

Software Requirements Specification For E-learning Portal

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1. Abstract

E-Learning is a relatively new learning mode that is fully dependent on the internet. Saving time is another e-Learning objective, due to which it has become popular in the current education scenario. Through this e-learning the Student can learn academic and non-academic courses. Mentors can easily upload the lectures note. Student can also enroll by getting the credentials of course and at the end of the Course they will be certified by the system and Approved by the mentor, Mentors can see the number of students of the course they will enroll. And there is admin also who can manage all the courses that mentor has uploaded and can rank them according to the criteria. Admin can manage the student's record and update and delete their data of study.

2. Scope of the project

This document is intended for providing an abstract overview of E-Learning system and general overview of entire project. It will give the access to the student and the Teacher to share their important data and to do all activities between student and mentors related to study safely. The scope of this document:

- ✓ Functional and Non-Functional requirements
- ✓ E-Learning System
- ✓ Tutors
- ✓ Administrator

3. Functional Requirements

Registration:

If the user is not register then user must be registered for enrolling any course.

Login:

If the user is registered then he/she will be logged in by entering user name and password.

Check Courses :

The user must view the courses available on the server.

New Uploaded Course:

The User must receive a Notification if there is any new course according to their interest.

Lectures:

Mentor will be able to upload the Lecture on the System where students will be able to learn from it.

Student Download:

The Students will be able to download the Lectures if they enrolled for the particular course. Once they enrolled the Course will be added to their profile.

Notifications:

The System Should sends the notification to the both main actors if there is any change that teacher made or if student require any help.

Manage Profile:

The user must be able to edit the profile from the setting they should perform various changes to the profile.

Search Courses:

The student should be able to search the course on the software he must have access to see every course on the system.

Manage Courses:

The mentor must edit the courses he should update, delete, and add the notes to his various courses.

Top Rated Courses:

The System should show the top-rated course of all time in the system.

Interest Category:

The System should show the courses to the use according to his area of interest.

Submit Ratings:

The student can be able to rate the course according to his experience. And provide the feedback in detail.

Logout:

The user must log out from the system when he wants to.

4. Non – Functional Requirements

Security:

The system needs to log client's information of registration for security purpose. Password should encrypt and store in the database.

Usability:

The system is user friendly and self-explanatory.

Reliability:

The reliability of a system is a measure of its ability to provide a failure-free operation. The system has to be very reliable due to the importance of data and the damages incorrect or incomplete data can do.

Availability:

The system is available 100% for the user and is used 24 hours a day and 365 days a year. The system shall be operational 24 hours a day and 7 days a week.

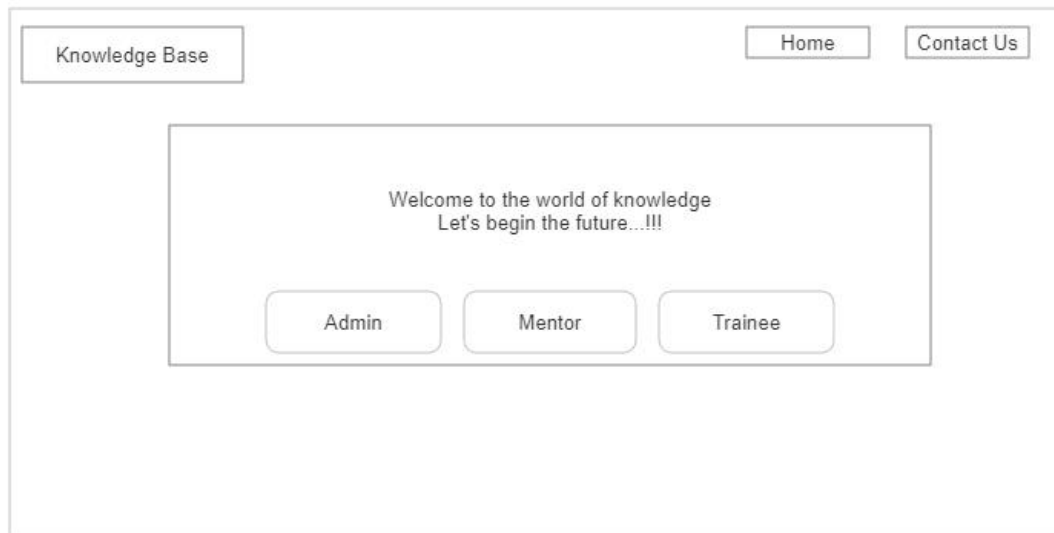
Accuracy

The accuracy of the system is limited by the accuracy of the speed at which the Student can use the system without any worry.

