

SOFTWARE CONSTRUCTION

Presentation





LEARNHIVE

Your Ultimate Learning Companion

Presentation By
TEAM 6





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ABSTRACT

The **Online Course Portal System** is a comprehensive e-learning platform designed to revolutionize education by providing seamless access to online courses. The system supports two distinct roles: Students and Instructors, each with a user-friendly interface tailored for efficient learning and teaching. With an intuitive design and robust functionalities, the platform enhances the online education experience by enabling smooth course access, interactive learning, and effective course management. By integrating modern digital tools, it ensures a more engaging, accessible, and streamlined approach to education.



5 EXISTING SYSTEMS AND THEIR DISADVANTAGES



- Limited interactivity in courses compared to traditional classrooms.
- Some courses focus more on theoretical knowledge rather than practical application.
- Certain courses follow a fixed schedule, limiting flexibility.



- Course quality varies as anyone can create and sell courses.
- No structured learning path or formal accreditation.
- Limited instructor interaction and feedback.



- Courses are more creative and hobby-focused, lacking technical or academic depth.
- No certification or accreditation for completed courses.
- Course quality can vary since anyone can become an instructor.



- Primarily focuses on academic subjects, limiting professional and career-oriented courses.
- No certification is provided for completed courses.
- Content can be less engaging for advanced or professional learners.



- Courses often follow a fixed schedule, making self-paced learning difficult.
- Some courses lack practical applications or hands-on projects.
- Limited opportunities for direct interaction with instructors.



PROPOSED SOLUTION



A digital platform designed to surpass the constraints of traditional education offers flexible, accessible, and personalized learning opportunities anytime, anywhere. It incorporates two user roles: Student and Instructor, each with a tailored dashboard. Instructors have the capability to create and manage courses with multimedia, assignments, and assessments, while students can enroll, access content, complete tasks, and receive immediate feedback. The platform provides real-time progress tracking and integrated communication tools, featuring a structured yet adaptable course flow for a dynamic learning experience. It's scalable to support large audiences without sacrificing performance and focuses on automation, interactivity, and data-driven feedback. Engineered for remote accessibility and future-ready education.

STUDENT MODULE



1. LOGIN & COURSE ACCESS:

- Login with username/password.
- New users get personalized courses; returning users access enrolled courses.



2. COURSE PROGRESS & TRACKING:

- Dashboard shows course progress.
- Includes graphical progress representation.



3. QUIZZES & ASSIGNMENTS:

- Weekly quizzes/assignments count for 50% of the score.
- Track performance weekly.



COURSE PORTFOLIO INTEGRATION:

Enable users to create a digital portfolio showcasing completed courses, projects, and skills, dynamically generated from an SQL database to prevent tampering.

4. BADGE & REWARDS:

Badge and achievement eligibility is fully customizable and defined by the client. Instead of using preset platform-wide criteria, each client can set their own requirements for badge tier

- Tiered Benefits: Participants will be eligible for tiered benefits: Bronze Tier, Silver Tier, Gold Tier
- Benefit: Discount on paid courses



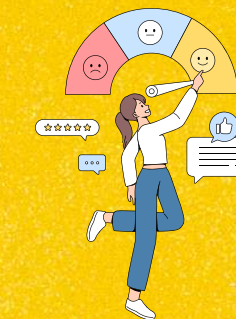
6. NOTIFICATIONS & REMINDERS:

- Receive alerts for assignments and quizzes.
- Get reminders for live sessions.



5. DOUBT CLEARING:

- Attend weekly live sessions.
- Access video solutions for FAQs.



7. FEEDBACK & RECOMMENDATIONS:

- Submit feedback forms.
- Get personalized course recommendations.



PROOF-OF-KNOWLEDGE CERTIFICATES:

Certificates remain valid only if users periodically prove their knowledge. Failure to pass the assessment temporarily invalidates the certificate until retested.

INSTRUCTOR MODULE



1. INSTRUCTOR LOGIN & DASHBOARD

- Login with User ID and password.
- Access dashboard to manage courses and student interactions.



2. COURSE MANAGEMENT

- Upload video lectures, create assignments, and set quizzes.
- Define course details (duration, syllabus, fees, and ratings).



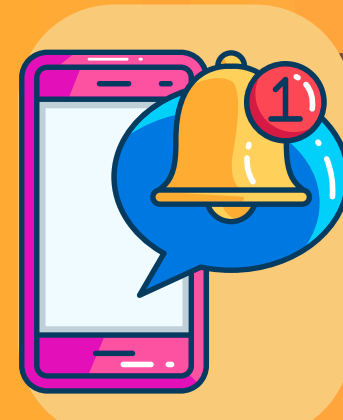
3. STUDENT INTERACTION & SUPPORT

- Monitor student doubts and provide clarifications.
- Conduct weekly live sessions and offer recorded explanations.



4. PERFORMANCE TRACKING

- Analyze student progress and quiz/assignment performance.
- Provide personalized feedback to improve learning outcomes.



5. NOTIFICATIONS & UPDATES

- Receive real-time alerts for student queries and course updates.
- Send reminders for assignments, exams, and live sessions.

