

Programming 2

Lab 6 Report

SkillForge UML Diagram

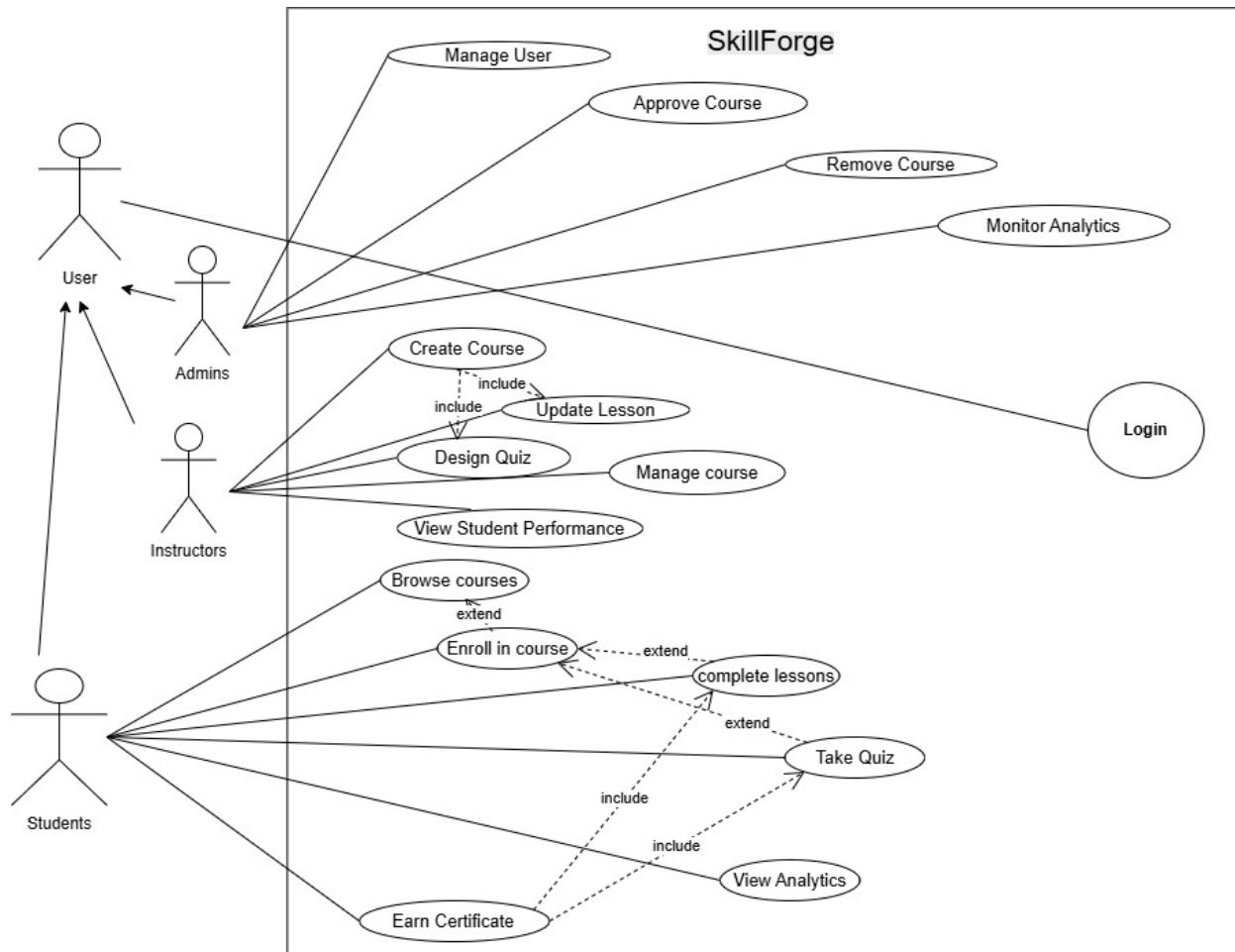
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1. Use Case Diagram

