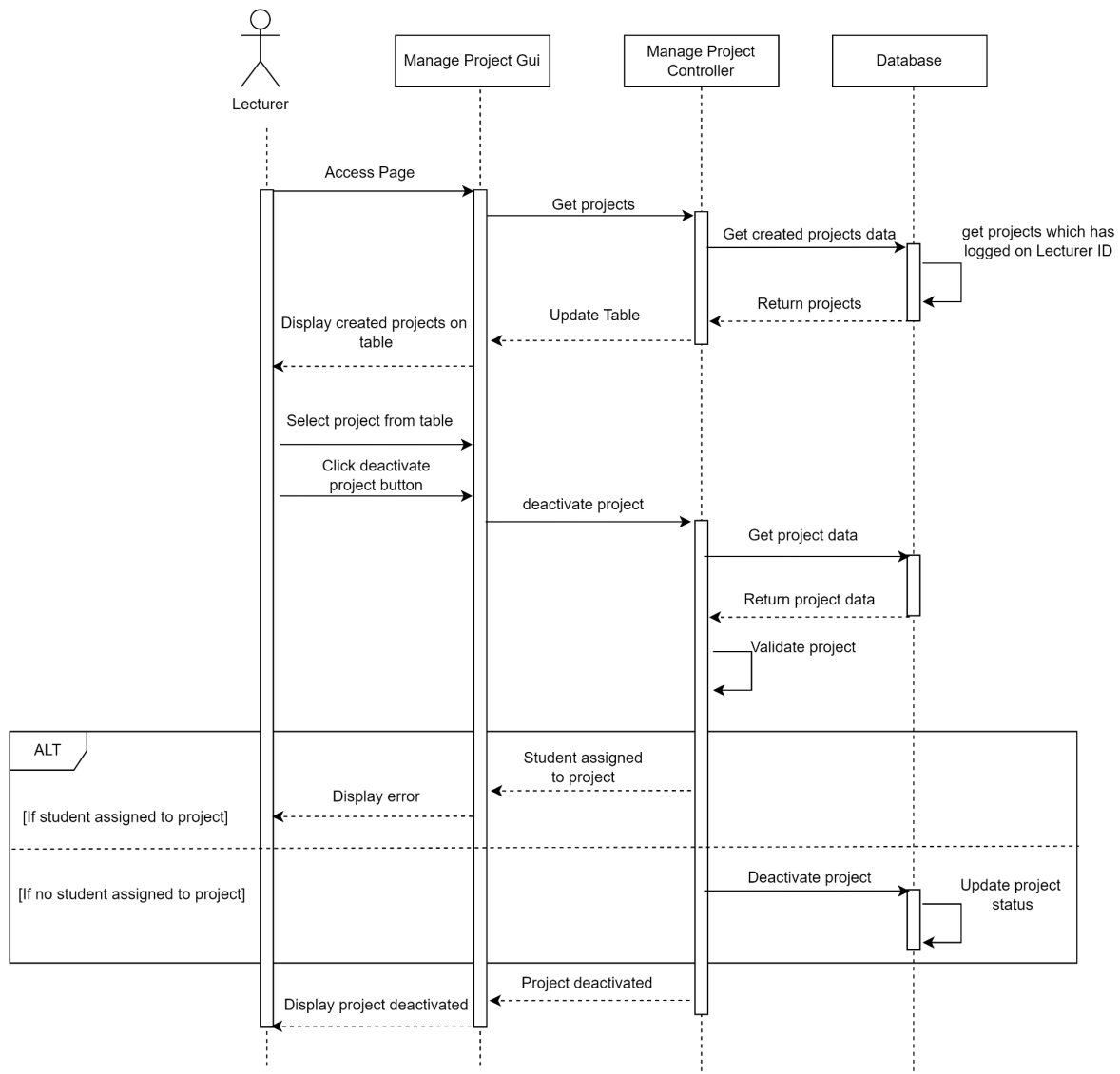
5.1.9 Unassign student to project (Lecturer)



