

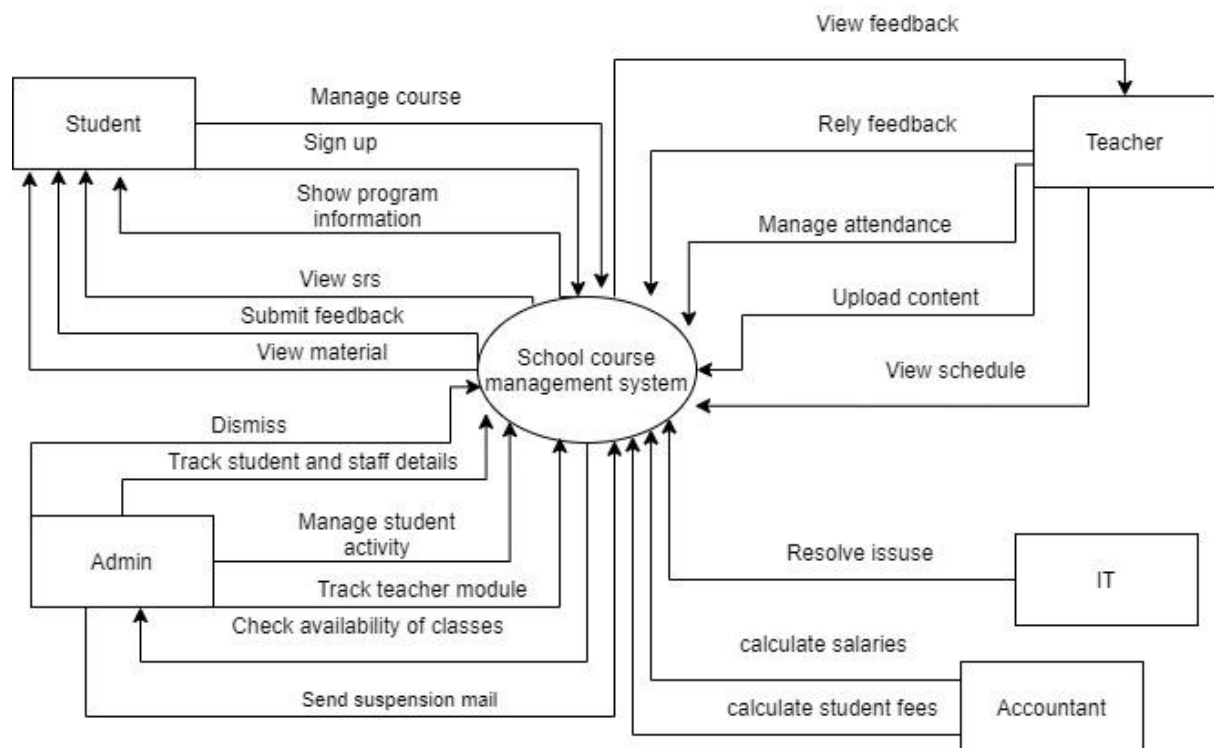
1. Requirements Engineering

Function	Description
View srs	Students can view their schedule, transcript, download, upload, modules, and programs.
Manage Course	Students can edit, drop, or add courses.
view material	Students can view announcements, past exams, and sheets.
Submit Feedback	Provide emails to contact the IT for technical issues or to contact the teachers and assistants.
Sign up	Adding and signing up for new students.
Choose program	Students can choose their program (British, American, national, etc.).
Track student details	Names, phone, parents' phone, email, studying program.
Manage student activity	Selection of Groups and projects proposal.
Calculate student fees	Calculate corresponding fees for each student program.
Keep track of staff details	Name, phone, email, salaries.
Calculate Teacher salaries	Calculate the salary for each teacher according to the modules they teach.
track teaching module	Tracking module details.
View Teacher Schedule	Teachers can view their schedule
Check availabilities of classes	Check the availabilities of classes if it has a small capacity of students in them.
Dismiss student	Admins can dismiss the students according to their attendance.
Upload content	Teachers upload exams, past exams, announcements, and worksheets.
Manage attendance	Teachers can manage students' attendance.
View Feedback	Teachers and IT staff can view the feedback sent by the students.
Reply feedback	Teachers and IT staff can respond to the student's feedback.
Resolve issues	IT staff can resolve technical issues
Send suspension mail	Send a suspension mail to the student due to his lack of attendance.