Access Reliability

The system shall provide 100% access reliability.

5. High-Level Design



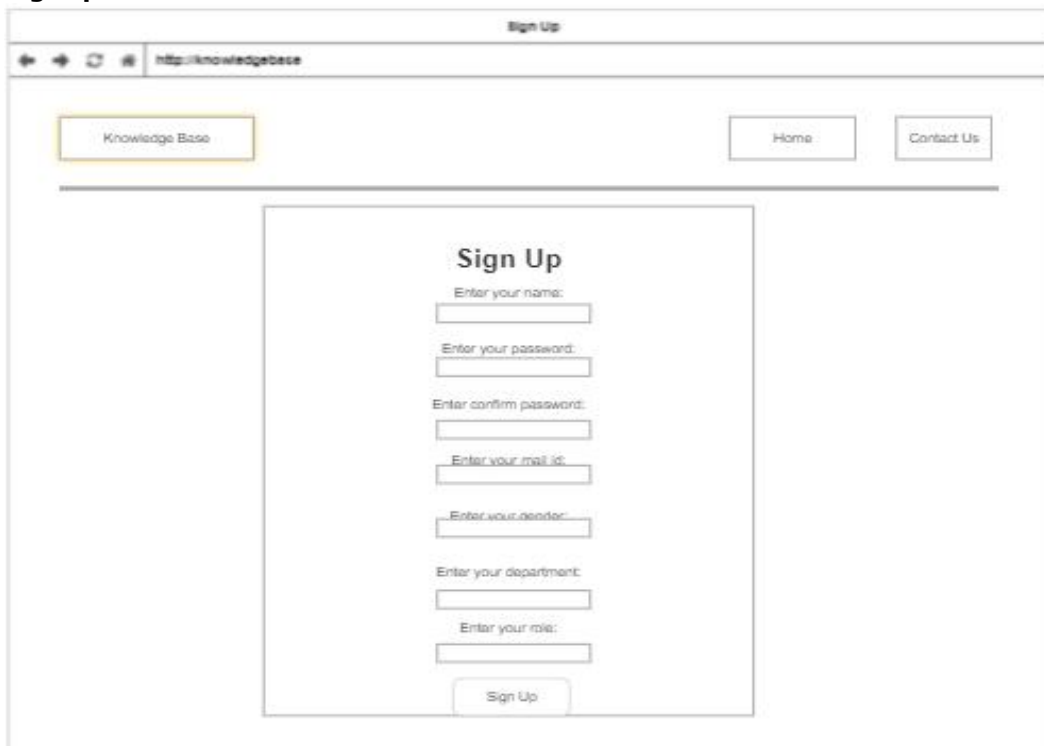
6. Low-Level Design

SignIn:

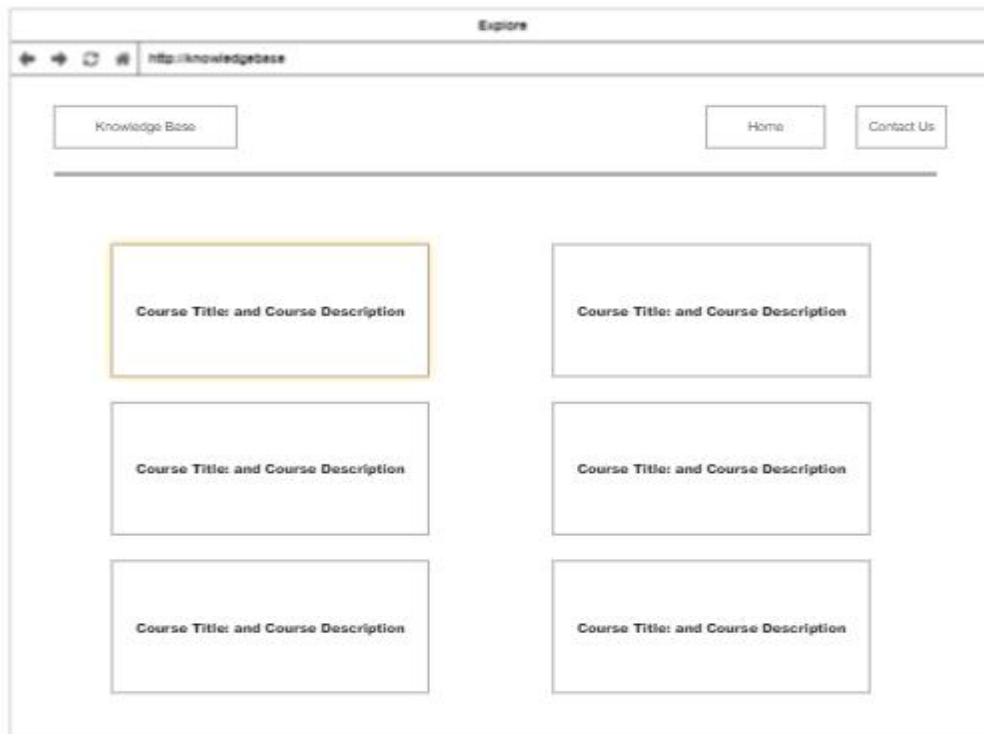
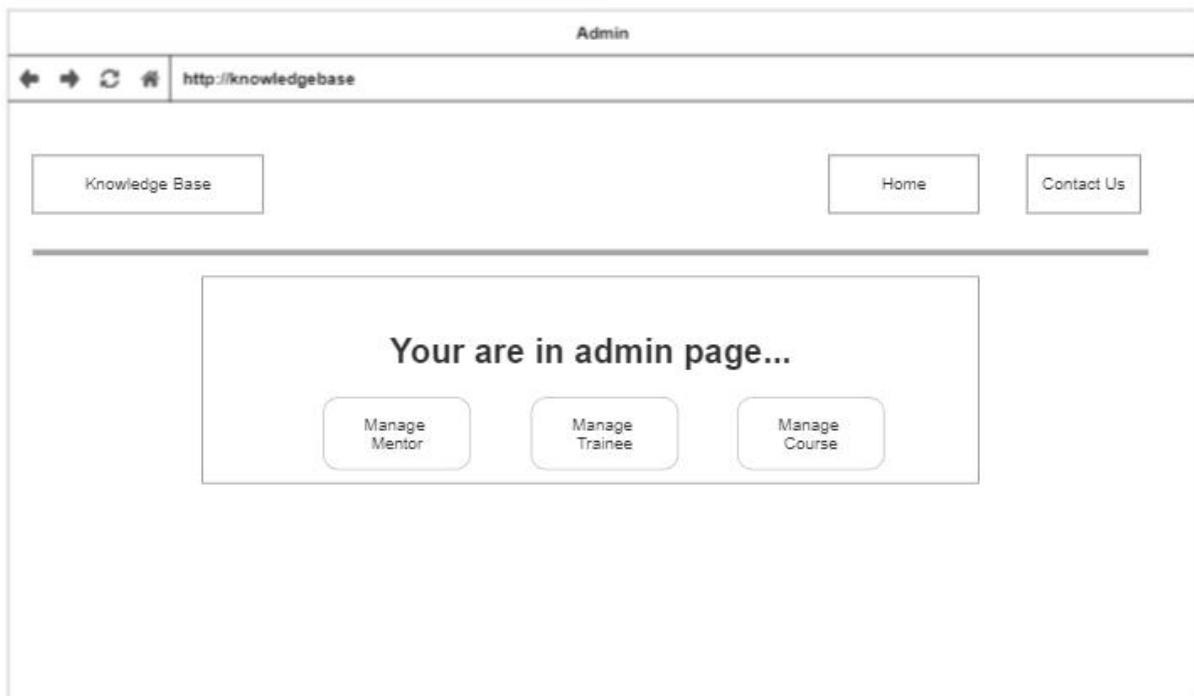


A browser window titled "SignIn" with the address bar showing "http://knowledgebase". The page has a navigation bar with "Knowledge Base", "Home", and "Contact Us" links. The main content area contains a "SignIn" form with the following fields: "Enter your name:" (text input), "Enter your password:" (password input), a blue link "Forgot Password?", and a "Sign In" button.

SignUp:



A browser window titled "SignUp" with the address bar showing "http://knowledgebase". The page has a navigation bar with "Knowledge Base", "Home", and "Contact Us" links. The main content area contains a "Sign Up" form with the following fields: "Enter your name:" (text input), "Enter your password:" (password input), "Enter confirm password:" (password input), "Enter your mail id:" (text input), "Enter your gender:" (text input), "Enter your department:" (text input), "Enter your role:" (text input), and a "Sign Up" button.

Explore:**Admin:**

Manage Course:

The screenshot shows a web browser window titled 'Admin' with the address bar displaying 'http://knowledgebase'. The page features a navigation bar with three buttons: 'Knowledge Base', 'Home', and 'Contact Us'. Below the navigation bar, a horizontal line separates the header from the main content area. The main content area is titled 'Manage Course...' and contains a vertical list of four buttons, each preceded by a radio button: 'View Course List', 'Add Course', 'Delete Course', and 'Exit'.