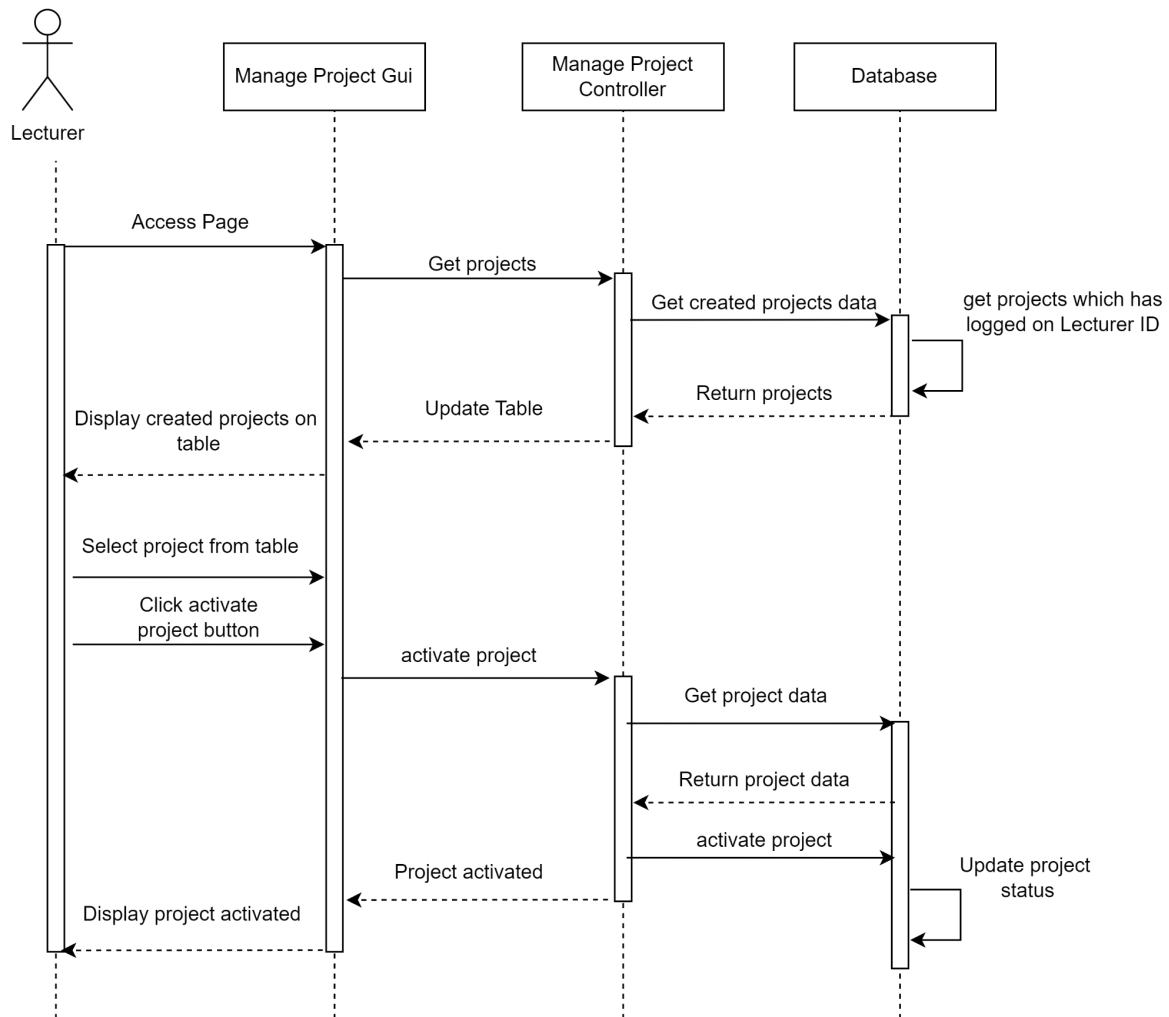
5.1.10 Edit project (Lecturer)



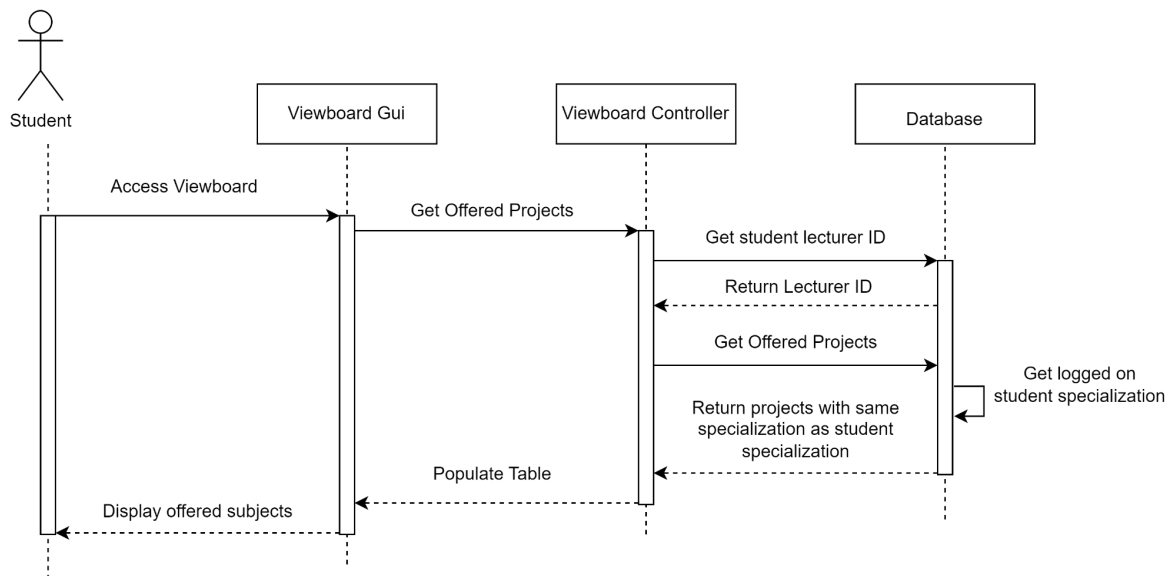
5.1.11 Deactivate project (Lecturer)



