**Context Diagram:** *The context diagram provides a macro view of the system interactions*

This diagram provides a high-level overview of the interactions between different stakeholders and the online learning platform. It focuses on the roles of the Student, Administrator, and Payment Gateway, outlining their primary functions. For instance, students can enroll, access materials, and pay fees; administrators manage the system and resources; the payment gateway handles fee transactions. This diagram is effective for understanding the general workflow and user interaction with the LMS.

**Data Flow Diagram:** *The data flow diagram outlines operational details and data movement*

This diagram delves deeper into the processes within the LMS, particularly focusing on student interactions. It maps out detailed activities like course selection, enrollment, accessing course materials, and assessment processes. This diagram highlights how data flows between different entities such as students, faculty, and administrators, providing a more detailed look at the operations and information flow within the LMS.

**Entity-Relationship Diagram (ERD):** *The ERD focuses on data structure and database design.*

The ERD maps out the database schema used by an LMS. It illustrates how different entities such as Students, Faculty, Courses, Modules, Assessments, and Payments are interconnected. This diagram is crucial for database design and understanding how data is stored and related within the system, which is vital for backend development and database management.