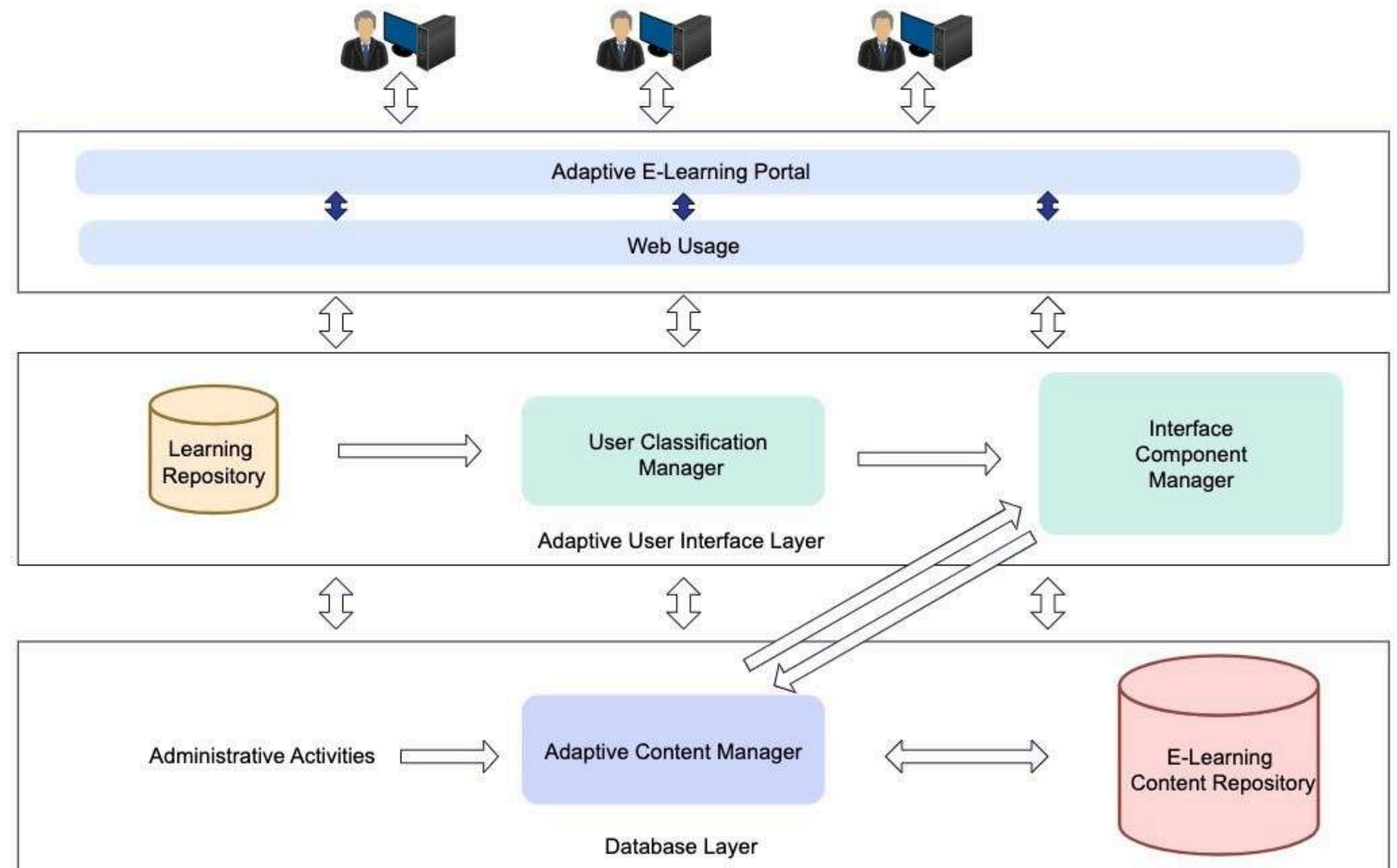


6. FEEDBACK & COURSE ENHANCEMENT

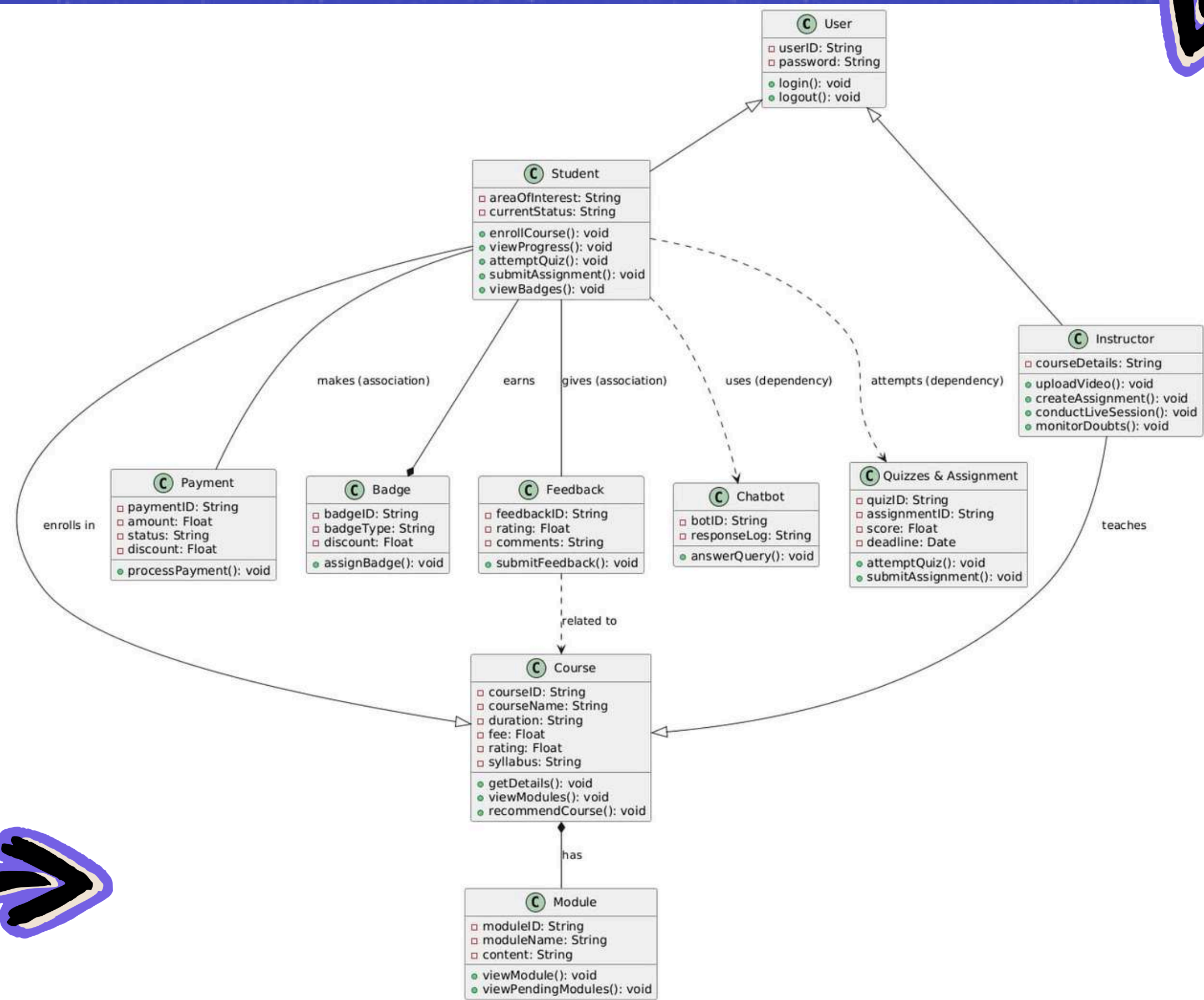
- Collect student feedback to improve course content.
- Get course recommendations based on student demand.