5.1.12 Activate project (Lecturer)

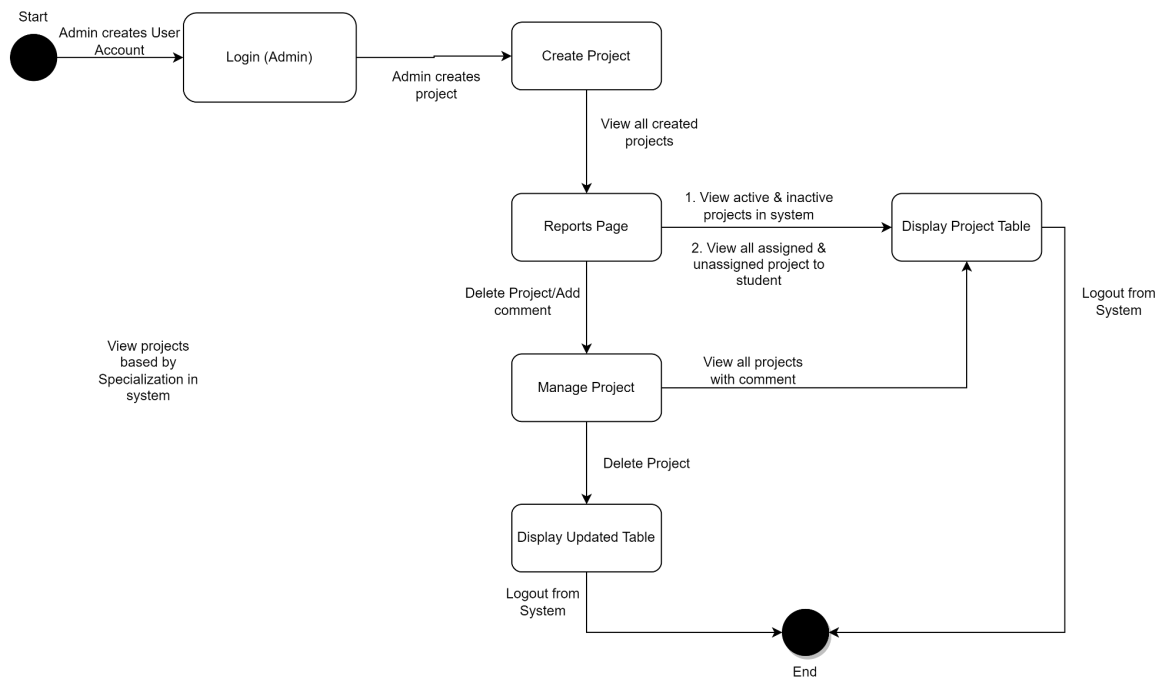


5.1.13 View Projects(Student)

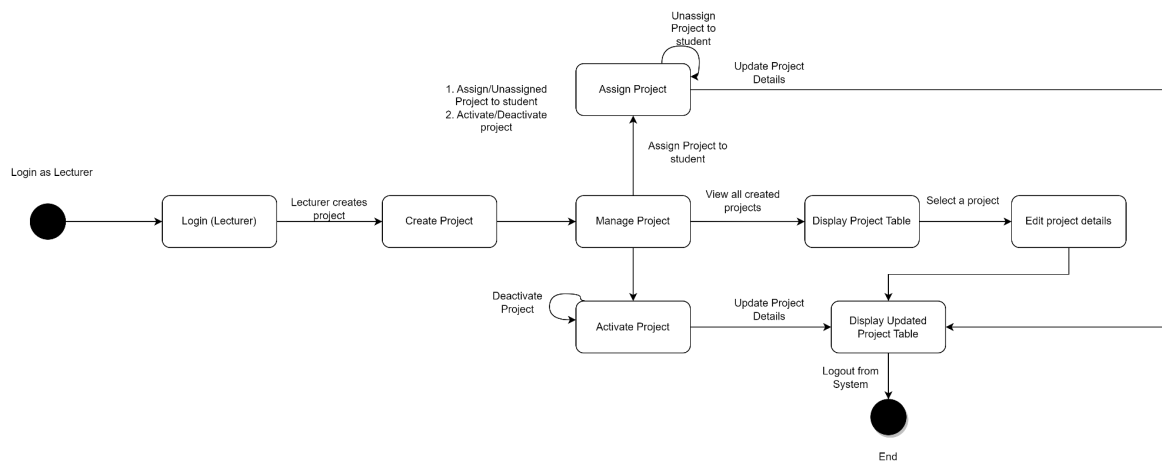


5.2 State Diagram

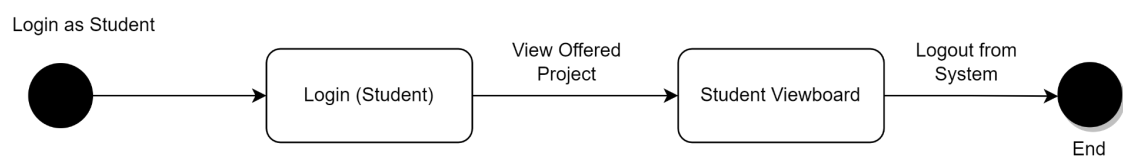
Admin State Diagram



Lecturer State Diagram



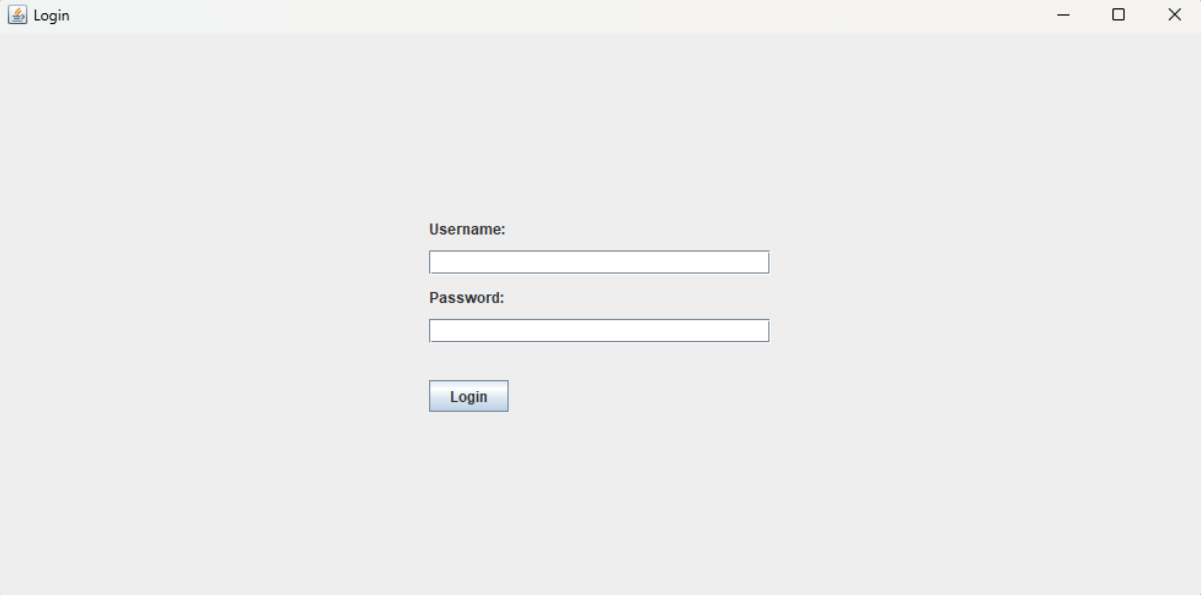
Student State Diagram



Appendix

Sample interface screen

Login

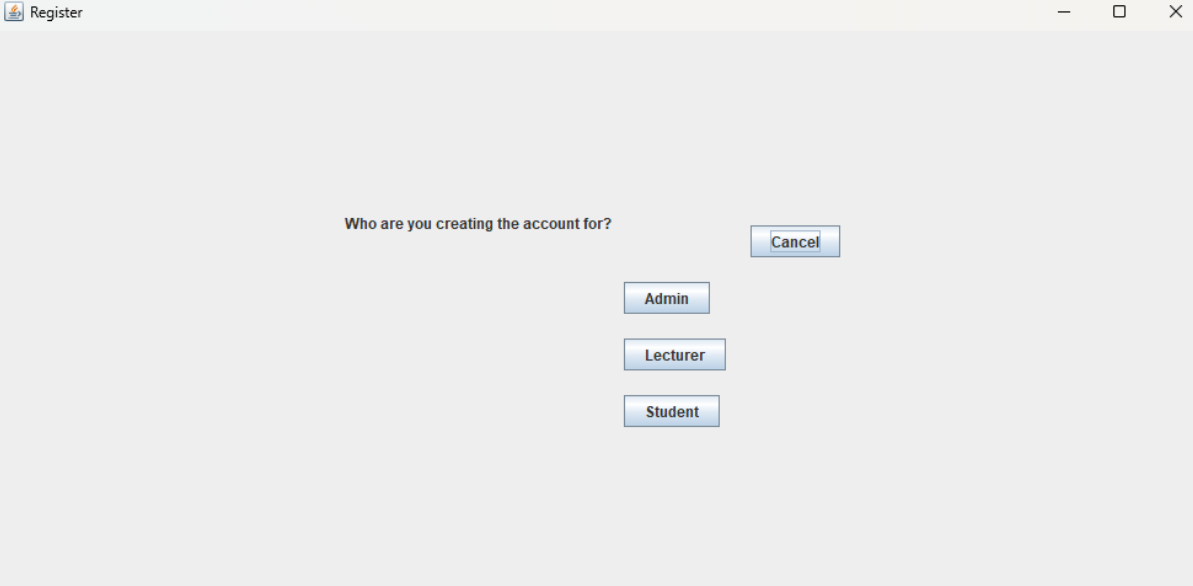


Username:

Password:

Login

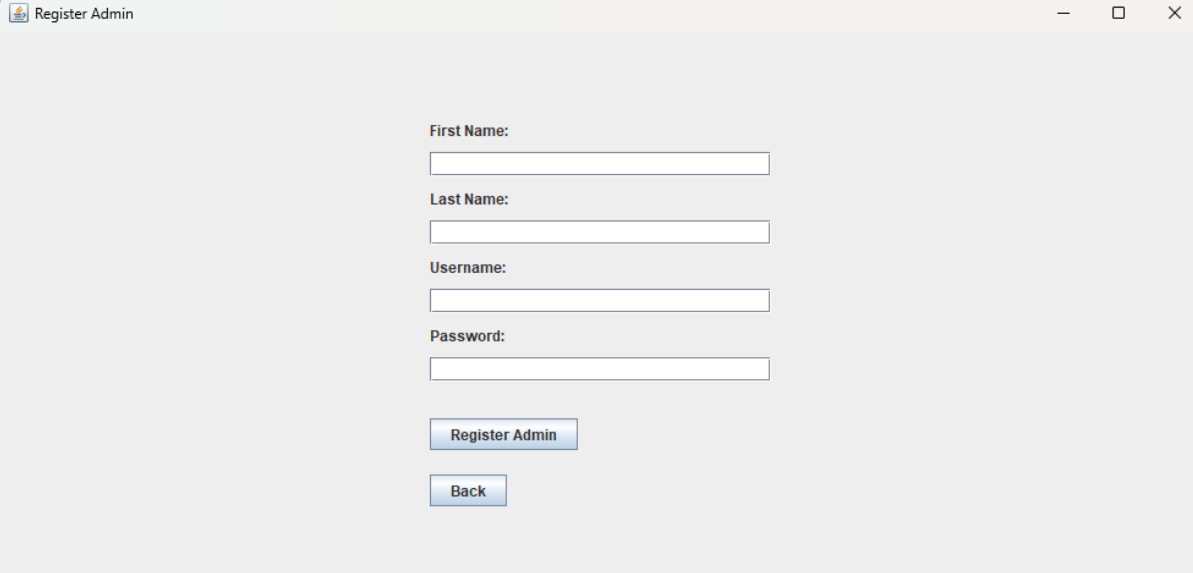
Create User Account(Admin)



Register

Who are you creating the account for?

This is a screenshot of a web browser window titled "Register". The window has a light gray background. At the top, there is a title bar with the text "Register" and standard window control buttons (minimize, maximize, close). The main content area contains the text "Who are you creating the account for?". Below this text, there are four buttons arranged vertically: "Cancel", "Admin", "Lecturer", and "Student". The "Admin" button is highlighted with a blue border and a slight shadow.



Register Admin

First Name:

Last Name:

Username:

Password:

This is a screenshot of a web browser window titled "Register Admin". The window has a light gray background. At the top, there is a title bar with the text "Register Admin" and standard window control buttons (minimize, maximize, close). The main content area contains a form with the following fields: "First Name:", "Last Name:", "Username:", and "Password:". Each field has a corresponding text input box. Below the "Password:" field, there are two buttons: "Register Admin" and "Back". The "Register Admin" button is highlighted with a blue border and a slight shadow.

