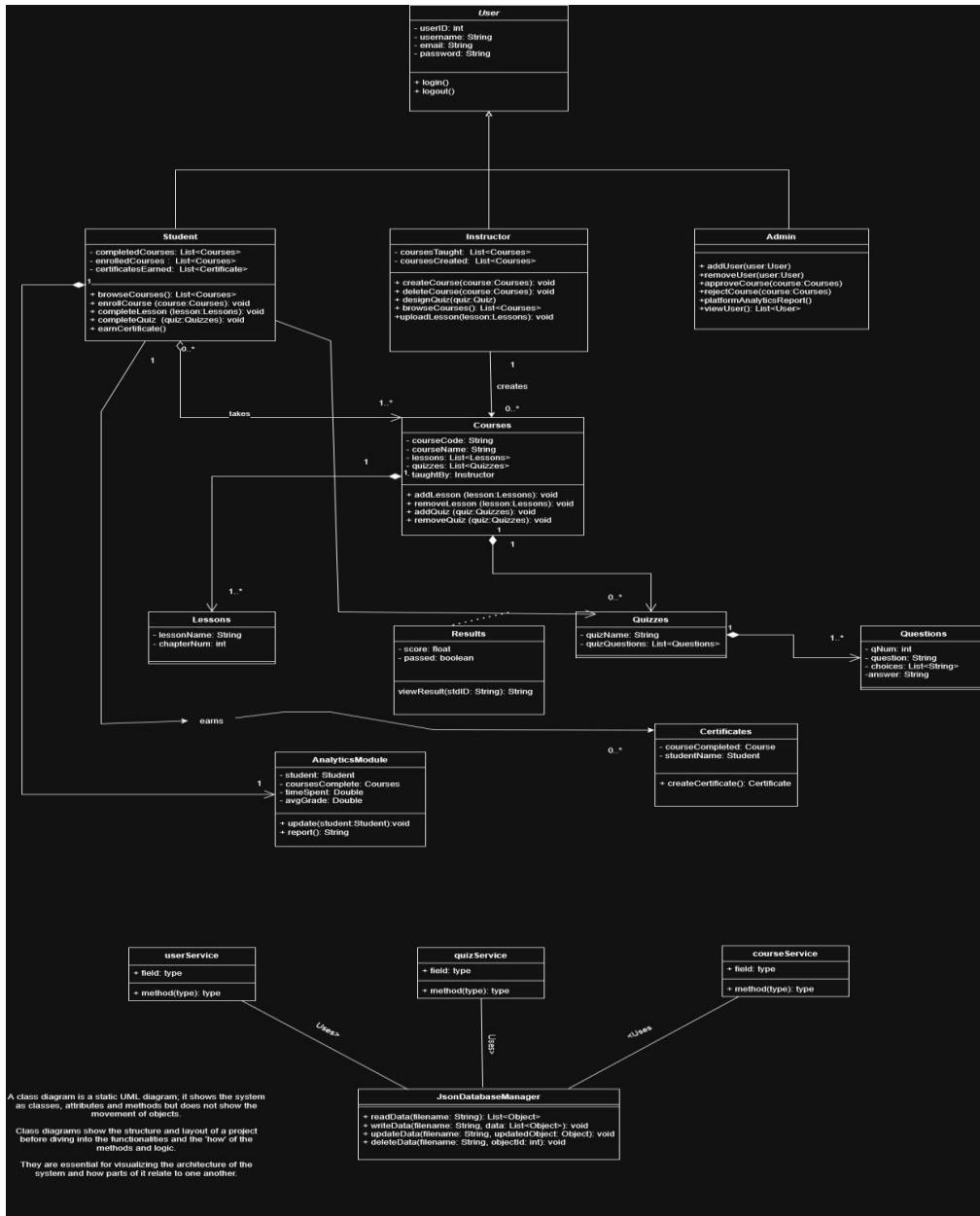


A class diagram is a static UML diagram; it shows the system as classes, attributes and methods but does not show the movement of objects.

