Project Design Phase-II

Data Flow Diagram & User Stories

Date:	4 November 2025
Team ID:	NM2025TMID01472
Project:	Educational Organization Automation
Maximum Marks	4 Marks

Data Flow Diagram

A **Data Flow Diagram (DFD)** visually represents how data moves through the *Education Organization System* implemented using **ServiceNow**. It shows how student, staff, and administrative data are collected, processed, stored, and distributed.
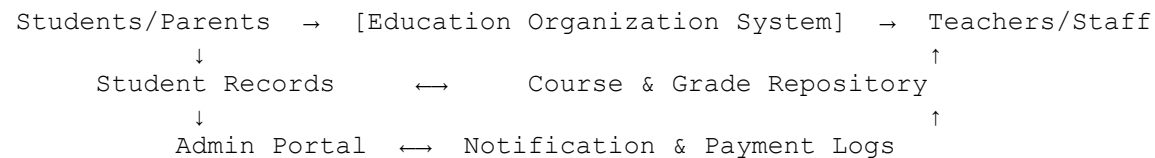
In the project **"Education Organization for ServiceNow"**, DFDs illustrate how various educational operations (like student admission, course management, grading, and notifications) are automated within ServiceNow workflows.

The DFD helps visualize how users (students, teachers, administrators) interact with the system and how data flows between modules, ensuring accuracy, transparency, and accountability.

Example:

Context Level (Level 0) DFD External Entities:

- Students / Parents

- Teachers / Staff

- System Administrator **Main Process:**

- Education Organization System (Built on ServiceNow) **Data Stores:**

- Student Information Records

- Course & Grade Repository

- Notification & Payment Logs **Data Flows:**

- Admission Requests, Course Enrollments, Grade Submissions, Notifications, and Reports.

```
Students/Parents  →  [Education Organization System]  →  Teachers/Staff
         ↓                                              ↑
    Student Records      ←→      Course & Grade Repository
         ↓                                              ↑
       Admin Portal  ←→  Notification & Payment Logs
```

Level 1 DFD (Expanded Processes)

1️⃣ **Student Enrollment & Profile Management**
   Handles registration, verification, and course enrollment.
   Data stored in *Student Records* on ServiceNow.

2️⃣ **Course & Faculty Management**

Admins create courses, assign instructors, and manage class schedules.

3. Assessment & Grading Module

Teachers record grades, feedback, and performance reports.

4. Notification & Communication Module

System sends automated notifications (e.g., exam schedules, fee reminders).

5. Reports & Analytics

Generates dashboards and reports for administrators to track performance and compliance.

User Stories

User stories describe how different users interact with the **Education Organization ServiceNow System**, expressed in simple, goal-focused language.

User Type	Functional Area	User Story No.	User Story / Task	Acceptance Criteria	Priority	Release
Student	Enrollment Management	US-01	As a student, I want to submit my admission form online so that I can be enrolled into courses.	Form submission successful, data visible to admin for verification.	High	Sprint-1

User Type	Functional Area	User Story No.	User Story / Task	Acceptance Criteria	Priority	Release
Administrator	Course Management	US-02	As an admin, I want to create and manage courses so that students and teachers can be assigned efficiently.	Admin can create, edit, or delete courses; changes reflected immediately in system.	High	Sprint-1
Teacher	Assessment & Grading	US-03	As a teacher, I want to enter student grades through the portal so that the system can generate report cards.	Grades saved in course repository; students notified of results.	High	Sprint-2
System	Validation & Workflow	US-04	As a system, I must verify if a student is	Validation rules trigger correctly;	High	Sprint-2
User Type	**Functional Area**	**User Story No.**	**User Story / Task**	**Acceptance Criteria**	**Priority**	**Release**
			registered before assigning a grade or issuing a report.	no grade assigned to unregistered students.		
Admin / Management	Reporting & Notification	US-05	As an admin, I want to receive automated reports about enrollment and academic performance.	Reports generated weekly and sent via ServiceNow dashboard/email.	Medium	Sprint-3

Summary

The **Education Organization for ServiceNow** streamlines educational processes by digitizing admissions, course management, grading, and reporting within a unified ServiceNow platform.

This project ensures:

- Secure and accurate data flow between departments.

- Automated workflows for validation and approval.

- Real-time notifications and performance tracking.

- Clear task distribution through user stories and sprint-based releases.