Register Lecturer

First Name:

Last Name:

Username:

Password:

Register Student

First Name:

Last Name:

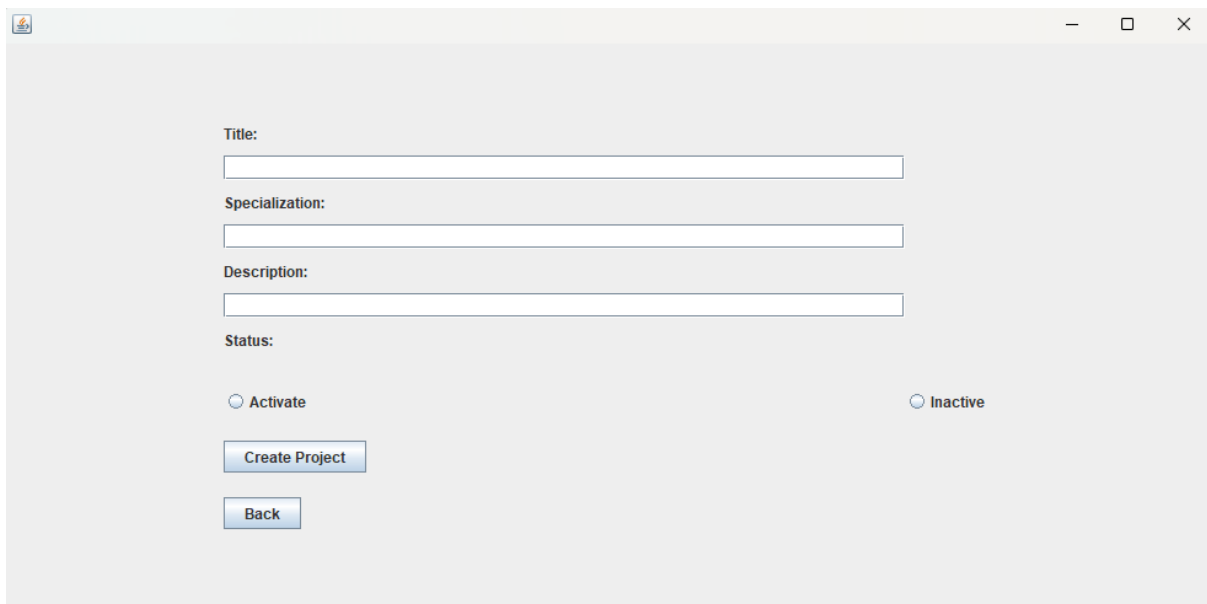
Username:

Password:

Specialization:

Supervisor:

Create Project (Admin)



A web form for creating a new project. It includes input fields for Title, Specialization, and Description. There are radio buttons for Status (Activate and Inactive). At the bottom, there are 'Create Project' and 'Back' buttons.

Title:

Specialization:

Description:

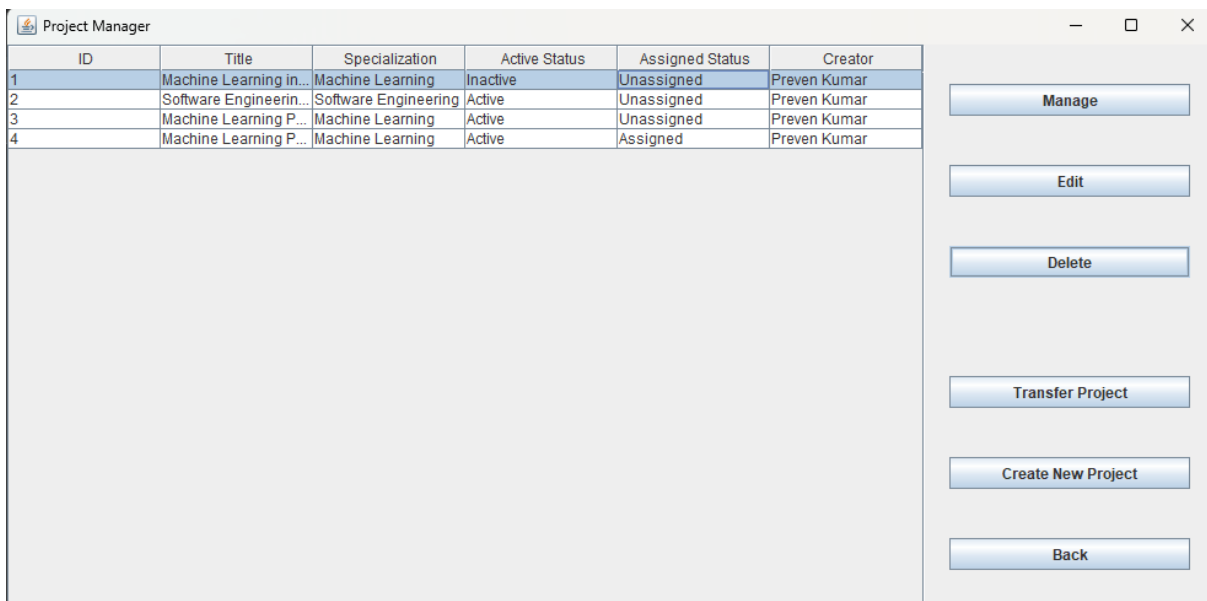
Status:

☐ Activate ☐ Inactive

Create Project

Back

Delete Project (Admin)



A web interface for deleting a project. It features a table with project details and a sidebar with action buttons.

| ID | Title | Specialization | Active Status | Assigned Status | Creator |
|----|------------------------|----------------------|---------------|-----------------|--------------|
| 1 | Machine Learning in... | Machine Learning | Inactive | Unassigned | Preven Kumar |
| 2 | Software Engineerin... | Software Engineering | Active | Unassigned | Preven Kumar |
| 3 | Machine Learning P... | Machine Learning | Active | Unassigned | Preven Kumar |
| 4 | Machine Learning P... | Machine Learning | Active | Assigned | Preven Kumar |

