# Data Flow Diagrams:

| Date | 26june,2025 |
|---|---|
| Team Id | LTVIP2025TMID53783 |
| Project name | Learn Hub |
| Maximum Marks | 4 marks |

A Data Flow Diagram (DFD) is a graphical tool used to model the flow of data through a system. It helps stakeholders understand how the application processes input and output data, who interacts with the system, and where the data is stored.

DFD Level 0 – Context Level

This shows the high-level interaction between external entities (Students, Teachers, Admins) and the LearnHub system:

**Entities:**

- Student
- Teacher
- Admin

**Processes:**

- Authentication
- Course Management
- Section Management
- Assignment Management
- Certificate Issuance

**External Storage:**

- MongoDB (Stores Users, Courses, Sections, Enrollments, etc.)

DFD Level 1 – Example: Course Management Process

**Processes:**

1. Create Course → store to DB
2. Add Section → append to Course.sections
3. Assign to Students → update enrolled[]
4. Course Completion → update completed[]
5. Certificate Generation → available for download

# User Stories (For LearnHub):

**User Type**: Student / Teacher / Admin

| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance Criteria | Priority | Release |
|---|---|---|---|---|---|---|
| Student | Registration | USN-1 | As a student, I can register using email and password | I should be able to access the platform as a student | High | Sprint-1 |
| Student | Login | USN-2 | As a student, I can log in and view available courses | I can view and enroll in courses | High | Sprint-1 |
| Student | Course Access | USN-3 | As a student, I can view course sections and materials | I can view videos/articles for each section | High | Sprint-2 |
| Student | Completion & Certificate | USN-4 | As a student, I can mark a course complete and get certificate | I get a download link after marking complete | Medium | Sprint-3 |
| Teacher | Registration | USN-5 | As a teacher, I can register and login as educator | I get redirected to dashboard after login | High | Sprint-1 |
| Teacher | Course Creation | USN-6 | As a teacher, I can create a course | I can fill form and submit a new course | High | Sprint-2 |
| Teacher | Add Sections | USN-7 | As a teacher, I can add sections to my courses | I can embed videos and resources to sections | High | Sprint-2 |
| Teacher | Assign Course | USN-8 | As a teacher, I can assign courses to multiple students | I can select from a list of students | Medium | Sprint-3 |
| Teacher | Delete Course | USN-9 | As a teacher, I can delete my own course | Course is deleted from backend | Medium | Sprint-3 |

| Admin | Login | USN-10 | As an admin, I can log in securely | Admin sees dashboard and stats | High | Sprint-1 |
|-------|-------|--------|-----------------------------------|--------------------------------|------|----------|
| Admin | Manage Users | USN-11 | As an admin, I can view all users and remove inappropriate ones | I can delete a user if needed | Medium | Sprint-3 |

| Admin | Manage Courses | USN-12 | As an admin, I can remove any course | I can review course and delete if needed | Medium | Sprint-3 |
|-------|----------------|--------|--------------------------------------|------------------------------------------|--------|----------|