

## UML Description of Course Management System

The course management system is a comprehensive platform that gives users control over a variety of course-related elements, including students, professors, and grades. Administrators, students, and teachers are the three main user groups that the system is divided into, and each has its own dashboard. The DashboardAdmin gives the admin access to a number of features, including HomePage, Generate Report, Manage Course Form, Manage Student, and Add Student. Users may get a general idea of the system through the HomePage class, while administrators can add, edit, and delete courses using the Manage Course Form class. The Manage Student class offers the ability to manage students in the system, whilst the Add Student class offers the ability to add students to the system. The MyFunction class works in tandem with the Generate Report class to provide functionality for creating reports that may be used to monitor and evaluate the system's performance. Users can access this functionality. The DashboardStudent class makes the ShowScore class, which gives students access to their scores, available. Students have the chance to keep track of their academic growth and achievement.

The ScoreEditDelete class, which allows teachers to edit and add to student scores, is accessible through the DashboardTeacher. They have access to this functionality as a component of the dashboard. Students must be present in order to maintain the validity of the results and to ensure that they will receive the grades they have achieved. The EnrollStudent class offers the option to enroll students in courses, while the ViewTeacher class provides information about the teachers. The system supports both of these kinds. Just a few of the numerous user management and security-related forms and classes that the system makes available are LoginInformation, ForgotPassword, and LoginFormTeacher. Due to the limitations imposed by these classes, only authorized users will be able to access the system and the sensitive data it maintains. The Teacher Sign up class offers the functionality required for teacher registration, whereas the LoginStudentForm class offers the functionality required for student login. To store the data relating to the courses, students, and scores, the system uses the course class, the student class, and the score class in that sequence. To ensure that the data kept in the system is accurate and undamaged in any way, these classes are required.

In conclusion, the UML class diagram shows a well-designed platform called a course management system that provides the features required for managing courses and the data related to them. The system is trustworthy, flexible, user-friendly, and able to generate a variety of reports. It is the ideal solution for educators, professors, and students who are searching for a system to help them oversee and manage their own classrooms.