Manage Trainee:

The screenshot shows a web browser window titled 'Admin' with the address bar displaying 'http://knowledgebase'. The page features a navigation bar with three buttons: 'Knowledge Base', 'Home', and 'Contact Us'. Below the navigation bar, a horizontal line separates the header from the main content area. The main content area is titled 'Manage Trainee...' and contains a vertical list of four buttons, each preceded by a radio button: 'View Trainee List', 'Add Trainee', 'Delete Trainee', and 'Exit'.

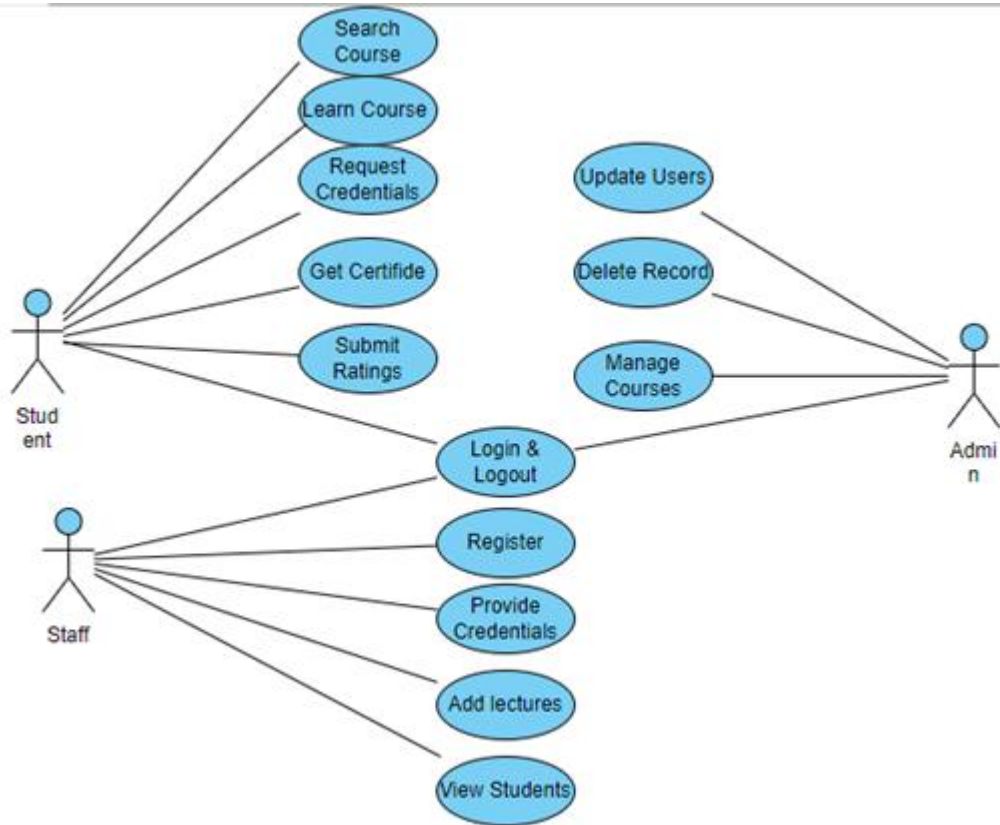
Manage Mentor:

The screenshot shows a web browser window with the title "Admin" and the address bar displaying "http://knowledgebase". The page has a navigation bar with three buttons: "Knowledge Base", "Home", and "Contact Us". Below the navigation bar, there is a central box titled "Manage Mentor...". Inside this box, there are four radio buttons, each followed by a label: "View Mentor List", "Add Mentor", "Delete Mentor", and "Exit".