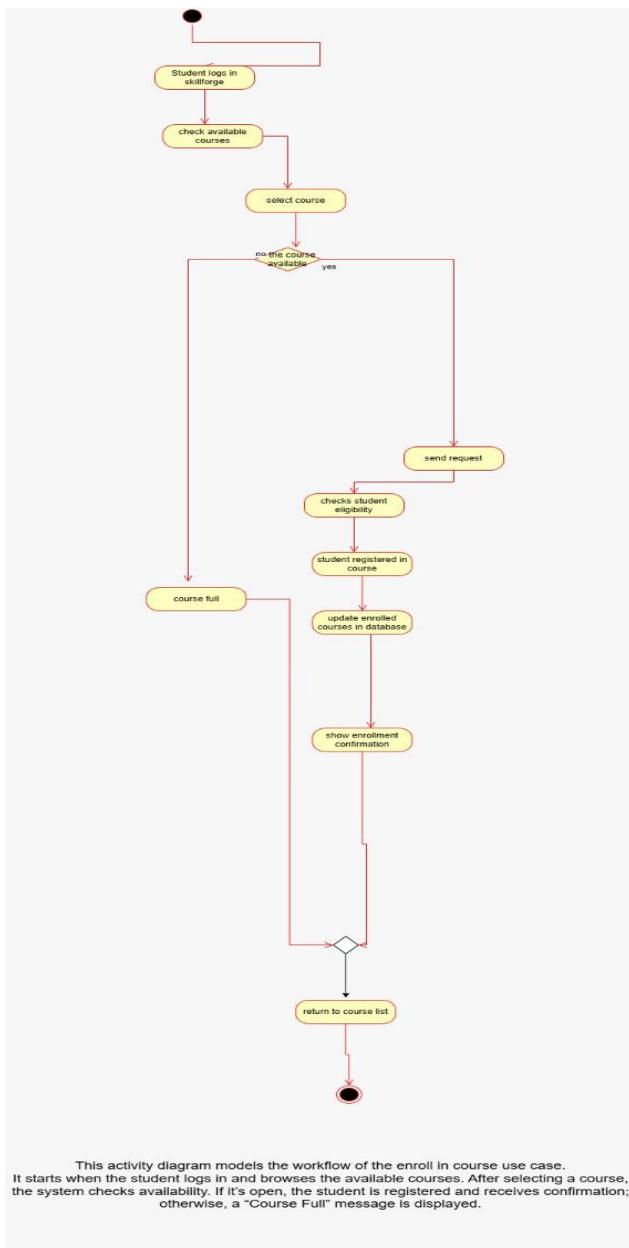
Class diagrams show the structure and layout of a project before diving into the functionalities and the 'how' of the methods and logic.

They are essential for visualizing the architecture of the system and how parts of it relate to one another.



This activity diagram models the workflow of the enroll in course use case.

It starts when the student logs in and browses the available courses. After selecting a course, the system checks availability. If it's open, the student is registered and receives confirmation; otherwise, a "Course Full" message is displayed.



## Student

Login: Student creates or accesses an account; the system verifies credentials.

Browse Courses: Allows viewing and exploring available courses.

Enroll in Course: Student joins a course after login; course must be approved.

Complete Lessons: Accesses course content after successful enrollment.

Complete Quiz: Completes quizzes to test understanding; results are recorded.

Earn Certificate: Certificate generated automatically after completing all lessons and quizzes.

Logout

## Instructor

Login: Instructor accesses teaching dashboard using valid credentials.

Create Course: Builds and publishes new courses with lessons and quizzes.

Delete Course : Removes a courses

Upload Lesson: Adds learning materials to a specific course

Design Quiz: Designs quizzes for evaluating students.

Logout

## Admin

Login: Admin signs in to access management tools.

AddUser: Adds, edits, or removes user accounts.

DeleteUser: removes a use

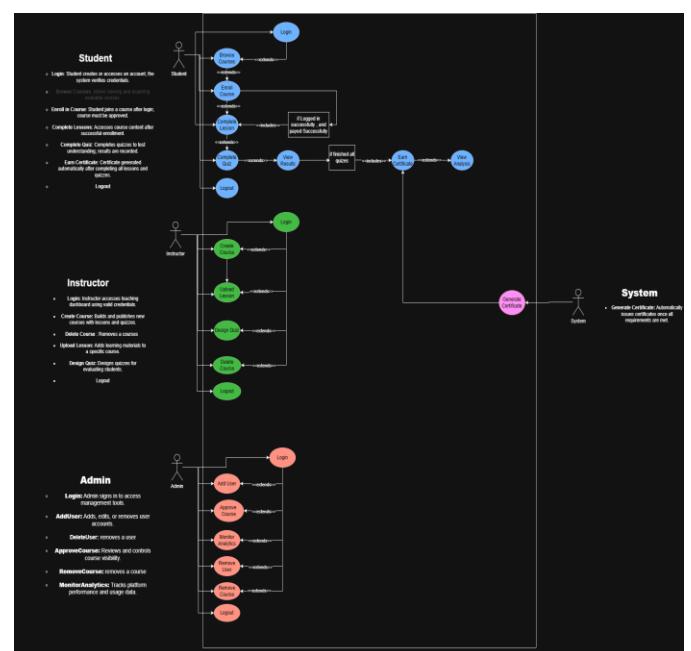
ApproveCourse: Reviews and controls course visibility.