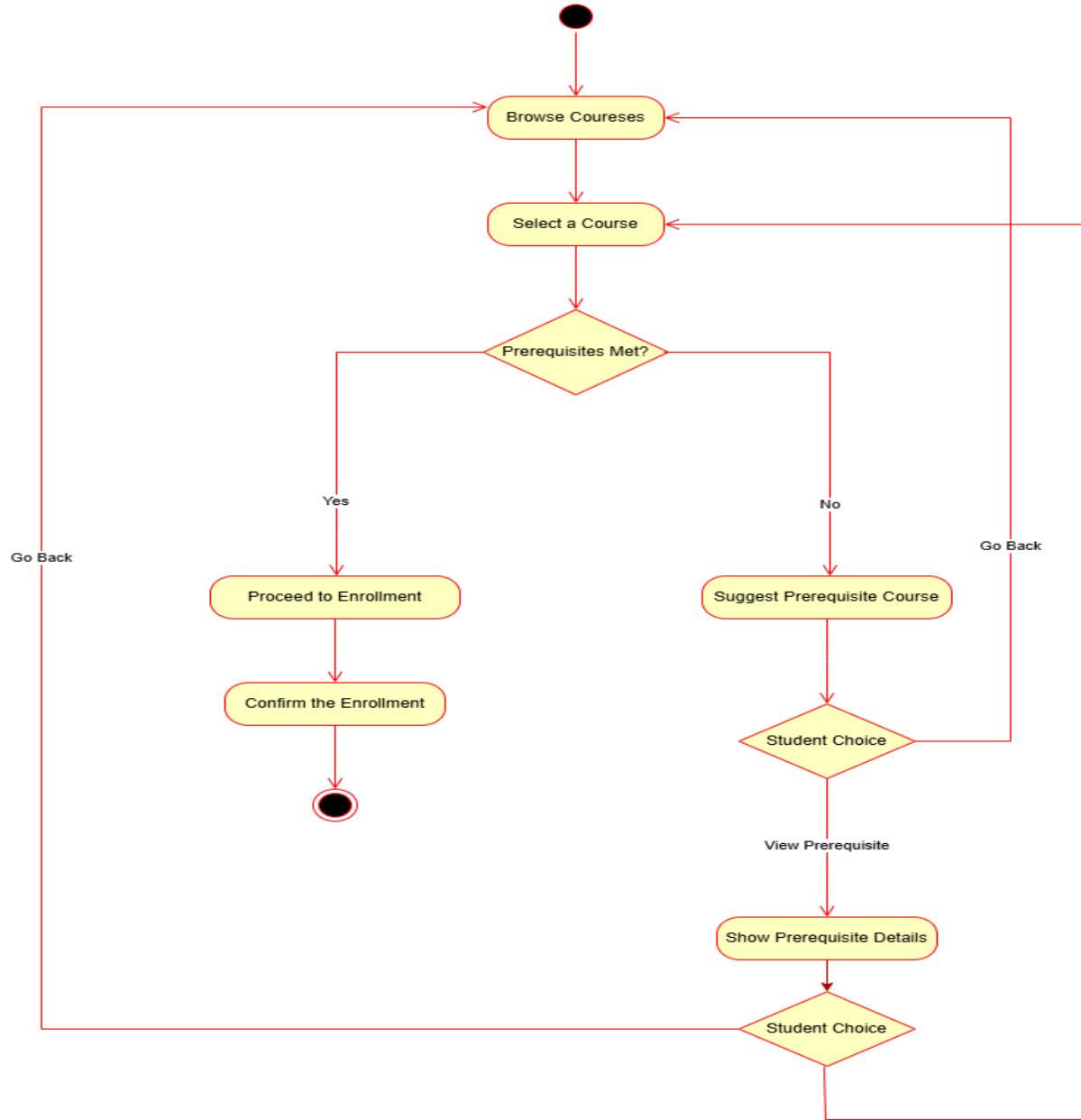


The Use Case Diagram represents the main actors (Student, Instructor, and Admin) and their interactions with the SkillForge system.

It shows the essential functions each user can perform, such as enrolling in courses, creating lessons, managing users, and earning certificates.

