Collage Management System

System Requirements:

A Collage Management System not only gives information about students. It can provide real-time information about professors' activities also. It also provides a dedicated portal for Manager and professors making it easier for them to find all information related to students and Collage activities.

This system has 3 main actors: Manager of the collage, staff of professors and students.

Manager can login to the system, hire new teacher, add new student, View attendance, pay salaries to the professors and make reports.

Professors can make new account, login to the system, add materials, track students' assignments, print students' Grades …. etc.

Students can make new account, login to the system, track his attendance, view his professors, pay collage's fees, view his grades …. etc.

Actors:

1. Manager
2. Staff
3. Students

Manager's Functions:

1. Login
2. Add staff
3. Add students
4. View attendances
5. Pay salaries
6. View feedbacks

7. Make a report
8. Log out

Staff's Functions:

1. Register
2. Login
3. Add materials
4. View Student's assignments
5. Take attendance
6. Receive salaries
7. View attendance
8. Manage his account
9. Print grades report

Students' functions:

1. Register
2. Login
3. View attendance
4. View materials
5. View his professors
6. Pay Collage fees
7. Manage his account
8. View his Grades
9. Log out

Requirements:

1. Functional requirements:

- System should enable new students and professors to create new account
- System should enable to the manager to add new professor or student

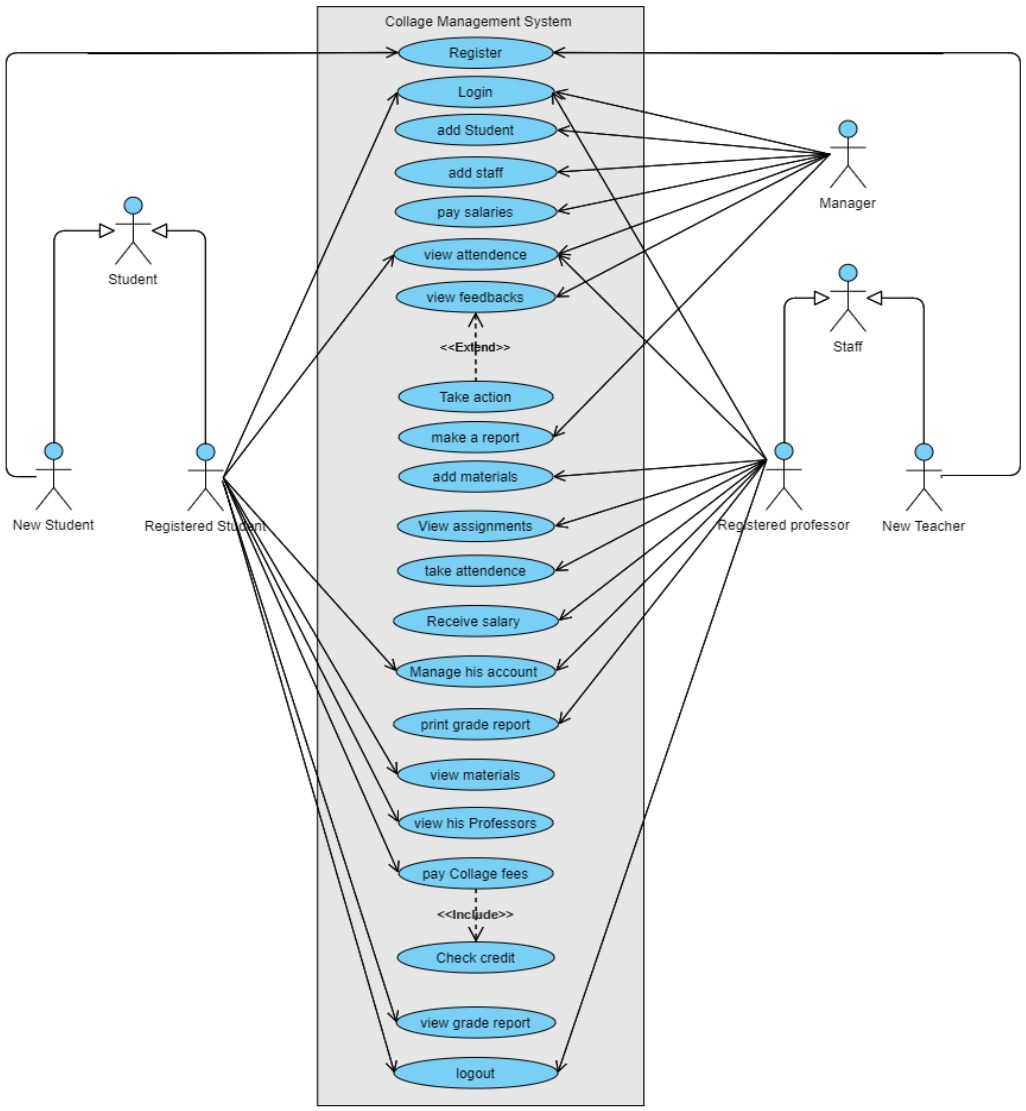
- System should enable professors to track attendance and to print grade report
- System should enable students to show materials and to know his professors.