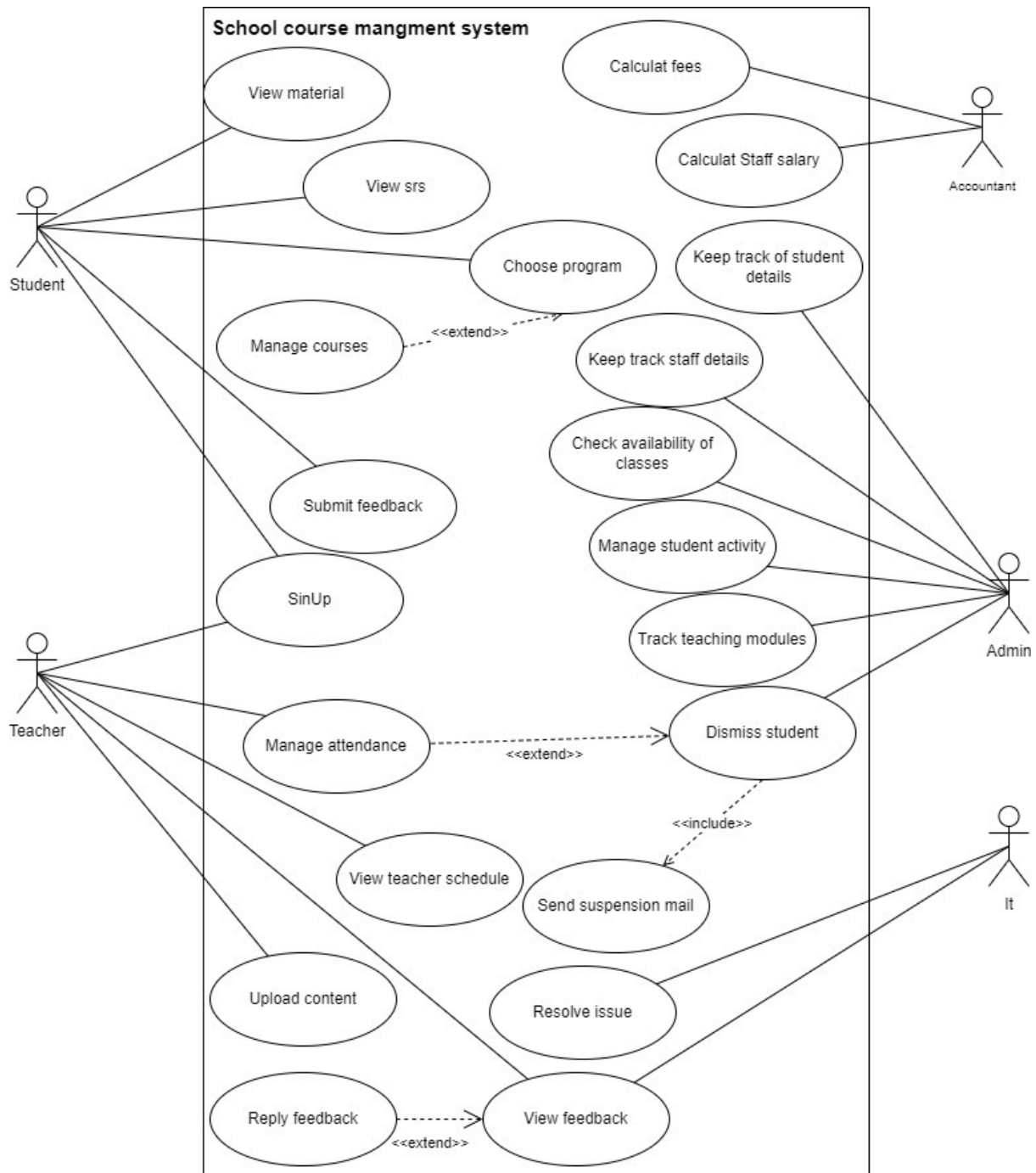
Non-functional

- Performance: response time should be not than more 3 seconds.
- Availability: The system should be available 24 hours a day.
- Security: It is required to have a backup of the database every 12 hours.
- Portability: this system should be able to run on Windows, mobile phones, and Mac.
- Usability: The UI should be easy to use and understand.
- Size: this system needs to be able to store 100 thousand records for students and staff.