ARCHITECTURE DIAGRAM

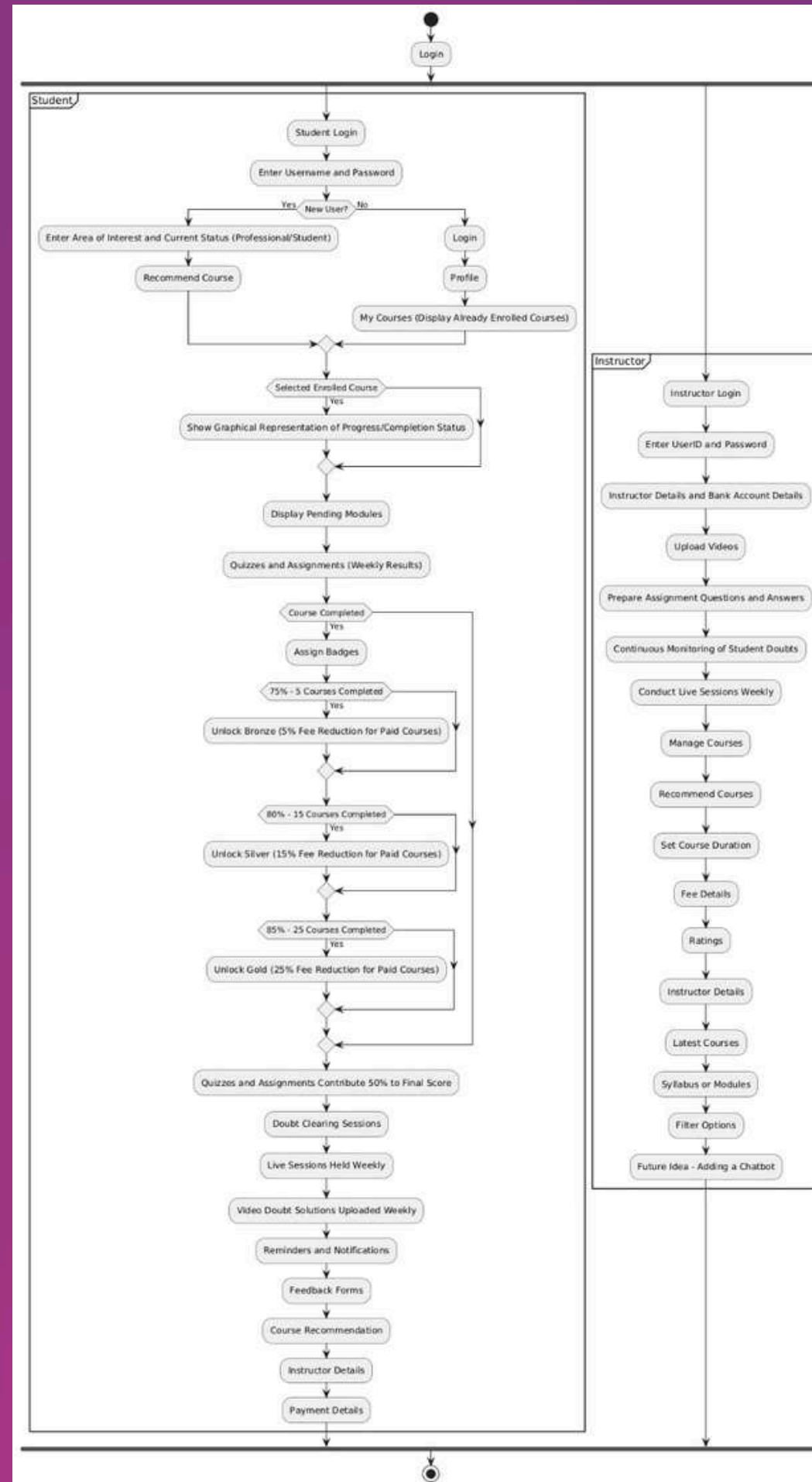


CLASS DIAGRAM

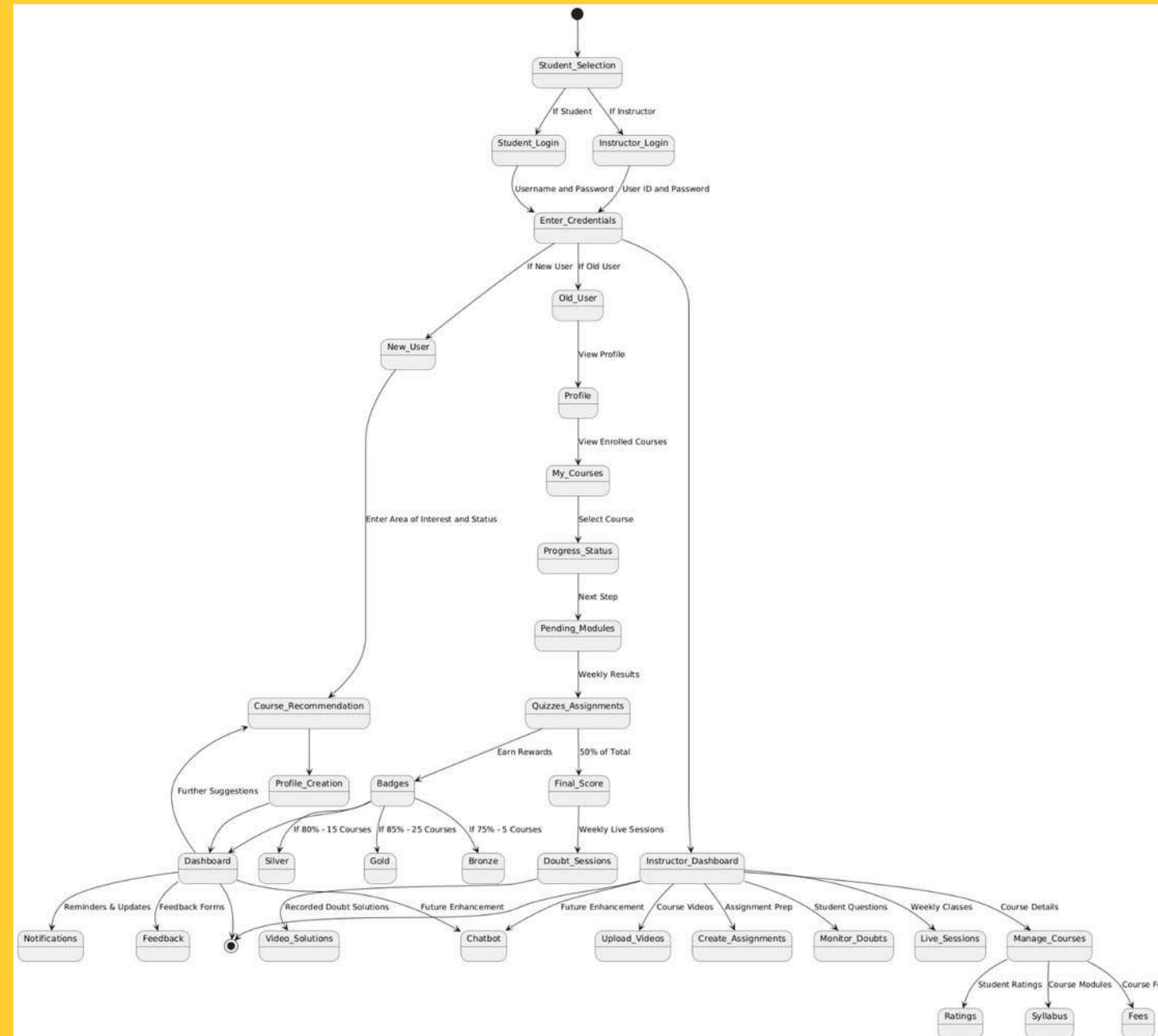




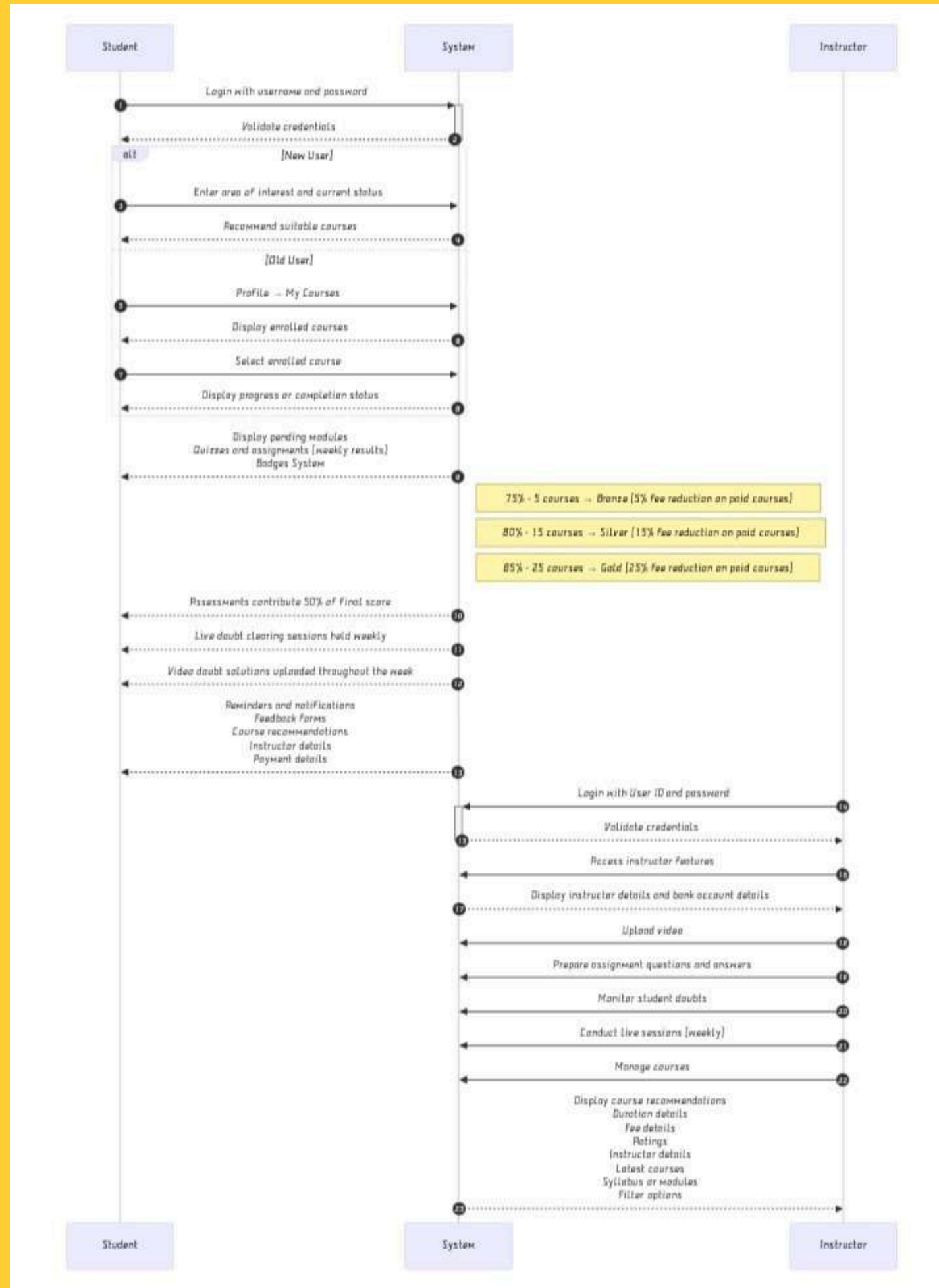