2. ***Non-Functional requirements:***
    - Speed and Response time
    - Availability: should available 24 hours
    - Accuracy
    - Easy to use: easy for students to use it
    - Security: must be secure

- ***Behavioral Models***

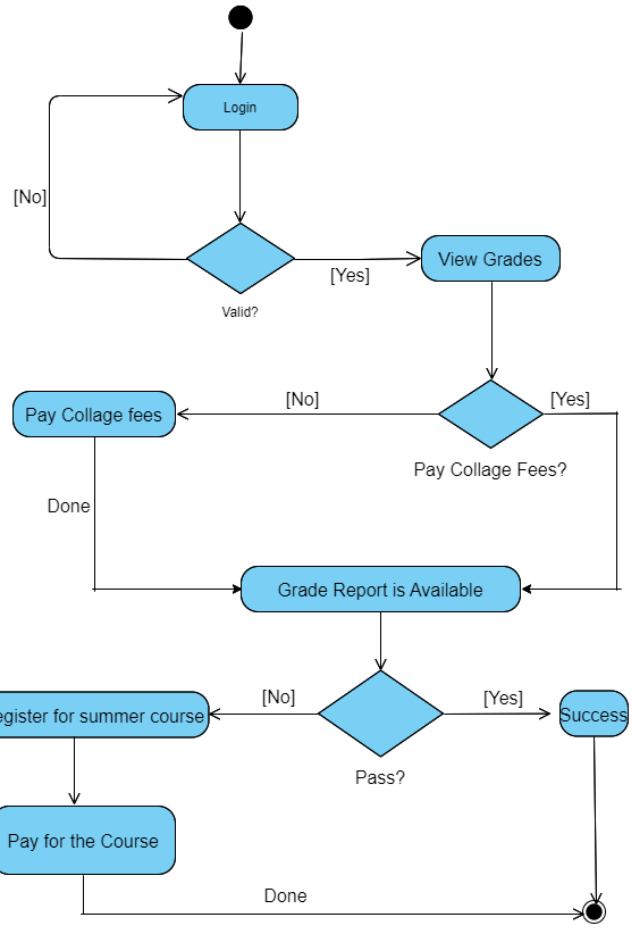
1. ***Use Case Diagrams***

    Use-case diagrams describe the high-level functions and scope of a system. These diagrams also identify the interactions between the system and its actors. The use cases and actors in use-case diagrams describe what the system does and how the actors use it, but not how the system operates internally.