1. Context Diagram



2. Use case Diagram



3. Use Case Scenario

Upload content UC scenario

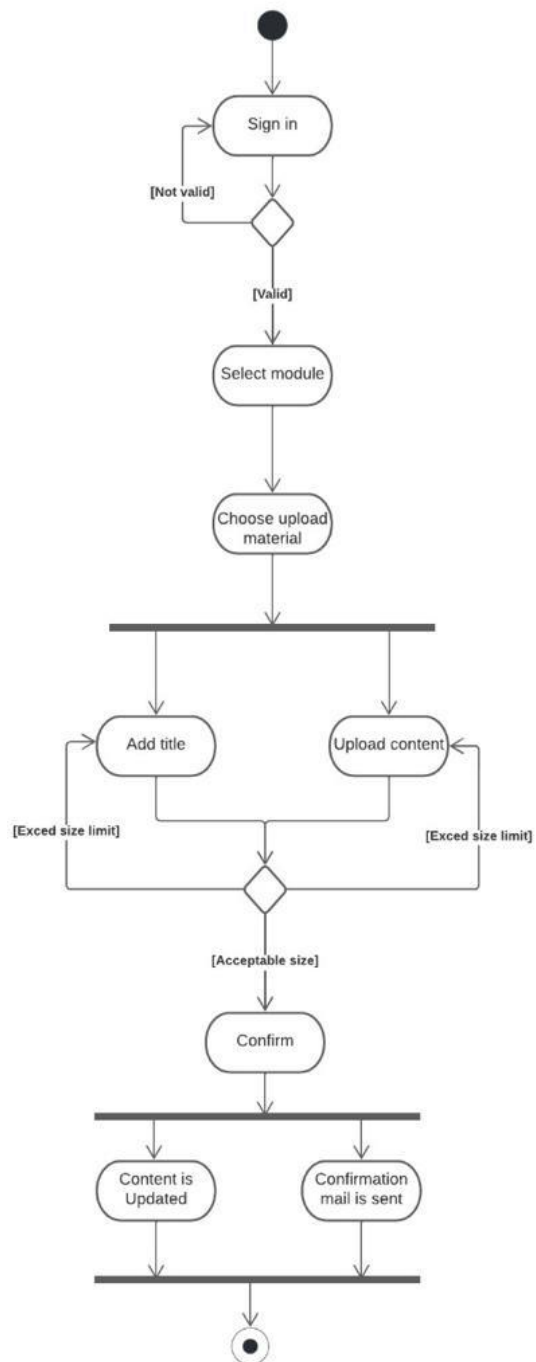
ID	UC_1
Title	Uploading material
Description	Teacher wants to upload some course material for his/her students
Priority	High
Primary Actor	Teacher
Secondary Actor	N/A
Preconditions	<ul style="list-style-type: none">• teacher is logged in• Teacher account user is authorized to upload content• File type and size is acceptable by the system
Post-conditions	<ul style="list-style-type: none">• Database updated with the uploaded content.• Content is viewable for enrolled students• System sends a confirmation email to teacher
Main success scenario	<ol style="list-style-type: none">1. The Teacher navigates to courses page.2. Select course3. click on upload material button4. Add title5. upload the content files6. Add brief description7. click on submit button
Extensions	<p>4a. Teacher may exceed the character limit of the title, system shows error message to retype within the limit.</p> <p>5a. Invalid files format or size may be chosen, system shows a message with the applicable file formats and size.</p>

Manage Courses UC Scenario

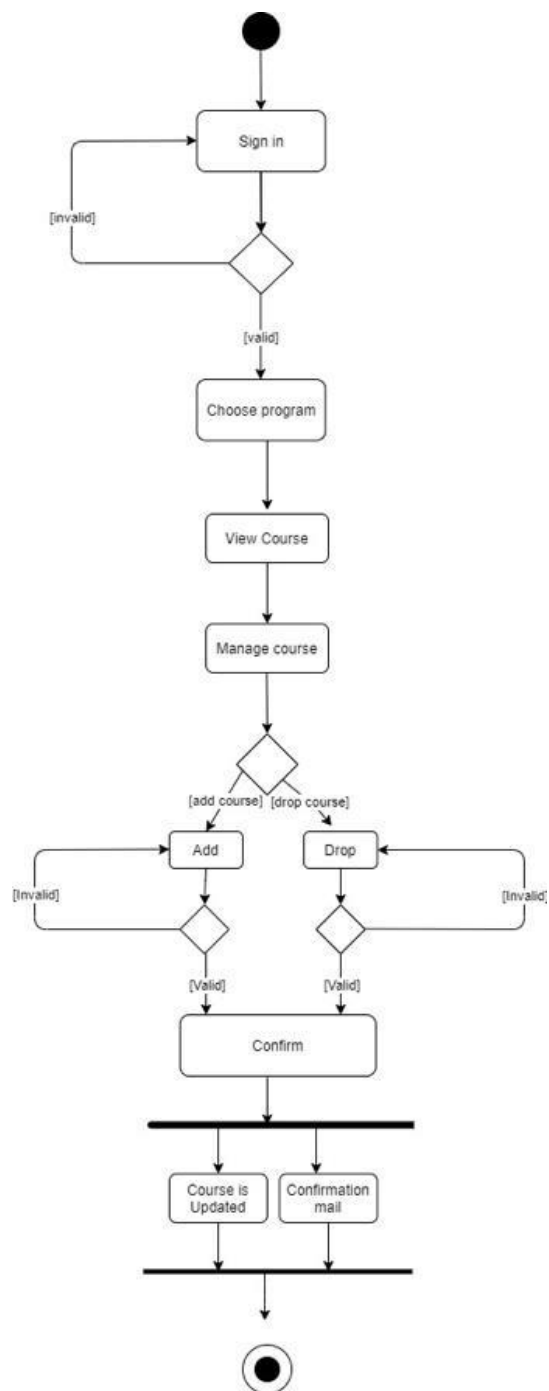
ID	UC_2
Title	Manage Courses
Description	Students edit their courses after choosing their studying program
Priority	High
Primary Actor	Student
Secondary Actor	Admin
Preconditions	<ul style="list-style-type: none"> • The student is logged in • Student account user is authorized to manage his/her courses • The student has already chosen his/ her program
Post-conditions	<ul style="list-style-type: none"> • Courses details are updated in the database • Student can view his/her assigned courses
Main success Scenario	<ol style="list-style-type: none"> 1. The student clicks the “Manage courses” button 2. The student navigates to the available courses 3. The student adds courses or drop courses 4. The student clicks the “confirm” button
Extensions	<p>2a. The student access courses that are not available to him/ her, the system alerts the student that he/ she can't access these courses</p> <p>3a. The student added more than 5 courses, the system alerts the student that he/she should reduce the number of courses</p> <p>3a. The student dropped the same module more than twice, the system alerts the student that he/ she can't drop it again and he/she have to add it</p> <p>4a. The system fails to connect to the server, the system alerts the student to check his/her internet connection</p>

