

<b>Date</b>	30/10/2025
Time id	NM2025TMID07726
<b>Project name</b>	Education organization using servicenow
<b>Maximum mark</b>	4 marks

## PROJECT DESIGN

### Level 0 DFD (Context Diagram)

The Level 0 DFD provides a high-level view, showing the entire educational institution's ServiceNow environment as a single process interacting with external entities.

#### External Entities:

- **Students:** Interact with various services (IT, academic, administrative).
- **Faculty/Staff:** Manage courses, access HR services, and use IT support.
- **Administration:** Oversee operations, finance, and reporting.
- **External Systems (e.g., Learning Management System (LMS), Financial System, Oracle Banner):** Exchange data with ServiceNow.

#### Process:

- **0.0 Educational Organization Management System (ServiceNow):** The core system that handles all data processing and workflows.

#### Data Flows:

- **From Students:** Service Requests, Incident Reports, Application Forms, Course Registrations, Feedback.
- **To Students:** Service Status Updates, Notifications, Course Details, Grades (potentially via integration), Self-Service Portal access.
- **From Faculty/Staff:** IT Requests, HR Inquiries, Leave Requests, Resource Booking requests, Grade Submissions.

- **To Faculty/Staff:** IT Support, HR Responses, Resource Confirmation, Dashboards.
  - **From Administration:** System Configuration, Reports Requests, Policy Updates, Financial Data Input.
  - **To Administration:** Operational Reports, Performance Analytics Dashboards, Financial Data Output.
  - **To/From External Systems:** Data exchange for student records, financial transactions, course data synchronization, etc..
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## Generalized Level 1 DFD (Key Processes)

Level 1 breaks down the main system into core functional processes, data stores, and the flow of data between them.

### Processes:

- **1.0 Manage IT Services:** Handles all IT-related incidents, requests, assets, and problem management using ITSM and ITAM modules.
- **2.0 Manage Student Services:** Streamlines academic and administrative student-facing processes using the CSM module or custom apps (e.g., admissions, financial aid, course registration).
- **3.0 Manage HR & Campus Operations:** Handles HR requests, faculty onboarding, facilities management, and general campus operations using HRSD and custom apps.
- **4.0 Data & Analytics:** Manages reporting, data insights, and compliance monitoring.

### Data Stores:

- **DS1: User Database:** Stores student, faculty, and staff profiles, roles, and credentials.
- **DS2: ITSM Data:** Stores incident, problem, change, and asset records.
- **DS3: Student Services Data:** Stores application details, course histories, financial aid info, and interaction logs.
- **DS4: HR Data:** Stores employee records, onboarding status, leave history.
- **DS5: Knowledge Base:** Centralized repository for self-service articles and documentation.
- **DS6: External System Interfaces:** Mediates data transfer with external systems.

#### **Key Data Flows at Level 1:**

- **Student (External Entity)** submits a **Service Request** to **1.0 Manage IT Services** (or **2.0 Manage Student Services** via a self-service portal).
- **Process 1.0** accesses **DS2** to log/resolve the request and potentially queries **DS1** for user details.
- **Process 1.0** sends **Status Updates** back to the Student.
- **Administration** accesses **4.0 Data & Analytics** to generate **Operational Reports** from data in **DS2, DS3, DS4**.
- **External Systems** send **Student Record Updates** to **Process 2.0** via **DS6**.