ACTIVITY DIAGRAM



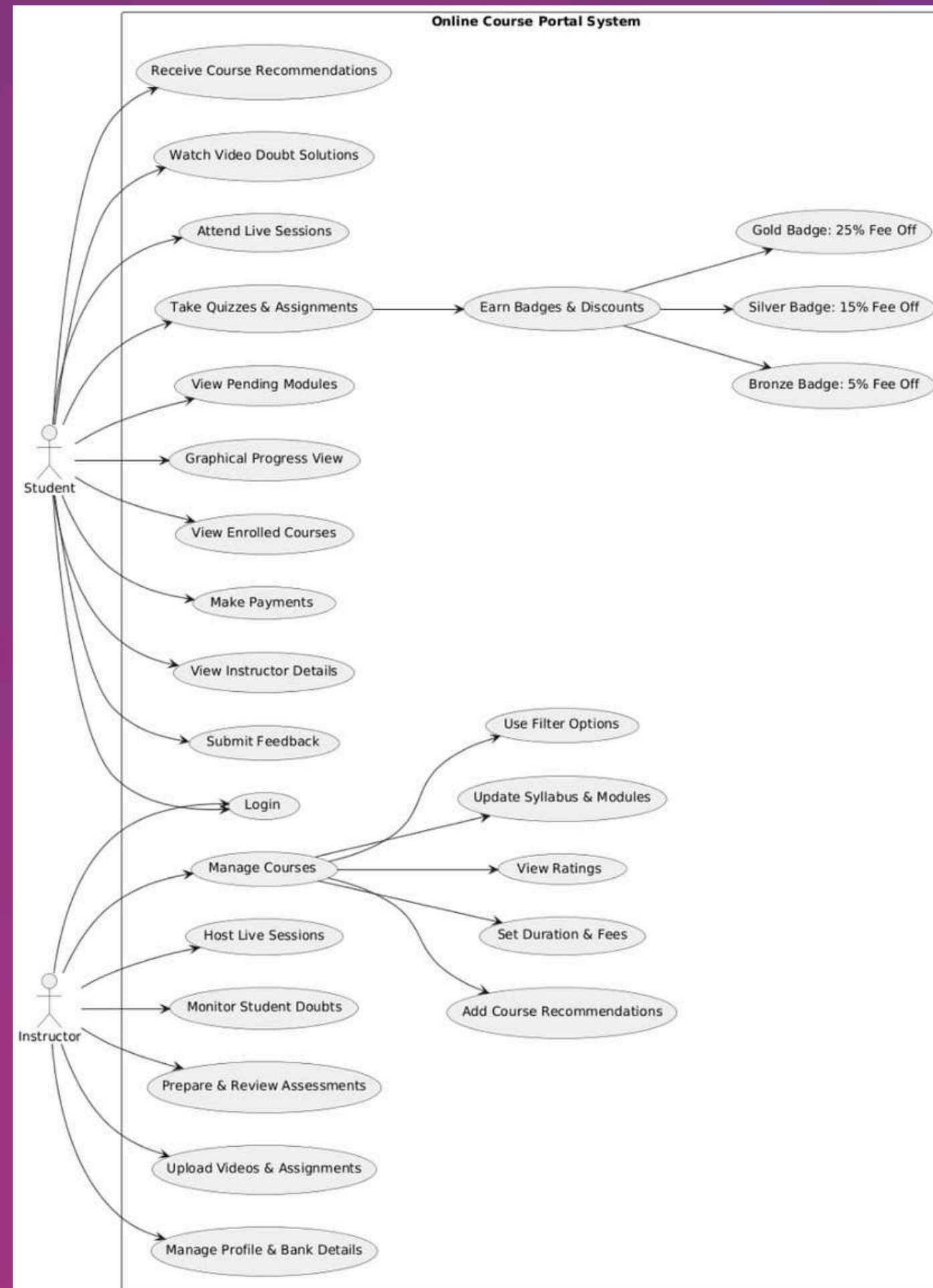
STATE DIAGRAM



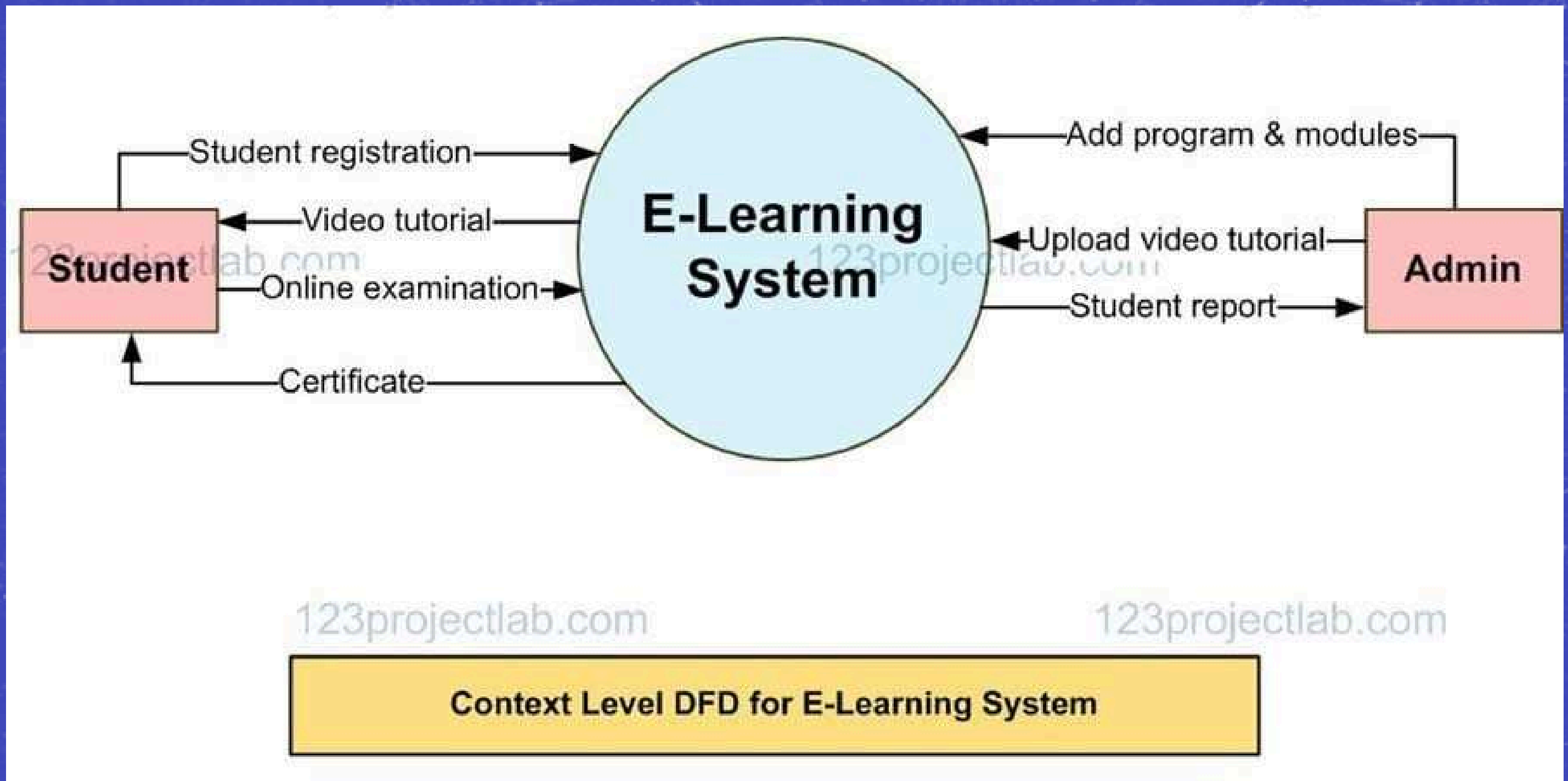
SEQUENCE DIAGRAM