Activity diagrams for:

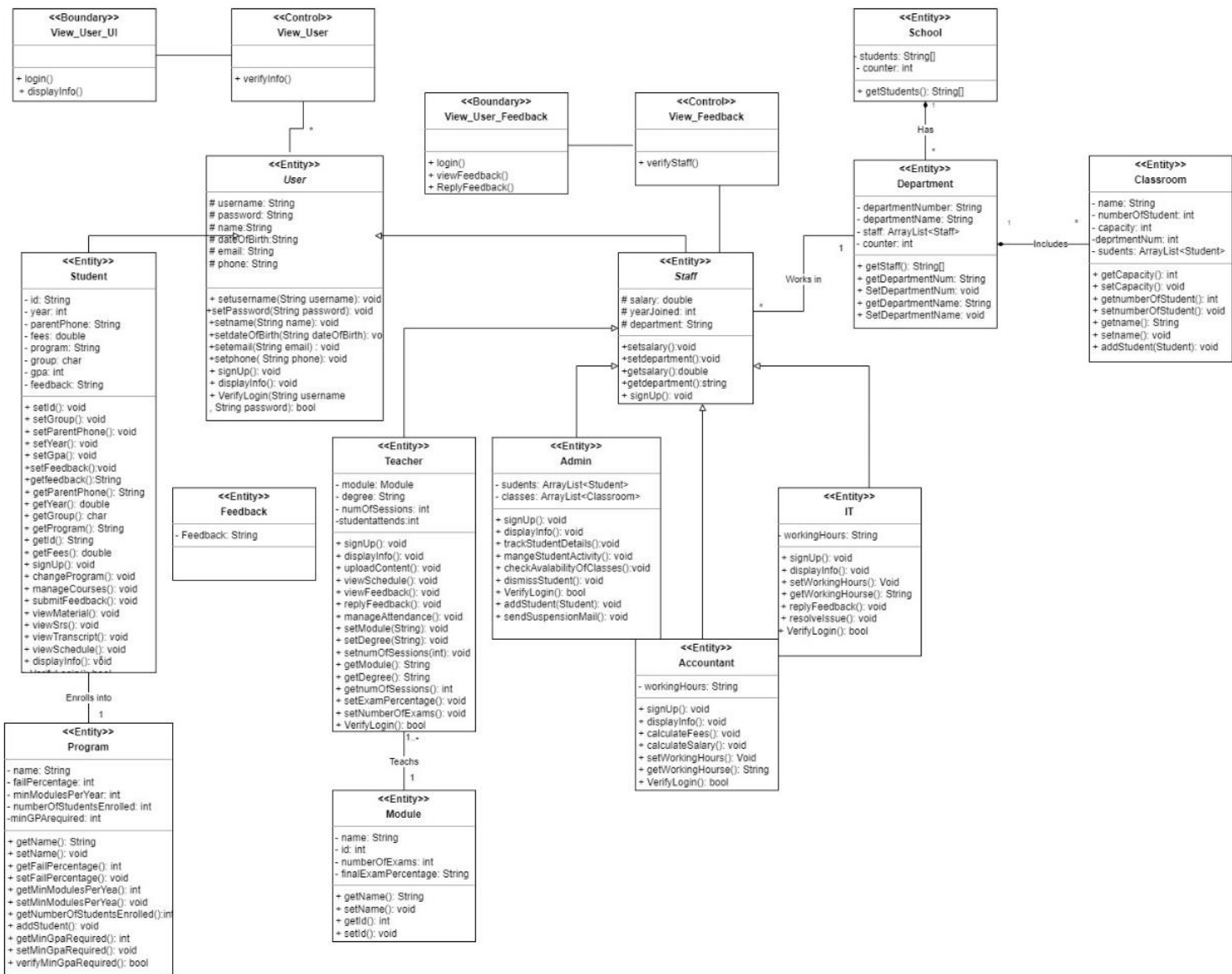
Upload content



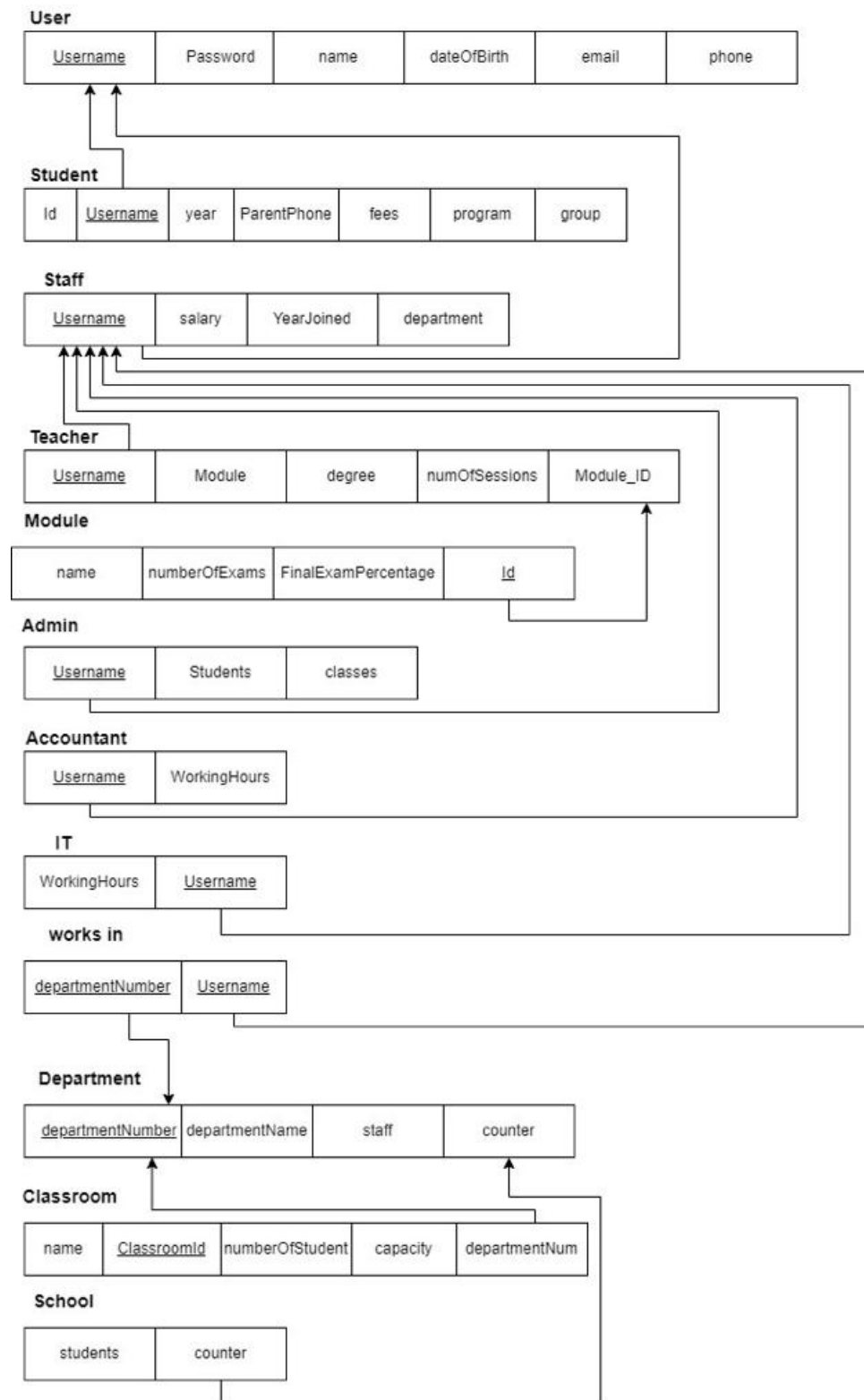