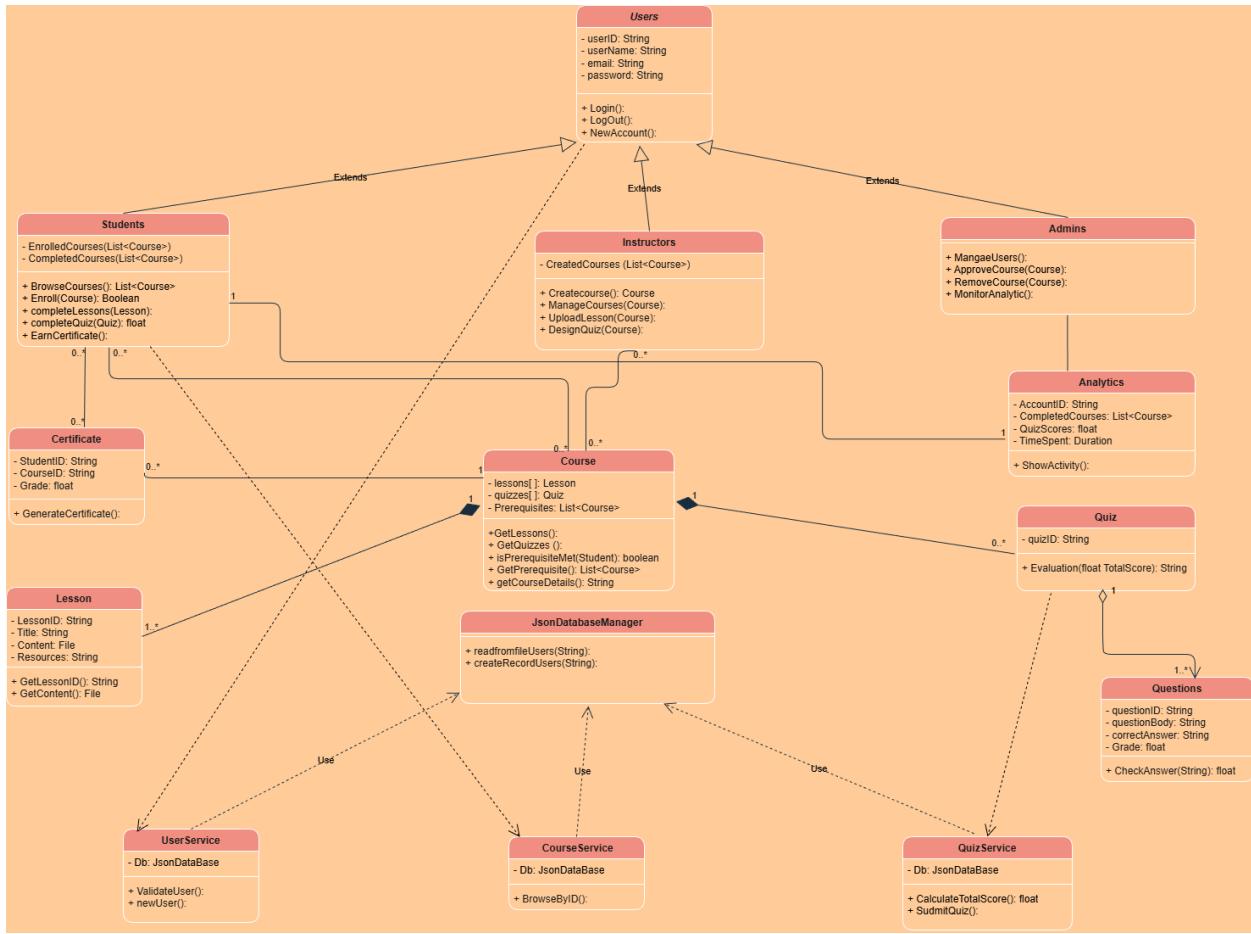
This diagram is important because it provides a high-level overview of system functionality and helps identify user requirements before detailed design and implementation.