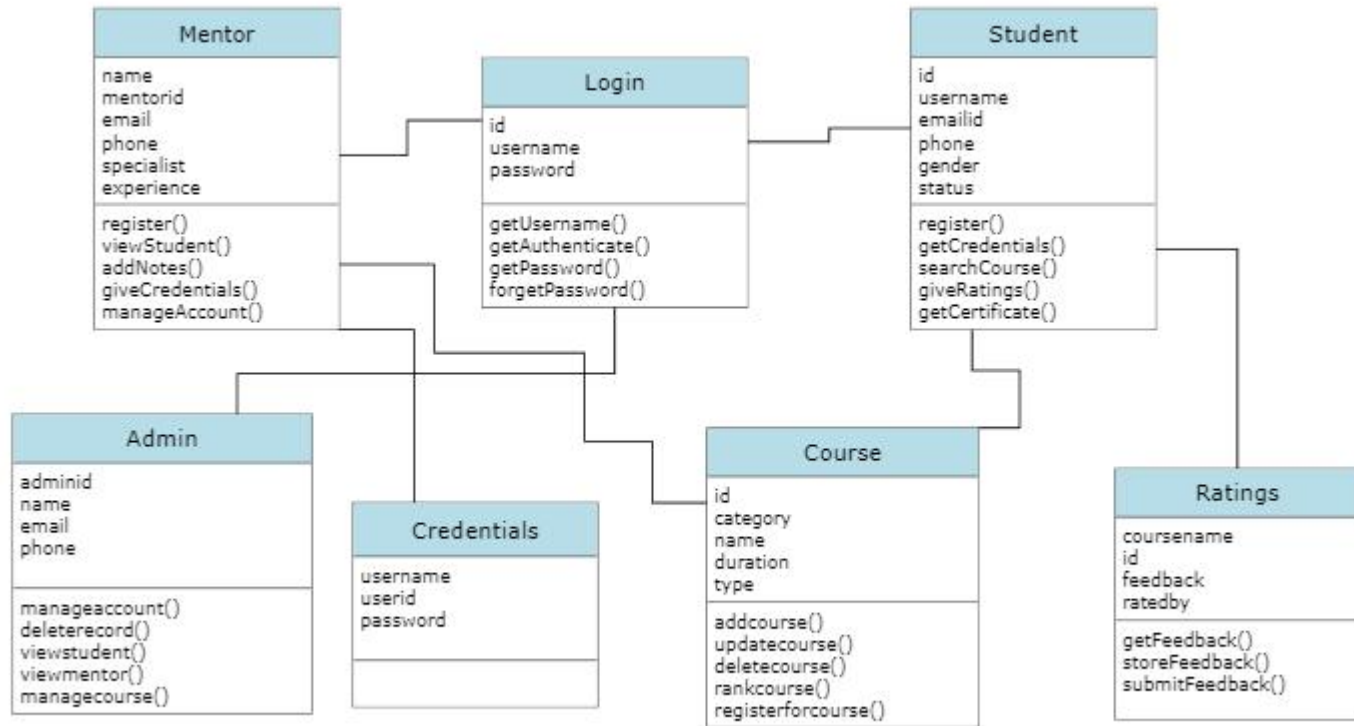
Delete Mentor:

The screenshot shows a web browser window with the title "Admin" and the address bar displaying "http://knowledgebase". The page has a navigation bar with three buttons: "Knowledge Base", "Home", and "Contact Us". Below the navigation bar, there is a central box titled "Delete Mentor Details...". Inside this box, there is a label "Enter Valid Mentor Id:" followed by a text input field. Below the input field, there is a button labeled "Delete".

