**Project Design Phase-II**

**Data Flow Diagram & User Stories**

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| Date | 23 June2025 |
| Team ID | LTVIP2025TMID52072 |
| Project Name | LearnHub |
| Maximum Marks | 4 Marks |

Data Flow Diagrams:

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

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| **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 |