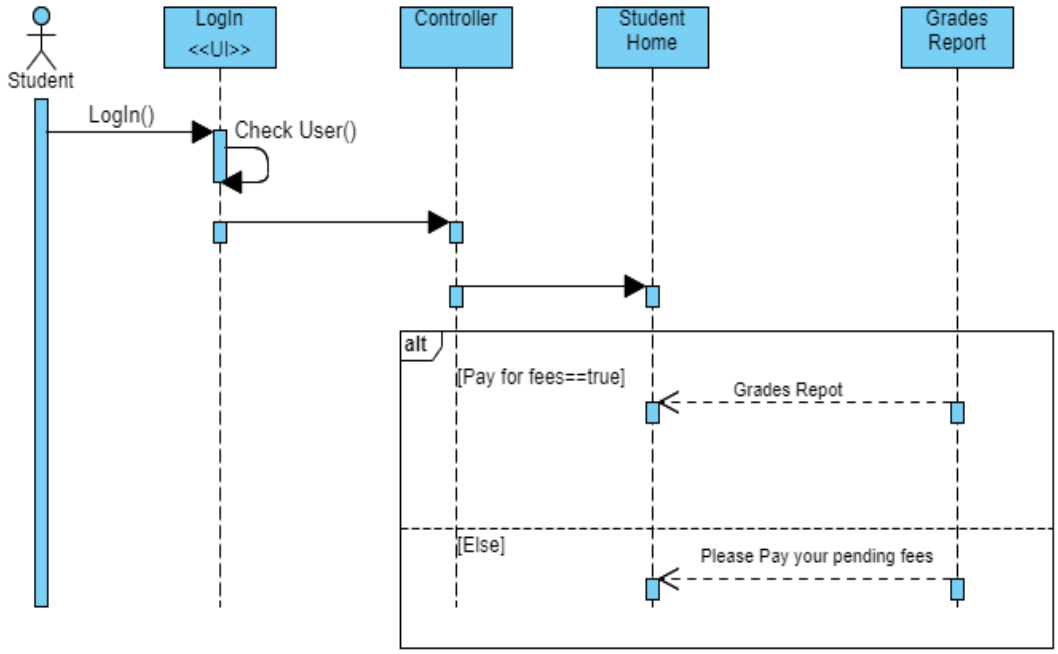
2.Activity Diagram

An activity diagram is a behavioral diagram, it depicts the behavior of a system. An activity diagram portrays the control flow from a start point to a finish point showing the various decision paths that exist while the activity is being executed.



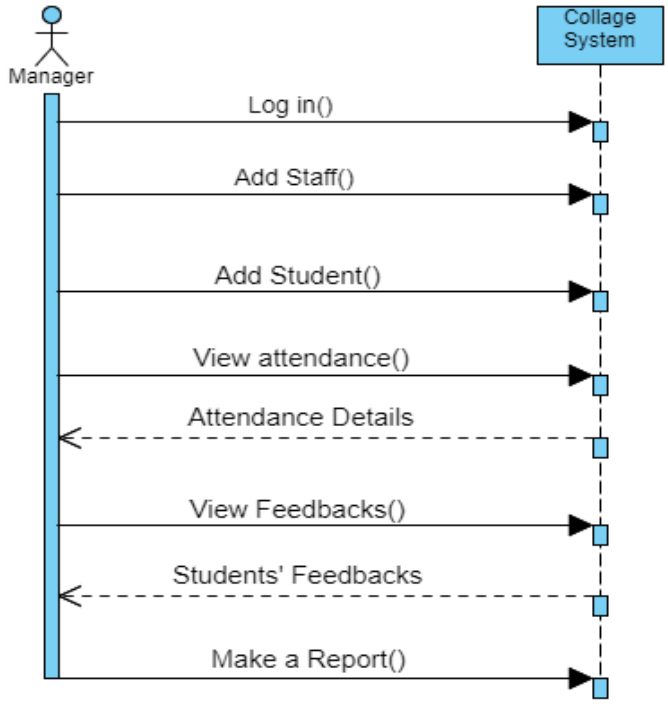
3.Sequence Diagram

Sequence Diagrams are interaction diagrams that detail how operations are carried out. They capture the interaction between objects in the context of a collaboration. Sequence Diagrams are time focus, and they show the order of the interaction visually by using the vertical axis of the diagram to represent time what messages are sent and when.