7. Use Case Diagram

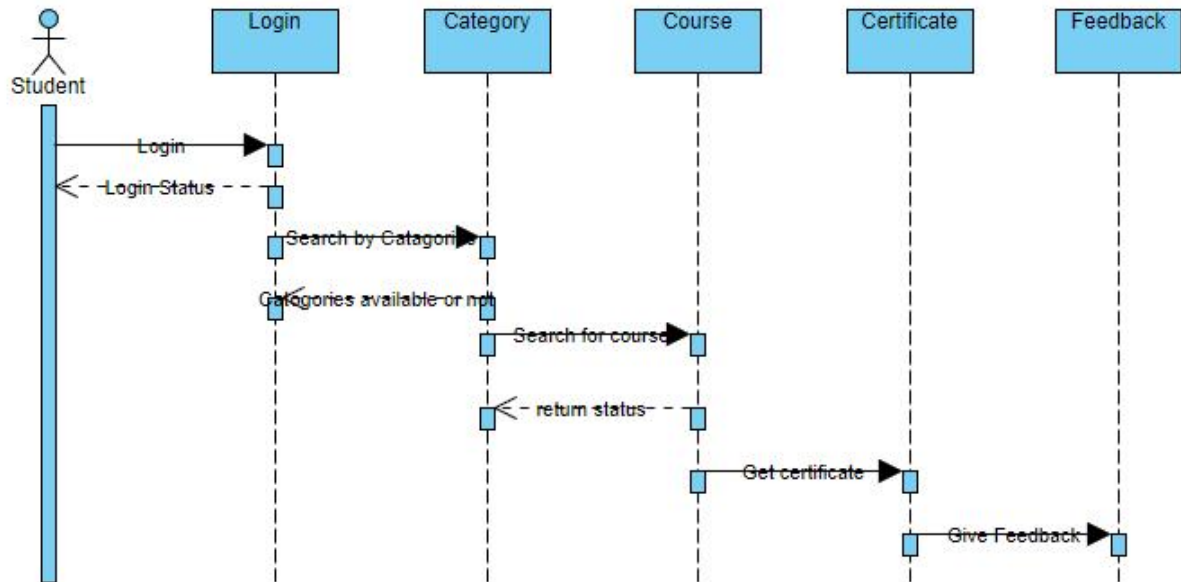


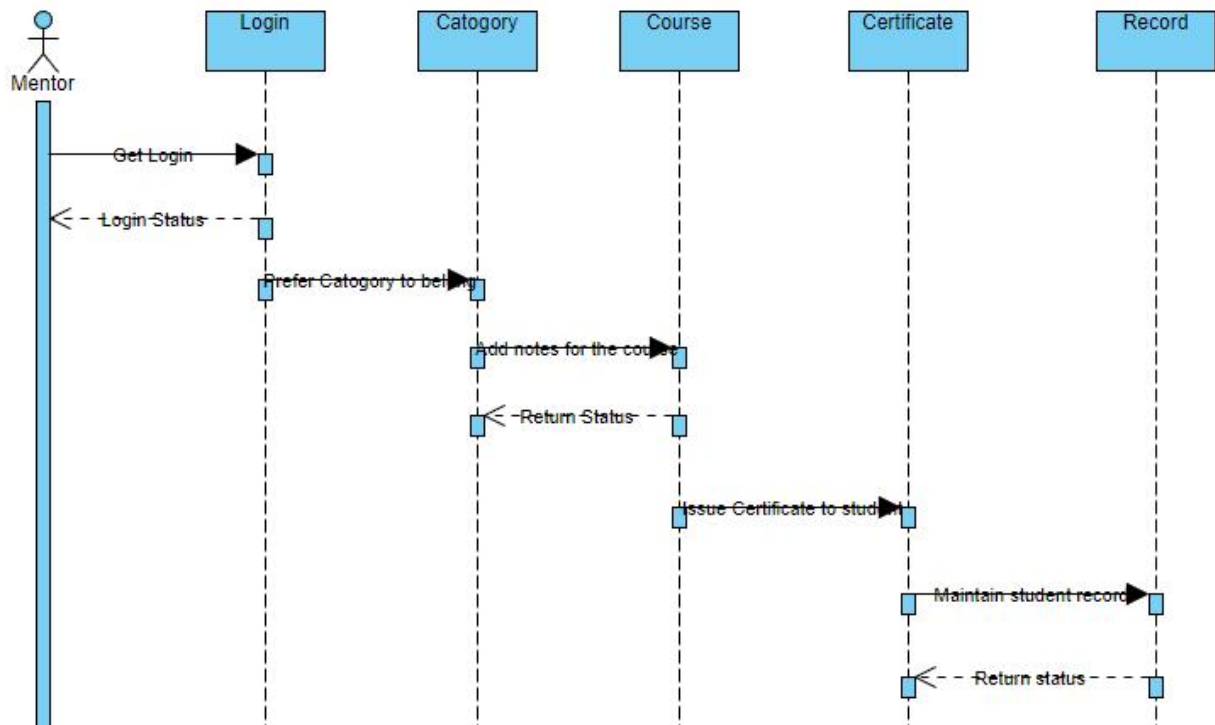
8. Class Diagram

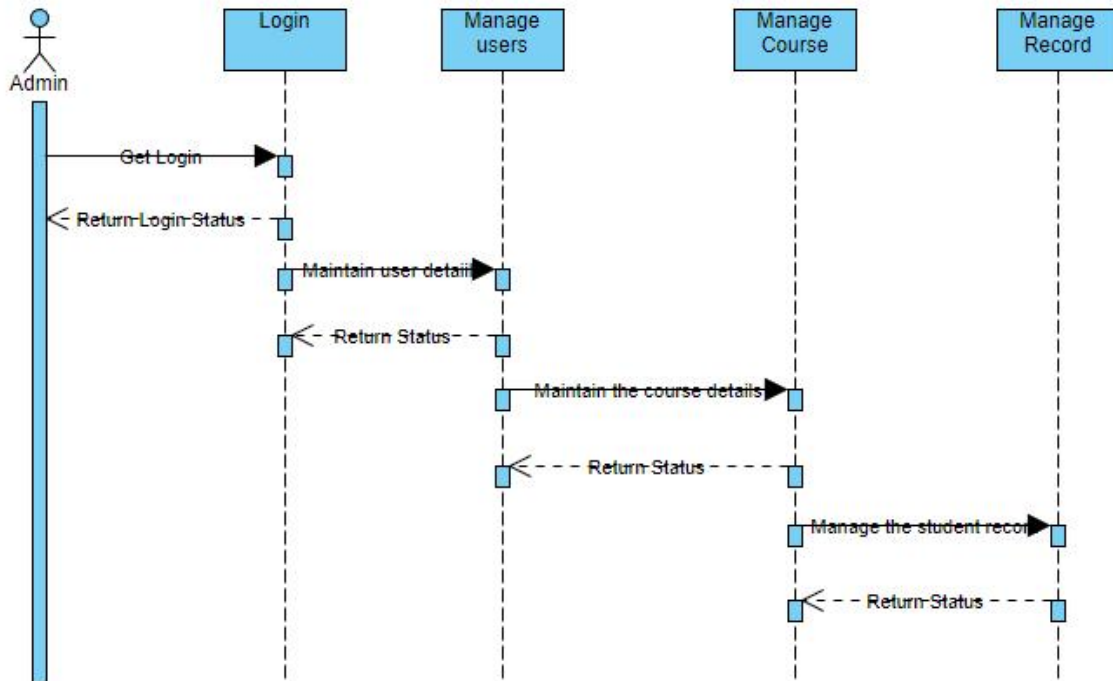


9. Sequence Diagram

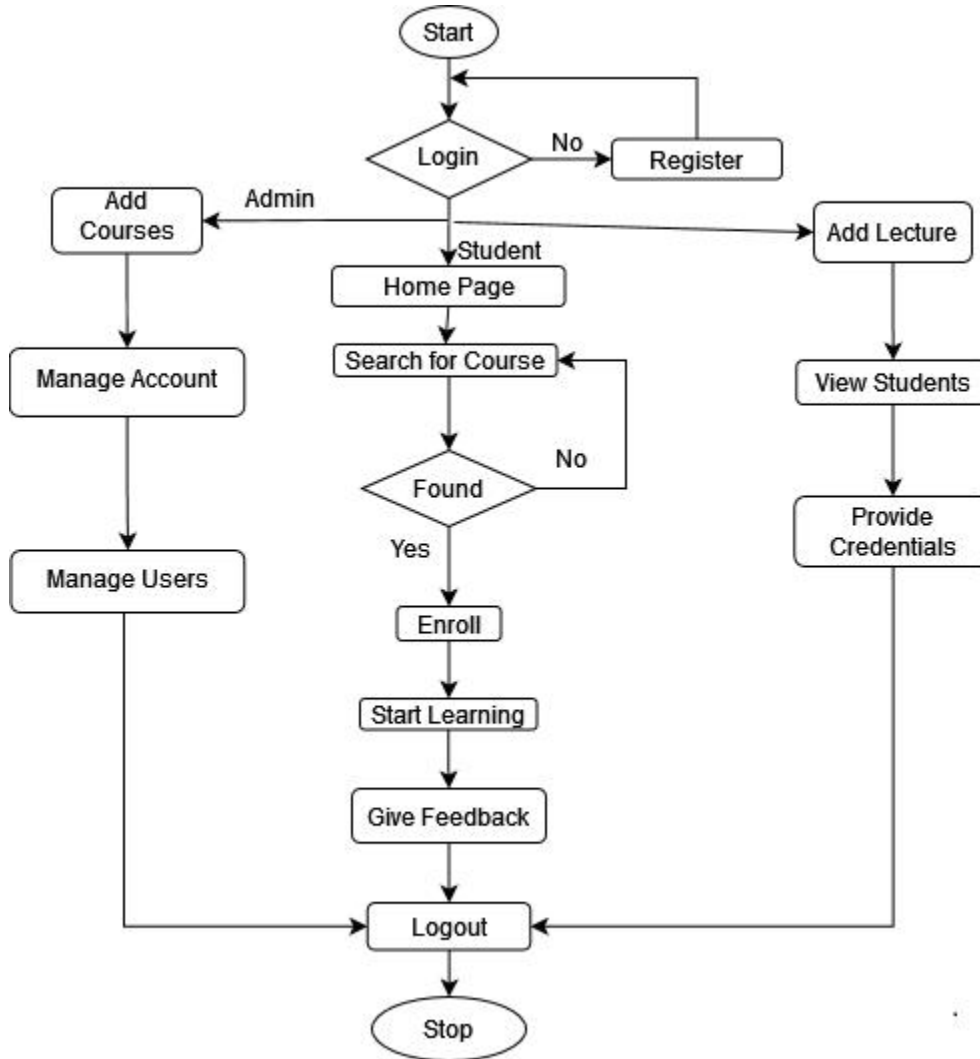
STUDENT



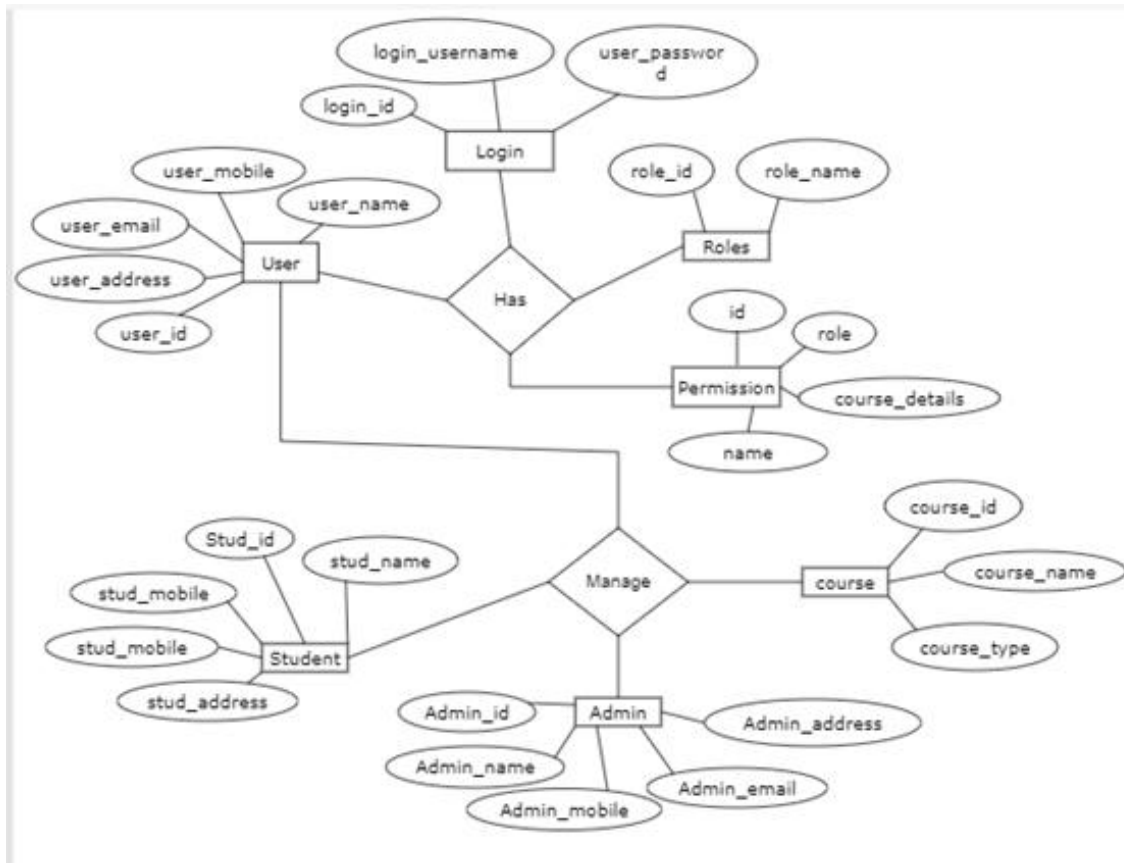
MENTOR

ADMIN

10. Flow Diagram



11. ER Diagram



12. TESTING

Testcase ID	Description	Expected result	Actual Result	Remark
TC01	Username:#m@gmail.com Password:*****	Grant Login	Login Unsuccessful	Fail
TC02	Username:m@gmail.com Password:*****	Grant Login	Login Successful	Pass
TC03	Name:xyzre Password:***** Confire password:***** Address:Chennai Phone:9845257289	Registration Successful	Registration Successful	Pass
TC04	Redirecting to home page after successfully login.	Home page should loaded	Successful	Pass
TC05	Irrelevant Searches.(Ex: Beauty tips)	Search something related to the technology	Successful	Pass
TC06	Give feedback to the mentor.	Thank You for your valuable feedback.	Unsuccessful Submission	Fail

13. CONCLUSION

In conclusion, online learning is beneficial to the students, tutors and the institution offering these courses. It enhances the quality of learning and teaching. Meet the learning style or needs of students. Also, improve the efficiency and effectiveness. Improve user-accessibility and time flexibility to engage learners in the learning process.