Manage course



Class diagram

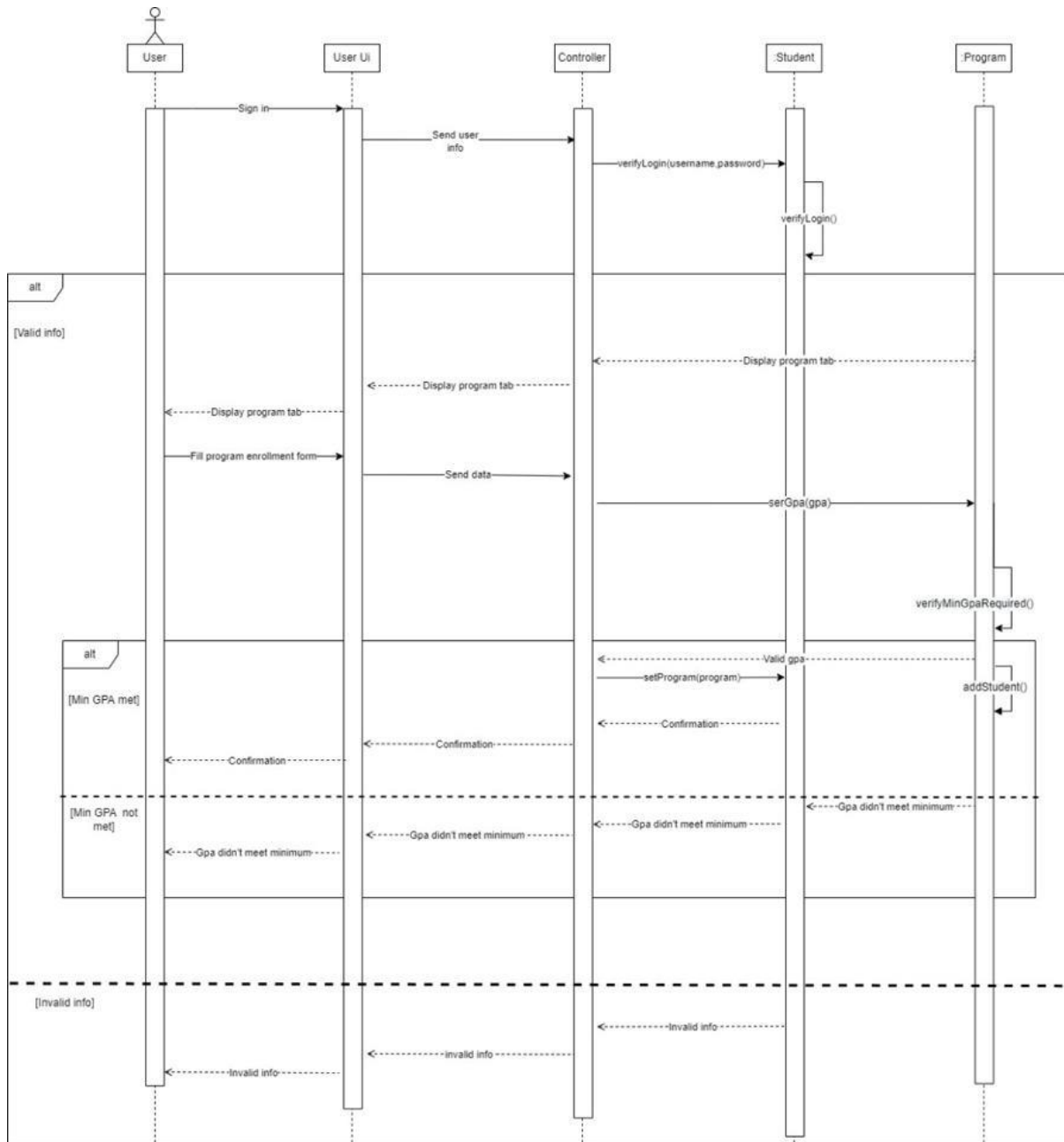


Database schema

