

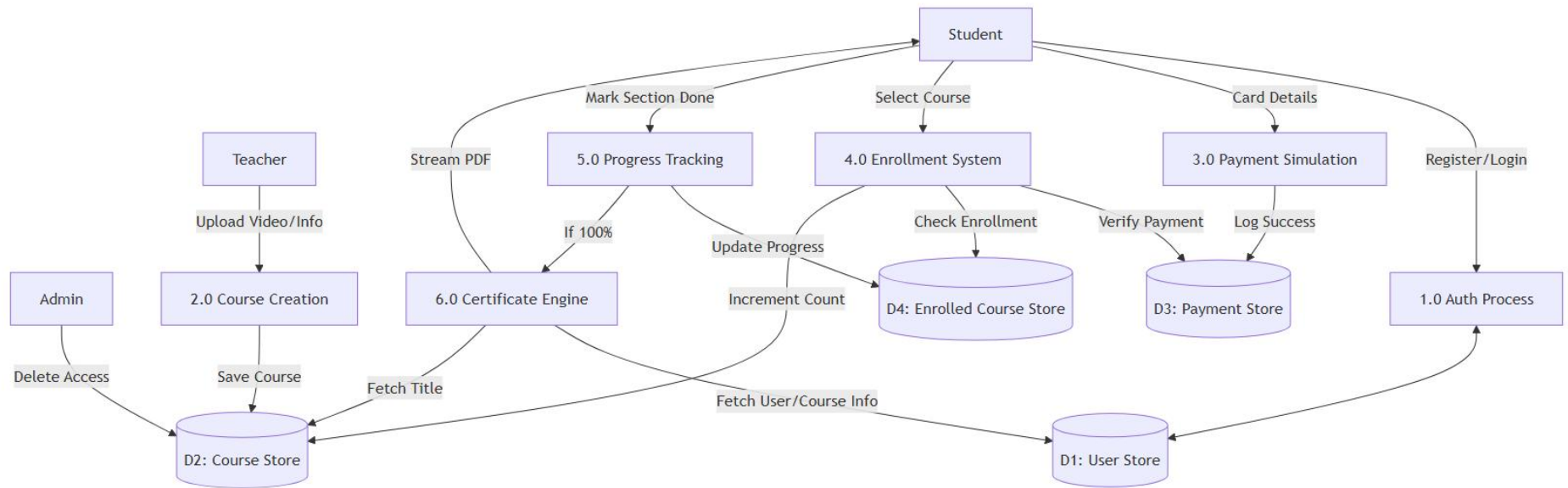
Project Design Phase-II
Data Flow Diagram & User Stories

Date	12 Feb 2026
Team ID	LTVIP2026TMIDS64190
Project Name	LearnHub: Your Center for Skill Enhancement
Maximum Mark	4 Marks

Data Flow Diagrams:

LearnHub connects students, teachers, administrators, and the database to provide structured and secure online learning. It collects user input (registration, login, enrollment), processes it through backend APIs, stores and retrieves data from MongoDB, and delivers course content, progress updates, and certificates in real time.

- **User interactions are managed through a React-based interface.**
- **Requests are sent to the Express backend via REST APIs.**
- **Authentication is validated using JWT middleware.**
- **Course, user, payment, and enrollment data are stored in MongoDB.**
- **Progress tracking updates completed sections dynamically.**
- **Certificates are generated using PDFKit and delivered to the user.**



User Stories

- Students want structured online courses with secure access, progress tracking, and certificates to improve their skills.
- Teachers want an easy-to-use platform to upload videos, manage courses, and track student enrollments.
- Administrators want full control over system management, course moderation, and secure user access.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Student	Registration	USN-1	As a student, I want to register with name, email, and password.	User can successfully create an account and receive confirmation.	High	Sprint-1
Student	Login	USN-2	As a student, I want to log in securely using email and password.	JWT token generated and access granted.	High	Sprint-1
Teacher	Course Management	USN-3	As a teacher, I want to create and upload courses with videos.	Course saved and visible in course list	High	Sprint-2
Student	Enrollment	USN-4	As a student, I want to enroll in a course after payment.	Enrollment allowed only after successful payment.	High	Sprint-3
Student	Progress Tracking	USN-5	As a student, I want to track completed course sections.	Completed sections stored and displayed correctly.	High	Sprint-3
Student	Certification	USN-6	As a student, I want to download certificate after completing a course.	Certificate available only after all sections complete.	High	Sprint-4
Admin	Course Control	USN-7	As an admin, I want to delete inappropriate courses.	Only admin role can delete courses.	Medium	Sprint-2
Administrator	Security	USN-8	As an administrator, I want role-based access control.	Unauthorized users cannot access restricted routes.	High	Sprint-1