2. Activity Diagram



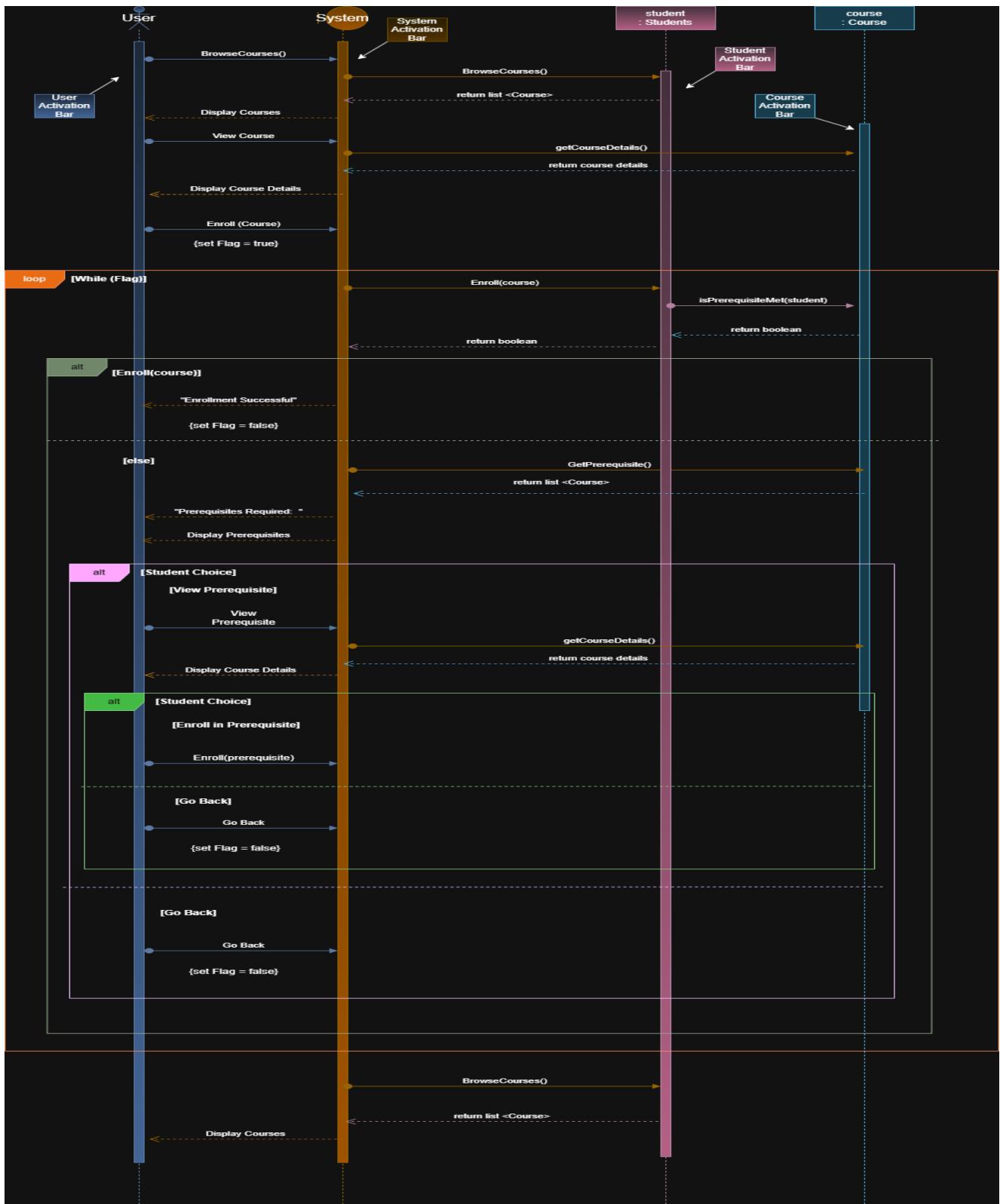
Activity diagram showing the flow of enroll method where the student need to have the prerequisite courses that one course might need ,if not the system will show the prerequisite courses for the student to enroll in if they would like

3. Class Diagram



Class diagram showing the overall system of SkillForge , it shows all classes needed to implement the system, main methods of each class and the relationship between them.

4. Sequence Diagram



This sequence diagram represents the flow of the system when a user wants to enroll in a course.

It is important as it provides common understanding for clients, developers, testers, ...etc.

Also, it visualizes the system's behavior over time as it displays the order of operations and timing and shows how objects interact in a specific scenario.

(**Note:** As the Sequence Diagram Picture is not clear, please check the following link for GitHub where you can find the picture under the name **Sequence Diagram Final.drawio.png**)

<https://github.com/YasminHaytham/UML.git>