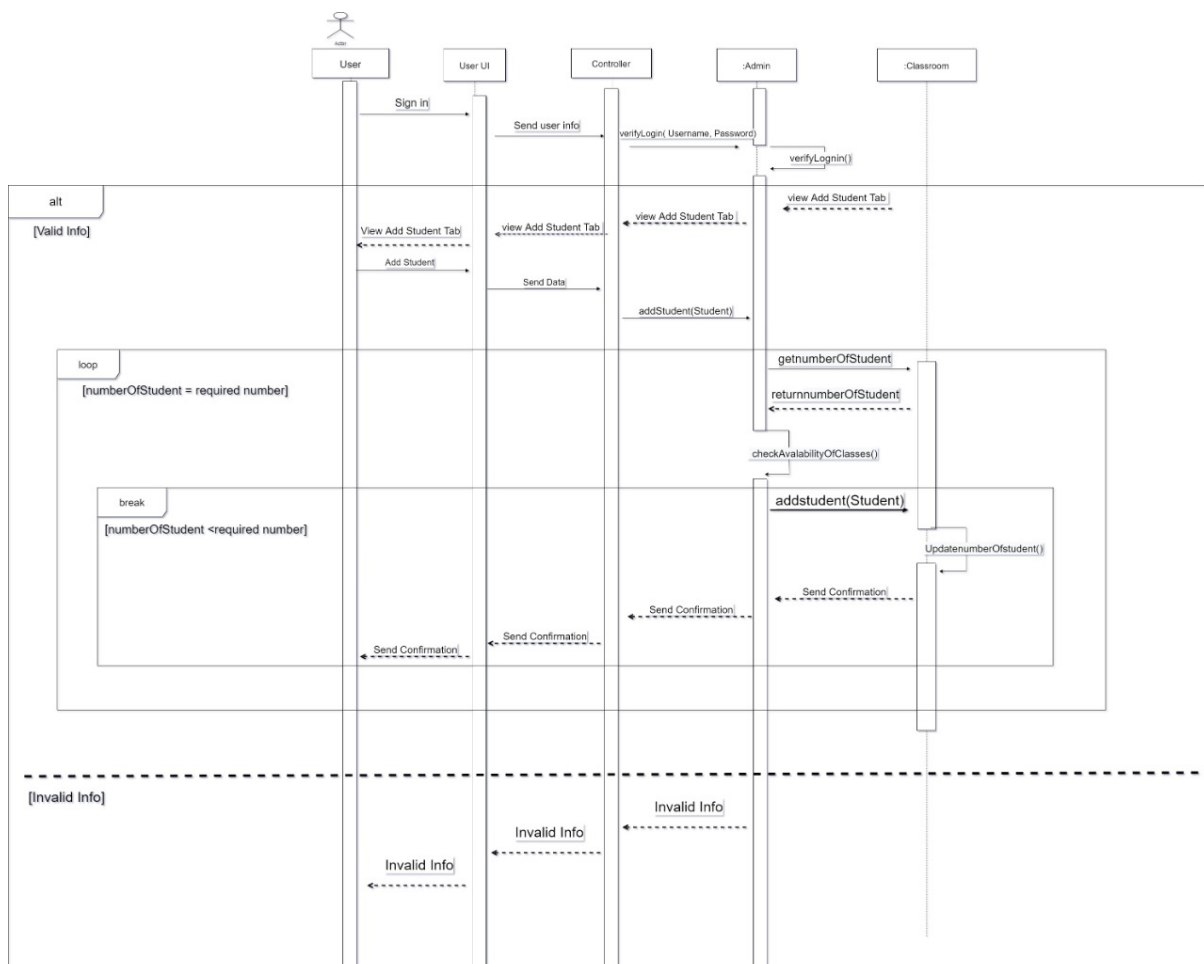


Sequence diagrams for:

Choose program