Manage

Edit

Delete

Transfer Project

Create New Project

Back

Add Comment (Admin)

Project Manager

| ID | Title | Specialization | Active Status | Assigned Status | Creator |
|----|------------------------|----------------------|---------------|-----------------|--------------|
| 1 | Machine Learning in... | Machine Learning | Inactive | Unassigned | Preven Kumar |
| 2 | Software Engineerin... | Software Engineering | Active | Unassigned | Preven Kumar |
| 3 | Machine Learning P... | Machine Learning | Active | Unassigned | Preven Kumar |
| 4 | Machine Learning P... | Machine Learning | Active | Assigned | Preven Kumar |

Manage

Edit

Delete

Transfer Project

Create New Project

Back

Manage Project

Machine Learning in Detecting Offensive Media

Specialization: Machine Learning

Student is required to build a Machine Learning model to detect offensive mediaâ€œnudity, racism, hatespeech, etc.)

Created by: Preven Kumar

Back

Comments

Comment

View Reports

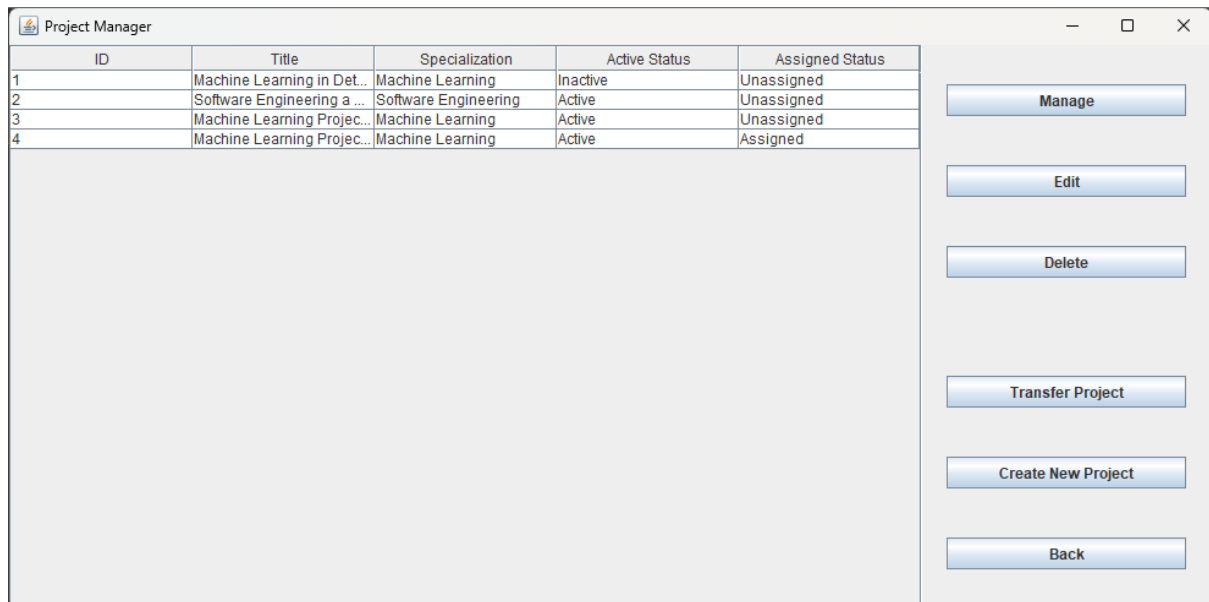
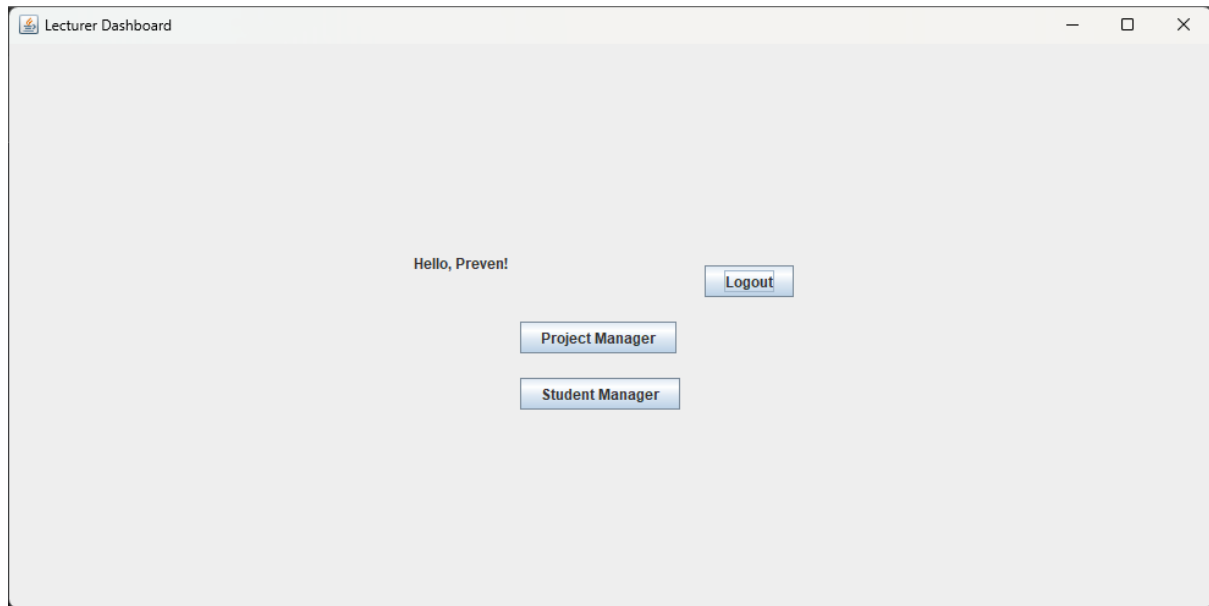
Report Generator