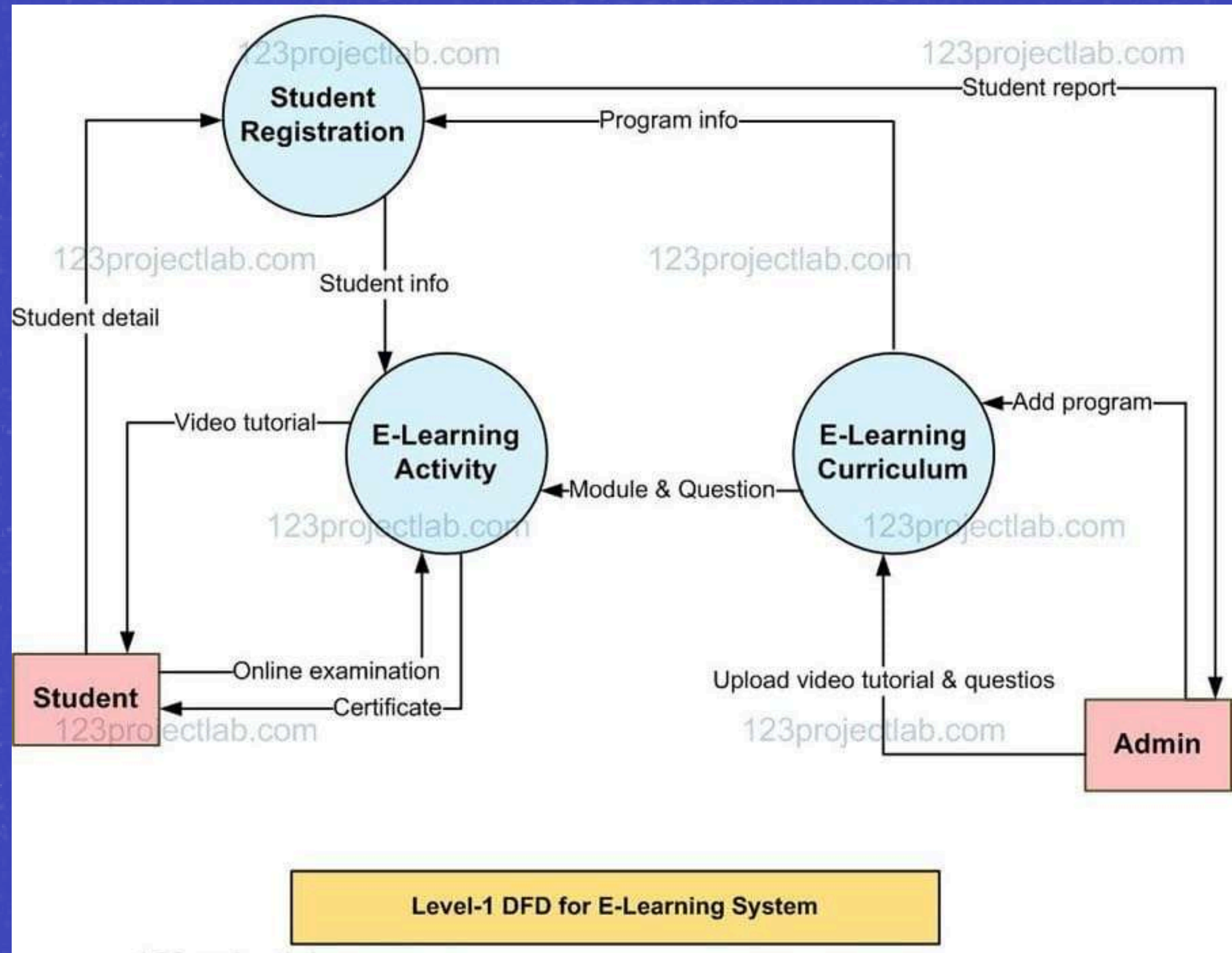
USECASE DIAGRAM



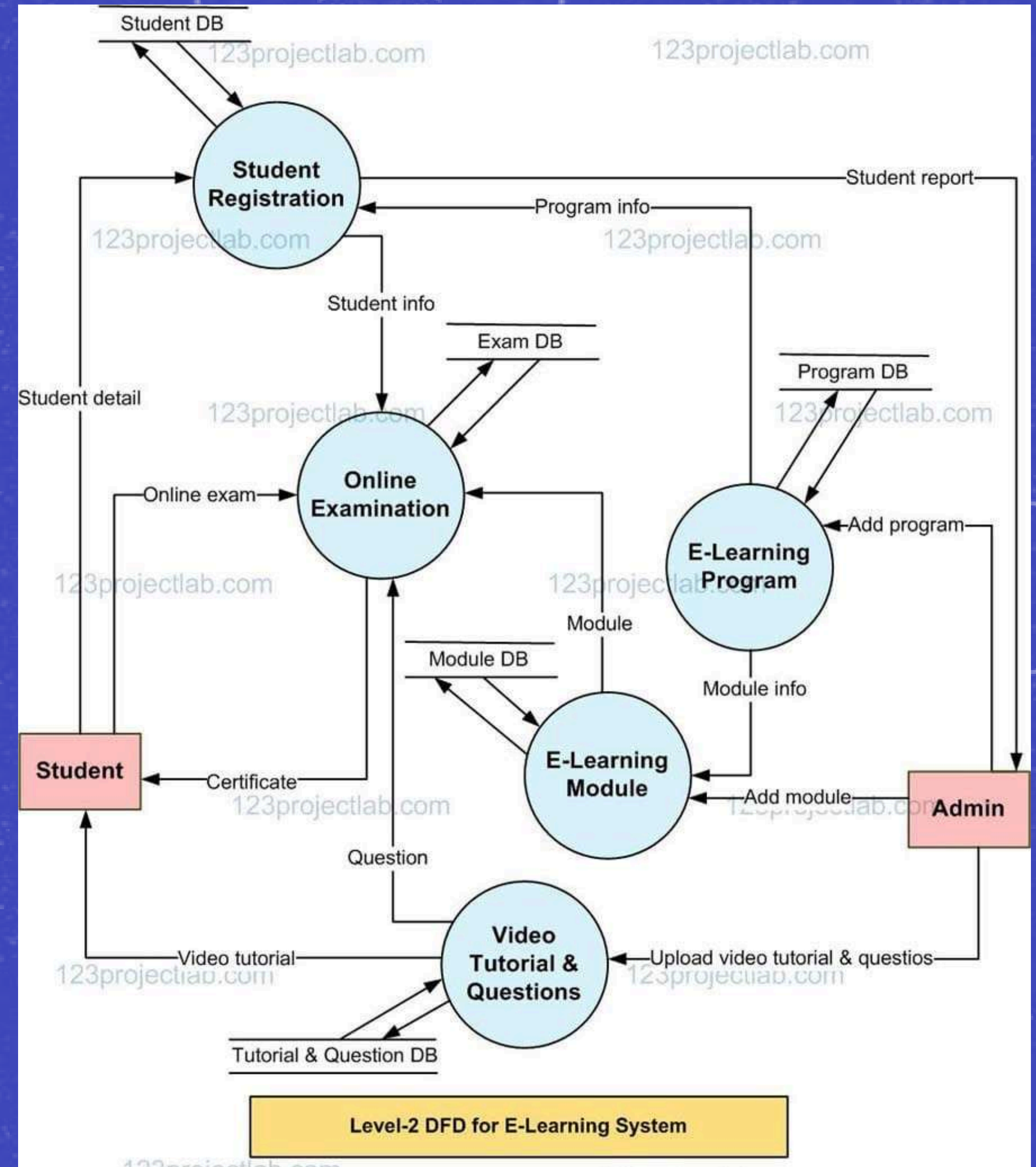
ZERO LEVEL DATAFLOW DIAGRAM



FIRST LEVEL DATAFLOW DIAGRAM



SECOND LEVEL DATAFLOW DIAGRAM



ASSUMPTIONS

Users access the portal through modern and updated web browsers.

Example: A student using the latest version of Google Chrome or Firefox can navigate the platform without compatibility issues

Every registered user provides a valid and unique email address.