Check availability of classes



Screenshots of Jframes

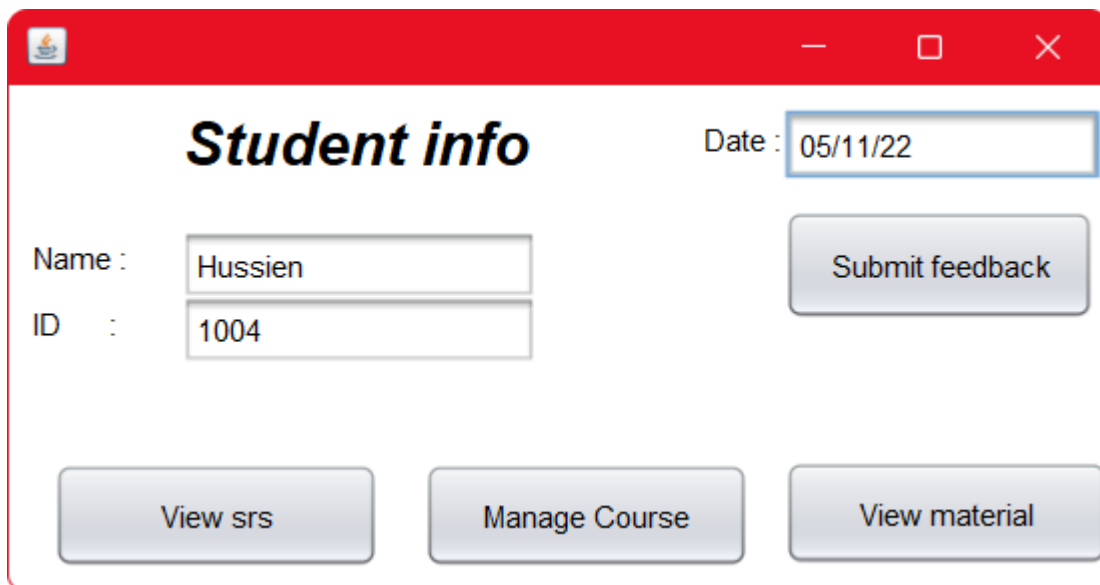
Brief description 1:

Login page: user can choose which user type to login



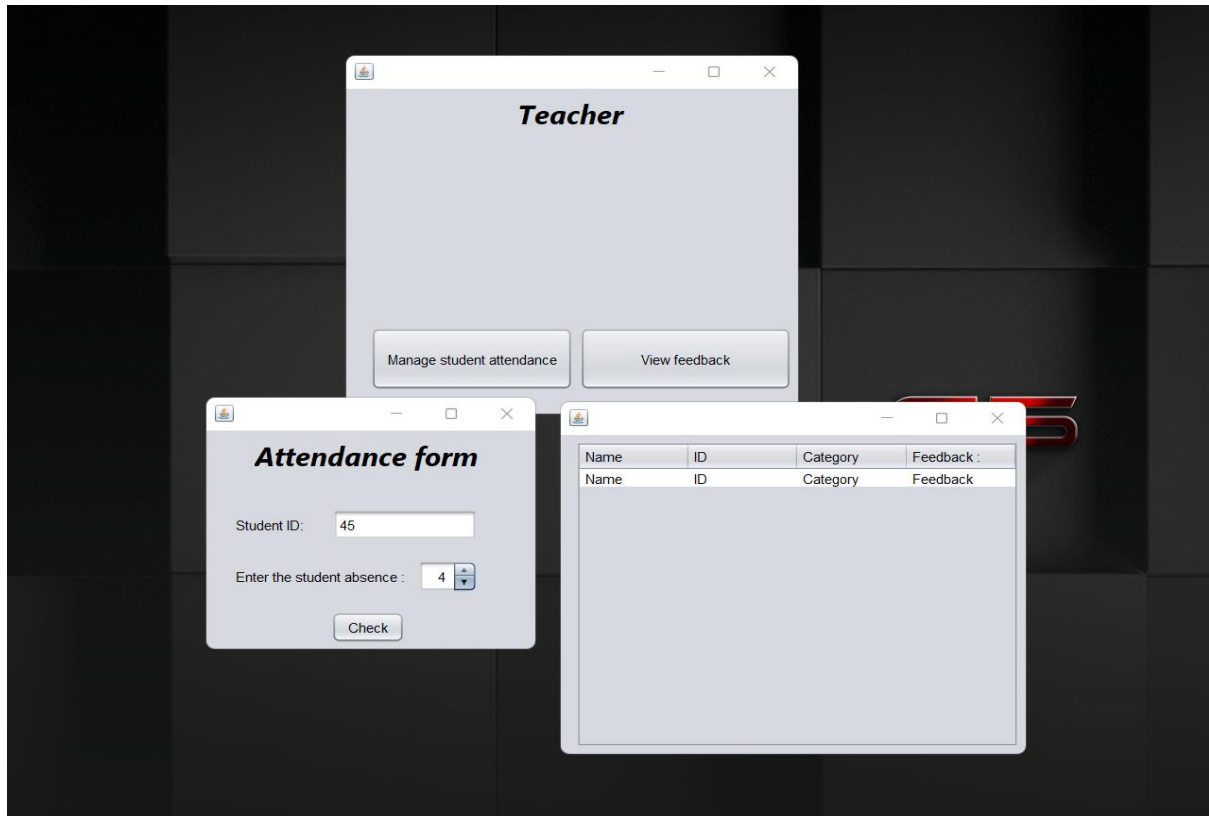
Brief description 2:

Student user login page showing all available actions, current date and student's name and ID



Brief description 3:

Teacher login page and the action pages available for them



Brief description 4:

Manage courses window for student where he can change Program and choose modules, the system check and prevent enrolling in same program or module and when user select a program it updates the program's student count automatically