4.System Sequence Diagram

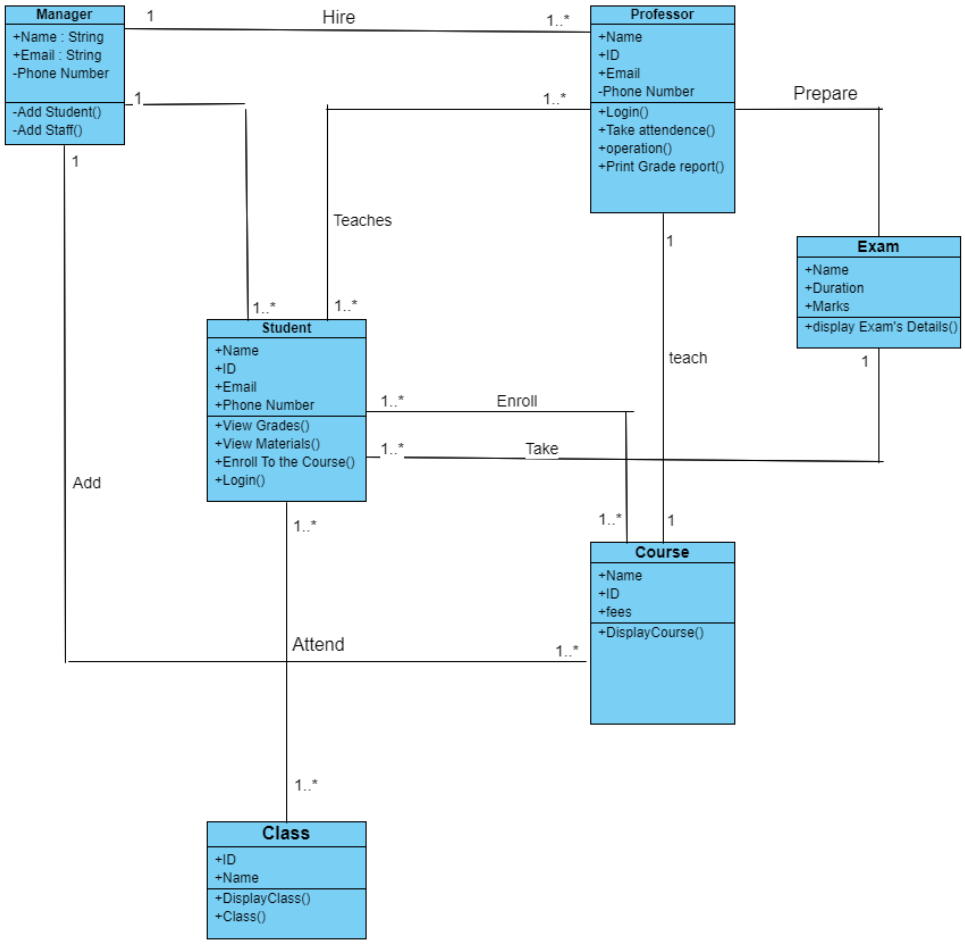
Create System Sequence Diagrams to Identify System events and major operations