All

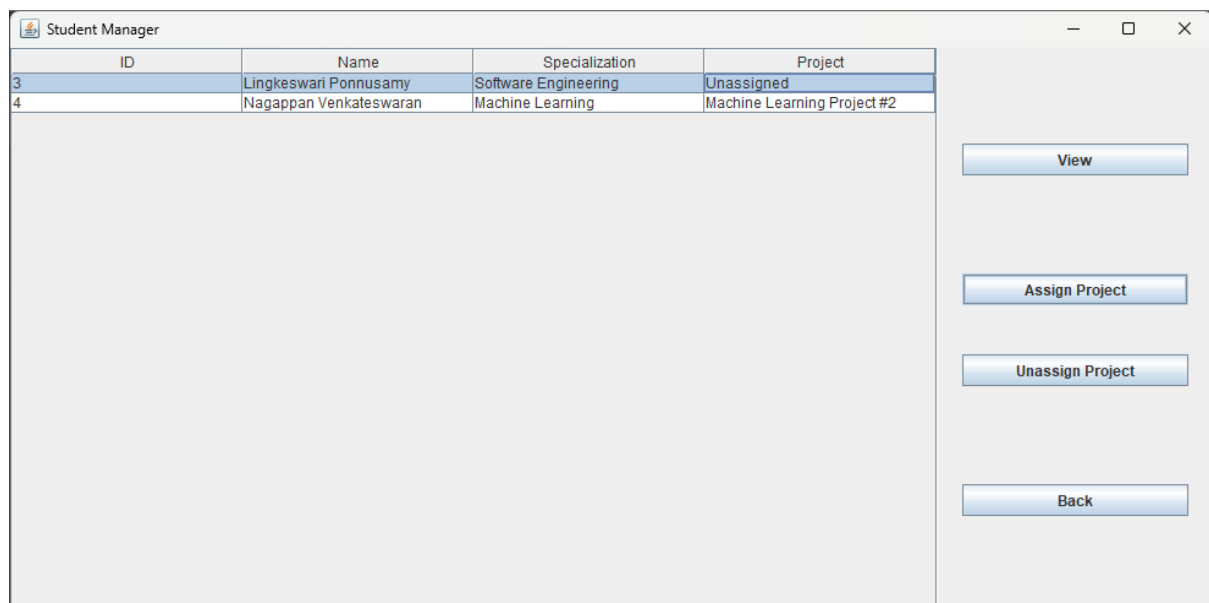
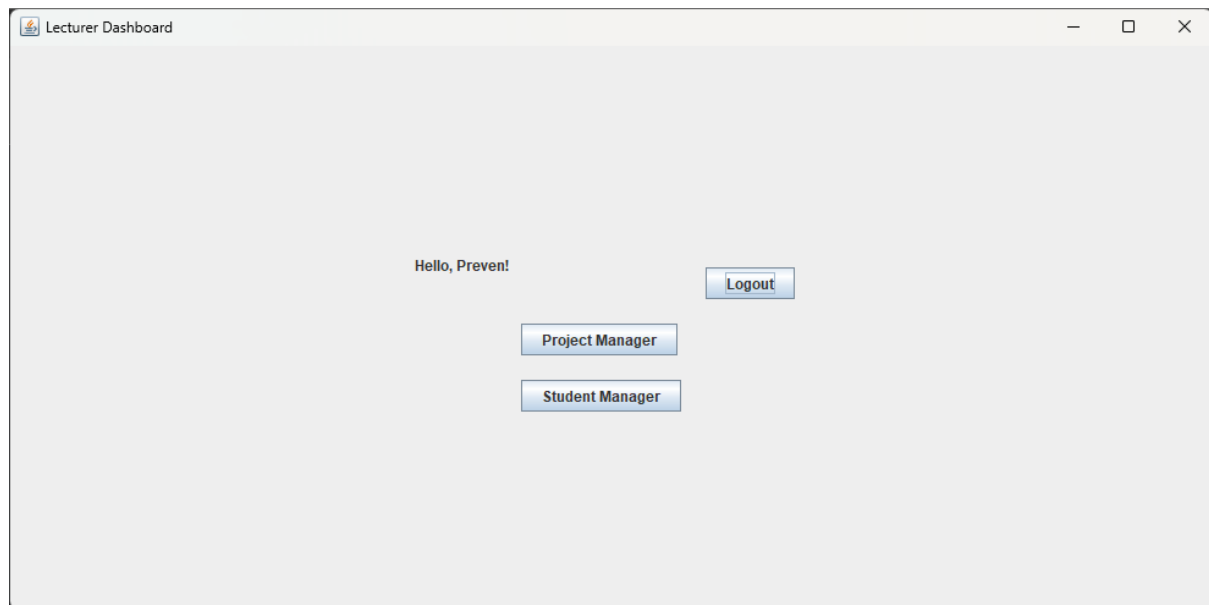
| Filter | | | | | | |
|------------|---------------------------|----------------------|----------|------------|--------------|-----------|
| Project ID | Title | Specialization | State | Status | Creator | Commented |
| 1 | Machine Learning in D... | Machine Learning | Inactive | Unassigned | Preven Kumar | |
| 2 | Software Engineering a... | Software Engineering | Active | Unassigned | Preven Kumar | Commented |
| 3 | Machine Learning Proj... | Machine Learning | Active | Unassigned | Preven Kumar | Commented |
| 4 | Machine Learning Proj... | Machine Learning | Active | Assigned | Preven Kumar | |

Back

View created projects (Lecturer)



Assign student to project (Lecturer)



Unassign student to project (Lecturer)

The screenshot displays two windows from the MMU Online Mini-project Management System. The top window, titled 'Lecturer Dashboard', shows a greeting 'Hello, Preven!' and three buttons: 'Logout', 'Project Manager', and 'Student Manager'. The bottom window, titled 'Student Manager', contains a table with student information and a sidebar with action buttons.

| ID | Name | Specialization | Project |
|----|------------------------|----------------------|-----------------------------|
| 3 | Lingkeswari Ponnusamy | Software Engineering | Unassigned |
| 4 | Nagappan Venkateswaran | Machine Learning | Machine Learning Project #2 |

Buttons in the Student Manager sidebar: View, Assign Project, Unassign Project, Back.

