1. Use case diagram:

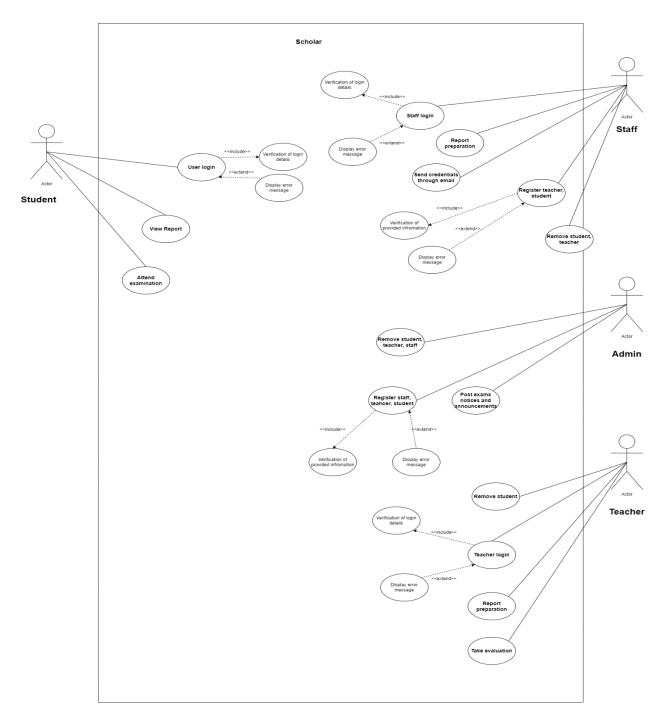


Figure 1 Use case diagram

2. High level use case:

Use Case:	Register student/teacher
Actors:	Staff
Description:	A student or a teacher provides personal details to the institute itself and staff registers the student or a teacher respectively to become an online member of the system.

Table 1 Use case: Register student/teacher

Use Case:	Student Login
Actors:	Student
Description:	After the registration of the student, he/she is provided with the login username and password through email. The student can now log in to the system using the correct username and password.

Table 2 Use case: Register student/teacher

3. Expanded use case:

Use Case: Register student/teacher

Actor: Staff

Description: A new student/teacher provides personal details to the institute to get registered to the system (Scholar).

Typical Course of event:

Actor action:	System response:
1. The staff prepares the student/teacher records based on the information provided to the institute.	2. System interface gets displayed.
3. The staff fills in the required information asked by the system.	4. System takes the input and validates it.
5. The staff registers by clicking on the register button.	6. If the entered information is correct after the verification of the information, the system registers the student/teacher and provides a username and password for the registered member of the system through email.

Table 3 Use case (Expanded): Register student, teacher

Alternate courses:

Line 3: If the user entered information is incorrect or the verification process fails, the system displays an error message allowing the user to enter the valid and correct information and the use case ends.

Use Case: Student Login

Actor: student

Description: After the registration of the student, he/she is provided with the login username and password through email. The student can now log in to the system (Scholar) using the correct username and password.

Typical Course of event:

Actor action:	System response:
1. The student receives the login credentials from their respective institute through email.	2. System interface gets displayed.
3. The student fills in the required information asked by the system for login.	4. Systems take the input and validates it.
5. The student clicks on the login button.	6. If the entered information is correct after the verification of the information, the system allows the student to log in to the student portal.

Table 4 Use case (Expanded): Student Login

Alternate courses:

Line 3: If the user entered information is incorrect or the verification process fails, the system displays an error message allowing the user to enter the valid and correct information and the use case ends.

4. Sequence diagram:

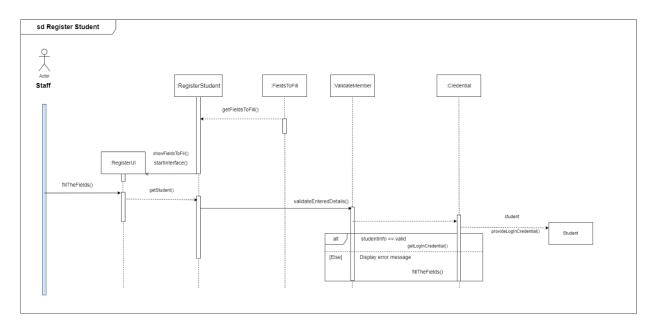


Figure 2 Student Registration (Sequence diagram)

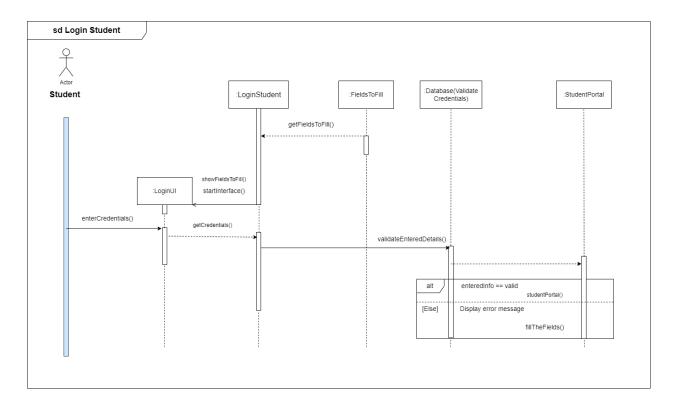


Figure 3 Student Login (Sequence diagram)

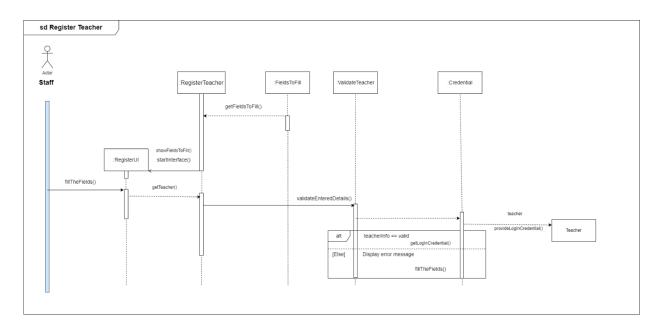


Figure 4 Teacher Registration (Sequence diagram)

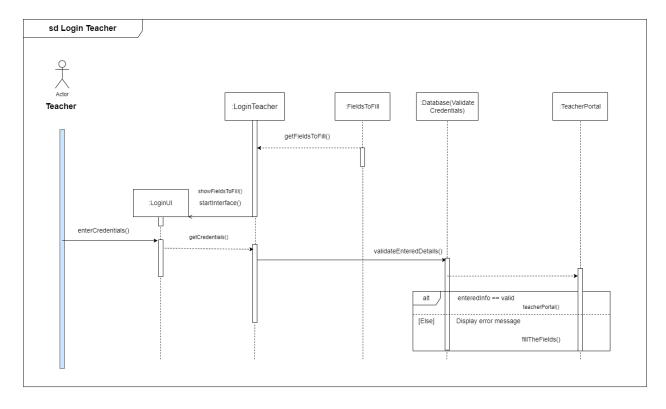


Figure 5 Teacher Login (Sequence diagram)