- ***Structured Diagrams***

  ### *1. Class Diagram*

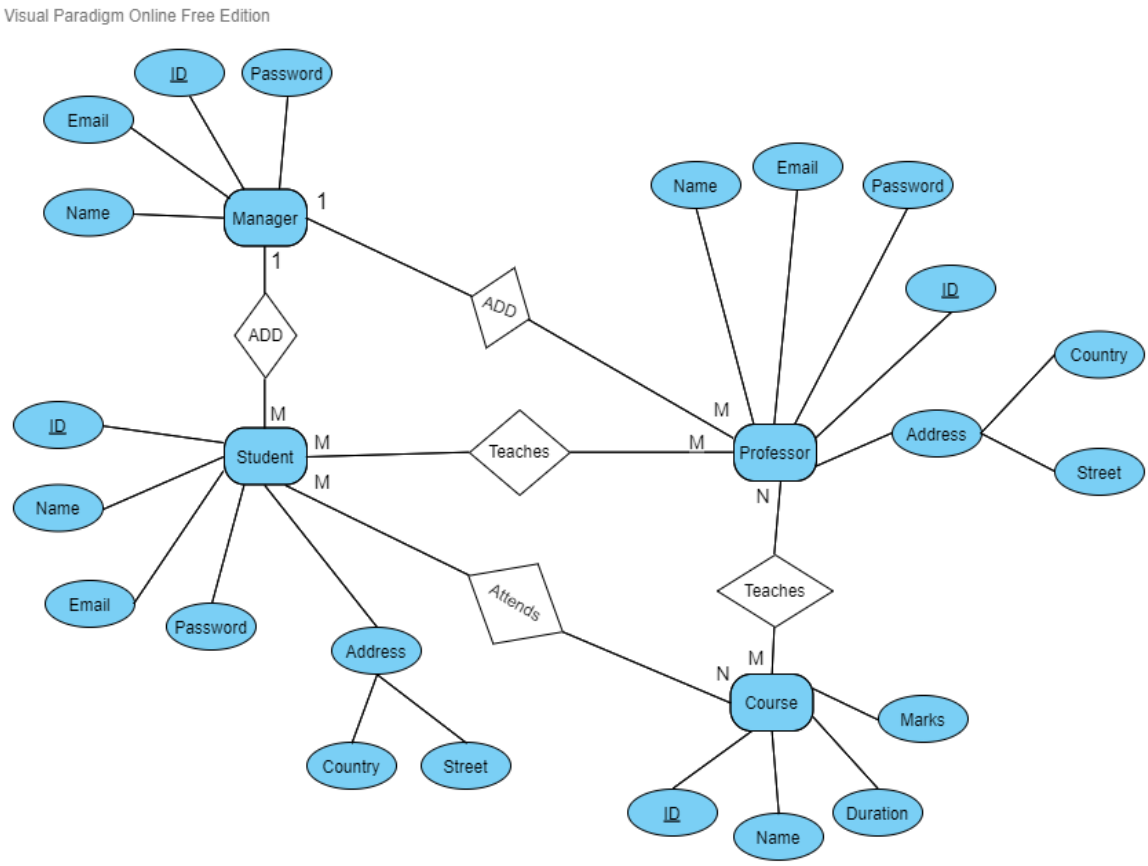
  In software engineering, a class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects.



- ***Another models:***

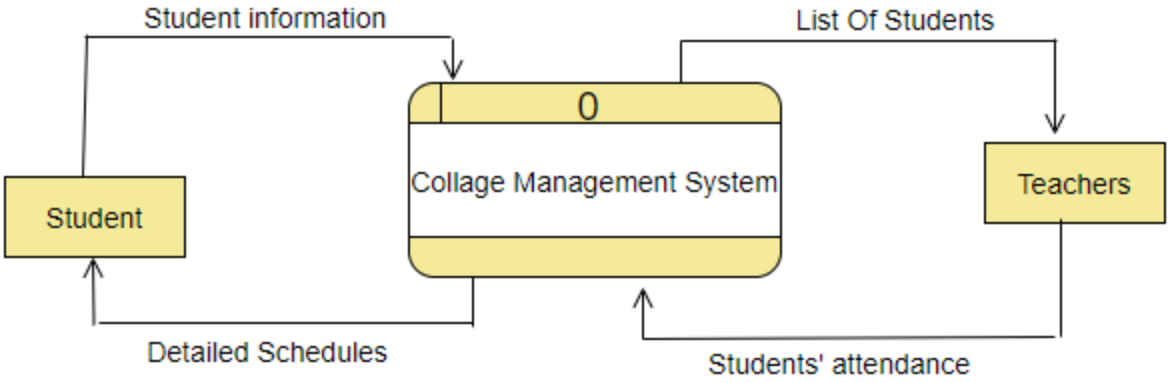
1. Entity Relationship Diagram

It is a graphical representation of data requirements for a database.



2.Data Flow Diagram

Data flow diagrams are used to graphically represent the flow of data in a business information system. DFD describes the processes that are involved in a system to transfer data from the input to the file storage and reports generation.


Student information
List Of Students
0
Collage Management System
Student
Teachers
Detailed Schedules
Students' attendance