Edit project (Lecturer)

Deactivate project (Lecturer)

Activate project (Lecturer)

View Projects(Student)

Sample input /output screens

Login

The image displays two screenshots of a web application interface. The top screenshot shows the 'Login' window with a title bar containing a small icon and the text 'Login'. The window has standard minimize, maximize, and close buttons. The main content area is light gray and contains a login form. The form has two labels: 'Username:' and 'Password:'. Below 'Username:' is a text input field containing the text 'hari'. Below 'Password:' is another text input field containing the text 'hari'. Below the password field is a blue button with the text 'Login'. The bottom screenshot shows the 'Admin Dashboard' window with a title bar containing a small icon and the text 'Admin Dashboard'. The window also has standard minimize, maximize, and close buttons. The main content area is light gray and contains a greeting 'Hello, Srihari!' on the left. To the right of the greeting is a blue button with the text 'Logout'. Below the greeting and the 'Logout' button are three blue buttons stacked vertically: 'User Manager', 'Project Manager', and 'Report Generator'.

Username:
hari

Password:
hari

Login

Admin Dashboard


Hello, Srihari!

Logout

User Manager

Project Manager

Report Generator

 Login


Username:

preven

Password:

preven

Login

 Lecturer Dashboard

Hello, Preven!

Logout

Project Manager

Student Manager

Login

Username:

naga

Password:

naga

Login

Project Manager

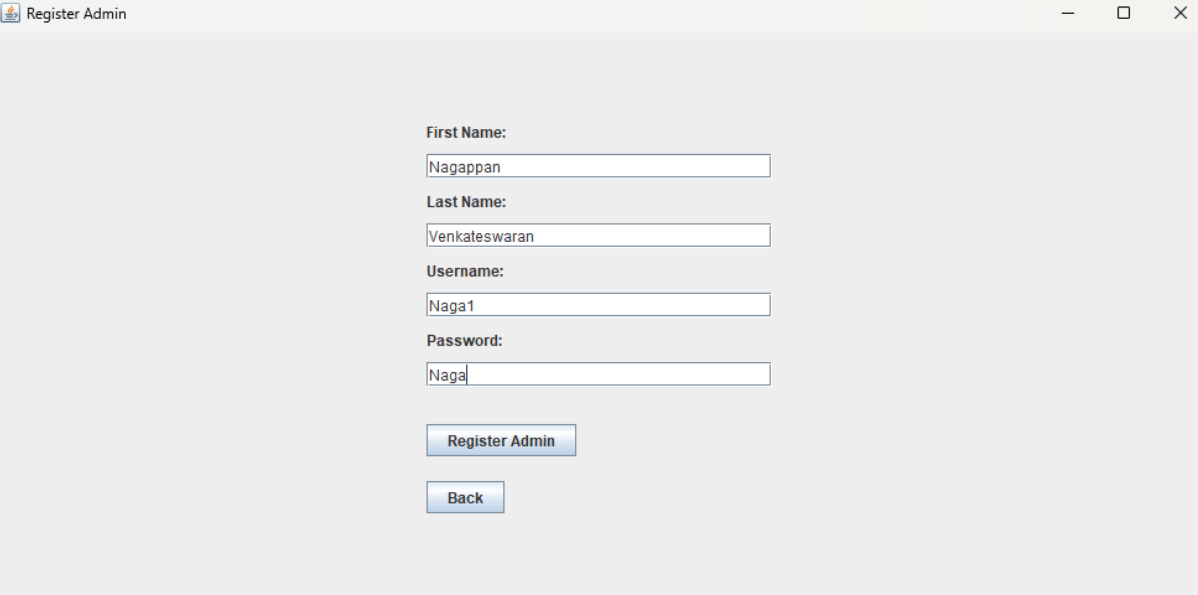
Here's your project.

Logout

| ID | Specialization | Title |
|----|------------------|-----------------------------|
| 4 | Machine Learning | Machine Learning Project #2 |

View

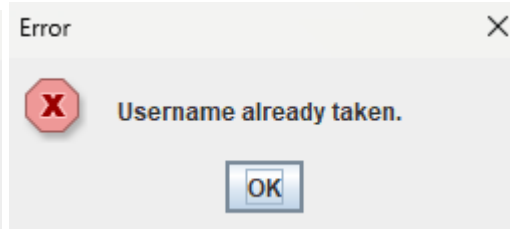
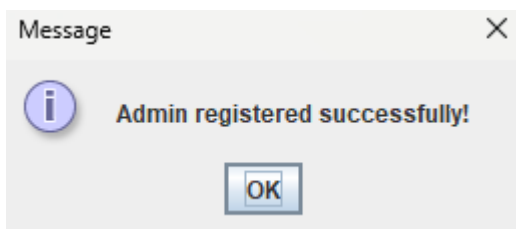
Create User Account(Admin)



The image shows a web browser window titled "Register Admin". It contains a registration form with the following fields and labels:

- First Name:** Input field containing "Nagappan".
- Last Name:** Input field containing "Venkateswaran".
- Username:** Input field containing "Naga1".
- Password:** Input field containing "Naga".

Below the input fields are two buttons: "Register Admin" and "Back".



Create Project (Admin)

Delete Project (Admin)

Add Comment (Admin)

View Reports

View created projects (Lecturer)

Assign student to project (Lecturer)

Unassign student to project (Lecturer)

Edit project (Lecturer)

Deactivate project (Lecturer)

Activate project (Lecturer)

View Projects(Student)

