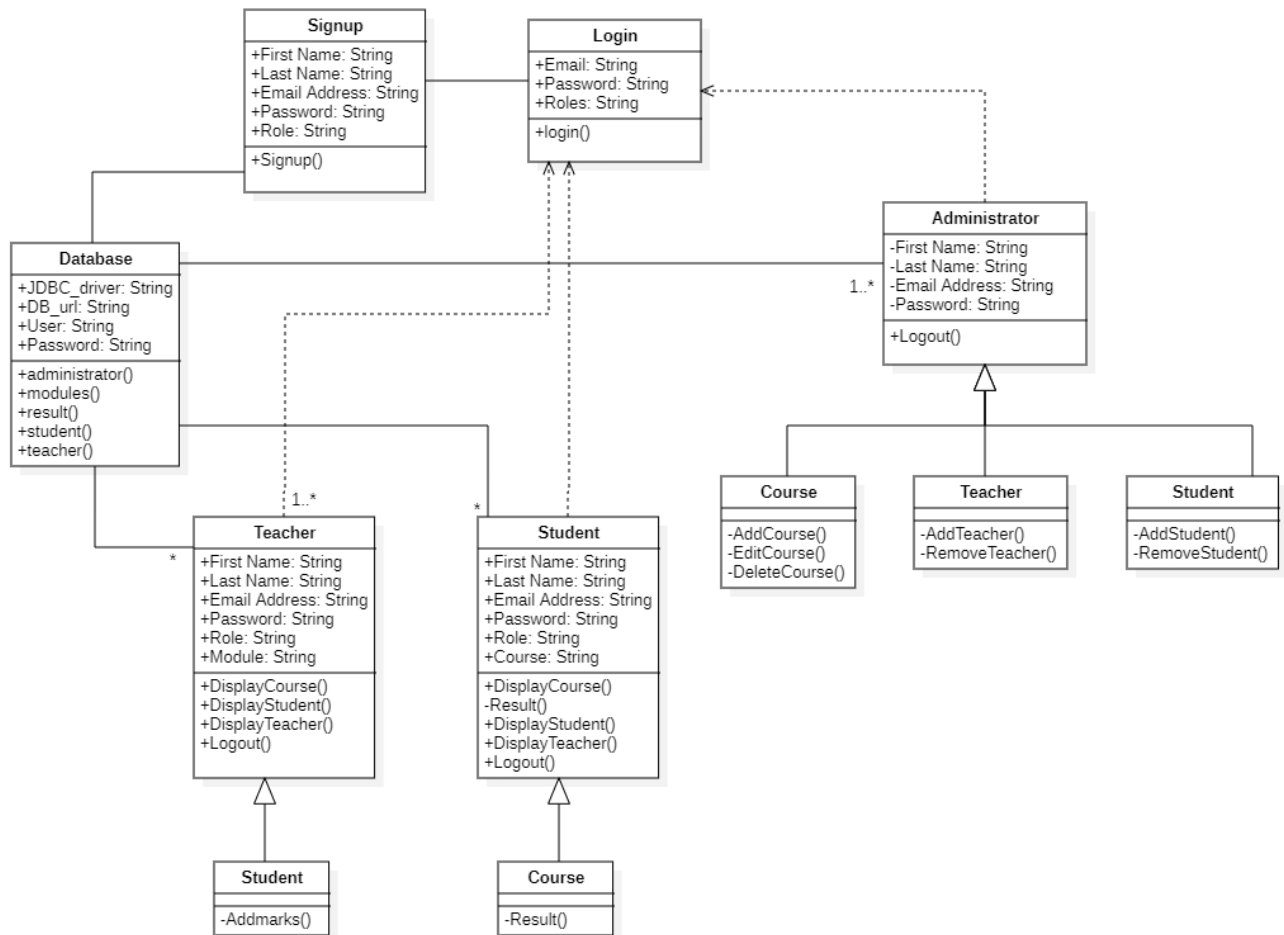


Course Management System



UML Diagram of Course Management System

In the course management system, the Signup and Login classes facilitate user authentication and access control. The Signup class allows new users to register by providing essential information such as first name, last name, email, password, and roles. Upon submission, this data is securely stored in the system's database, managed by the Database class. Conversely, the Login class verifies user credentials during the authentication process. Users input their login credentials, including email and password, which are then compared against the records stored in the database. If the credentials match, users are granted access to the system based on their assigned role—Administrator, Teacher, or Student. The administrator class serves as the central authority responsible for overseeing and managing the entire system.

Administrators have the privilege to add, edit, and delete courses, teachers, and students, thereby controlling the system's core functionalities. They handle tasks such as course creation, teacher assignments, and student enrollment, ensuring the smooth operation of the platform. Additionally, administrators manage system-wide settings and user privileges to maintain security and regulate access levels. On the other hand, the Teacher class focuses on academic assessment, allowing teachers to input marks for students' assignments, quizzes, and exams. Teachers play a crucial role in evaluating student performance and providing feedback. Meanwhile, the Student class enables students to access their marks and track their academic progress. Students can view their marks across different modules, allowing them to monitor their performance and identify areas for improvement. Together, these roles and functionalities create a comprehensive course management ecosystem tailored to the needs of administrators, teachers, and students.