Example: During registration, the system accepts student123@gmail.com only if it hasn't been used before.

. Instructors are authenticated and authorized to manage course content.

Example: An instructor account is verified by the admin team before being allowed to upload lectures and assessments.

Students enroll in courses before accessing course materials and features.

Example: A student must enroll in the "Data Structures" course to access its video lectures, quizzes, and resources.

All uploaded content adheres to platform-supported formats such as MP4 for videos and PDF for documents.

Example: An instructor uploading a tutorial uses MP4 format to ensure it plays correctly on all student devices.

A stable internet connection is available for users during learning sessions.

Example: Smooth video playback and real-time quiz submissions require a continuous internet connection.

Platform notifications and updates are delivered within the portal interface.

Example: Students receive real-time updates on assignment deadlines directly on their dashboard.

Users securely manage their login credentials and utilize the recovery option when needed.

Example: If a user forgets their password, they reset it through the "Forgot Password" feature without admin intervention

All users engage respectfully and responsibly within discussion forums and messaging features.

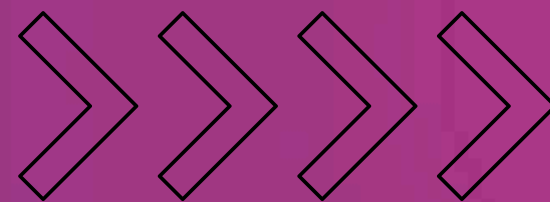
Example: Students post constructive questions and feedback while adhering to the platform's code of conduct

The platform is maintained for high availability, with prior notice given for scheduled maintenance.

Example: Users are notified 24 hours in advance if the system is undergoing updates to ensure minimal disruption.



USER INTERFACE DESIGN





Let's sign you in

Welcome to our Page [Sign Up](#)

Account Type

Student 

Username

Jaya

Password

● ● ● ● ● ● ● ● ●

☐ Keep me logged in

Sign In



Sign In With



or





 Dashboard

 Courses enrolled

 Account


 Notification

 Settings

 Logout

 Support forum

 Help



Jaya bharathi

Student

Dashboard

ongoing course

Digital marketing



module 1



Completed



module 2



In Progress

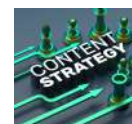


module 3



In Progress

Additional courses by Mr. Mano



Content Writing

2 M views

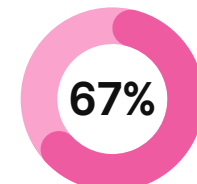


Statistics

1.3 M views



Broze badge



course recommendation

 Most popular



Machine Learning

Mrs . Subha Patani >> 12 M views



internet of things

Mr . Manhari raj >> 13 M views



User Interface

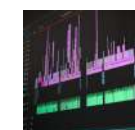
Mr. Rahul Singh >> 9 M views

Courses enrolled



Digital Marketing

Mr. Mano >> 7 M views



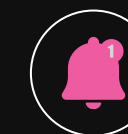
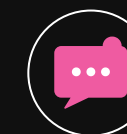

Video Editing

Mrs. Debora >> 20 M views



AI and Data Science

Mr. Ramleel >> 2 M views


 Dashboard Student assignment Courses handled Account Messages Settings Logout Student forum Help

Assigned


Assignment 2	Submitted 46
Test 2	54
Assignment 1	58
Test 1	78

[Add work](#)

Students Enrolled



Rupa Kumari
Rajalakshmi Engineering Collage




Pradeep . G
Vellore Institute Of Technology

[View all](#)


Courses Handled

Internet of things 



module 1
Introduction to iot

Video : 704 x 576 - 48 KHz - 92 kbps







module 2
Introduction to iot

Video : 704 x 576 - 48 KHz - 92 kbps

[Upload module](#) 

Live sessions

This Month [See All](#) 

Sessions	Date	Status
 Session 1 Internet of things	Feb 12th, 2025 07:00 PM	Success
 Session 2 Internet of things	Feb 22th,2025 06:00 PM	Success
 Session 1 Assembly language	March 2nd, 2025 05:00 PM	Success
 Session 3 Internet of things	March 11th, 2025 04:00 PM	Pending

REFERENCES LINKS

<https://creately.com/diagram/example/j2azmwx41/course-registration-system-level-0-classic>

https://youtu.be/bL00UAW_ygE?si=-KX8xgUJrxShzoLJ

<https://www.slideshare.net/slideshow/uml-diagrams-for-online-course-portal/115353622>

<https://www.slideshare.net/slideshow/course-registration-systemsrs-dfd-structured-chart/250900073>

<https://coggno.com/blog/common-lms-course-assumptions/>

<https://www.slideshare.net/slideshow/online-course-portal-for-campus-with-query-system/14879582>

<https://elearningindustry.com/traditional-learning-vs-online-learning>

<https://youtu.be/WnMQ8HlmeXc?si=9kZwWhhEmwm9V1wj>

<https://youtu.be/6XrL5jXmTwM?si=dTrFbls6xHTiRyE7>

<https://youtu.be/ZTVAs9cNo30?si=66-lBHtQt6jBrsqx>

A vibrant, stylized illustration on a dark blue background. In the center, the words "THANK YOU" are written in large, bold, white capital letters. Above the text is a large, hand-drawn white arrow with a thick black outline, pointing downwards. To the right of the arrow is a glowing yellow lightbulb with a black filament. On the left, a girl with brown hair and pink bows holds a pink tablet. Below her, a girl with short brown hair holds a black tablet. In the bottom center, a blue laptop with a yellow border displays a green checkmark on its screen. To the right of the laptop, a boy with brown hair holds a black smartphone. Further right, another boy with brown hair holds a black smartphone. The background is decorated with small white stars and a few pink and yellow sparkles. The overall style is flat and modern, with a focus on technology and gratitude.

THANK
YOU