RemoveCourse: removes a course

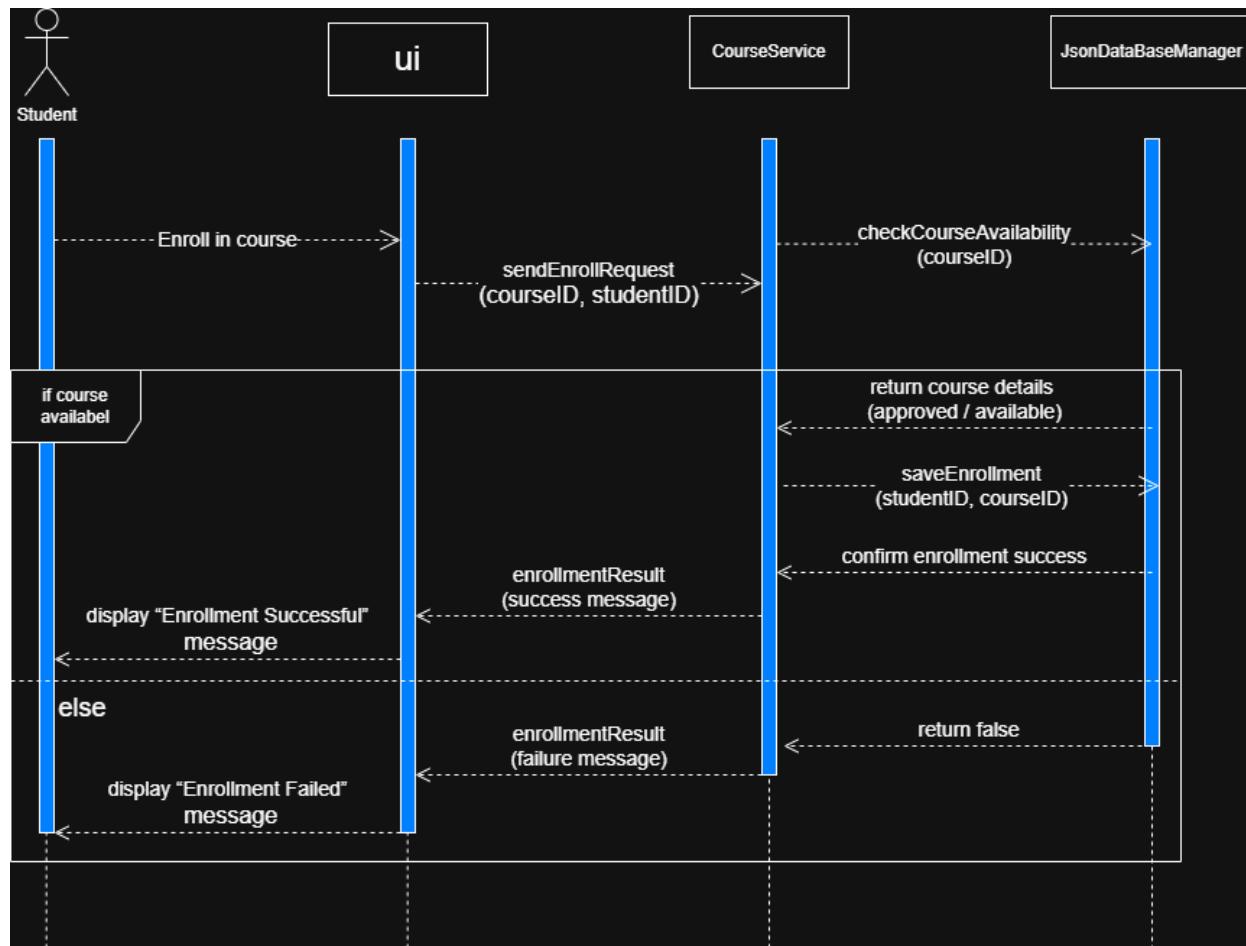
MonitorAnalytics: Tracks platform performance and usage data.

## System

Generate Certificate: Automatically issues certificates once all requirements are met.



The sequence diagram illustrates the process of enrolling in a course on the SkillForge platform. It shows how the student interacts with the system through the user interface, which communicates with the CourseService and the JsonDataBaseManager to verify course availability and record enrollment. The diagram also includes confirmation messages returned to the student after a successful enrollment.



### Description:

The sequence diagram illustrates the process of enrolling in a course on the SkillForge platform. It shows how the student interacts with the system through the user interface, which communicates with the CourseService and the JsonDataBaseManager to verify course availability and record enrollment. The diagram also includes confirmation messages returned to the student after a successful enrollment.