Project Design Phase II

Data Flow Diagrams and User Stories

Date	31 OCTOBER 2025
Team ID	NM2025TMID04230
Project Name	Education Organisation Using ServiceNow
Maximum Marks	4 Marks

Data Flow Diagram (DFD) - Level 0: Context

This diagram illustrates the highest-level interaction of data for the project. The central entity is the **ServiceNow Platform**, which functions as the Digital Workflow Engine for the entire organisation. Surrounding it are the primary external entities: **Student/Faculty/Staff** (the users), the **Student Information System (SIS)**, and various **Legacy/Other Systems** (like LMS, HR, Finance). Users initiate **Service Requests** and consume **Knowledge Articles** from ServiceNow, which, in turn, provides **Status Updates** and **Fulfillment Notifications**. Crucially, the **SIS** engages in bi-directional flow with ServiceNow, syncing **Student and Course Data** while receiving **Status Updates** on SIS-related requests. Finally, **Legacy/Other Systems** feed essential data—such as financial or authentication information—into ServiceNow, which sometimes sends back completion signals.

User Stories

User Stories capture specific user needs derived from the project's empathy work. These requirements ensure the ServiceNow implementation is truly user-centric.

A. Student Persona (Alex, The Engaged Student)

The student stories focus on convenience and transparency. **As a Student**, Alex needs a **single Service Portal** to submit *all* requests (IT, housing, registration), ensuring they don't have to log into multiple confusing systems. Transparency is paramount: Alex

wants to **view the real-time status** of requests (e.g., "Pending Advisor Approval") so they know exactly when to expect fulfillment. For simple queries, Alex expects the Virtual Agent to provide **instant, accurate answers** about deadlines, promoting self-service. Proactive communication is also necessary: Alex wants to receive an **automated reminder notification** on their mobile phone for due dates, helping them avoid late fines.

B. Administrative Staff Persona (Sarah, The Service Fulfillment Agent)

The admin staff stories prioritize efficiency and data accuracy. **As an Admin Staff member**, Sarah needs a **centralized queue** that intelligently prioritizes and routes *all* incoming requests based on her specific role, eliminating time wasted sifting through departmental email inboxes. To ensure accuracy and speed, Sarah requires that **all student and course data** (pulled directly from the SIS) be displayed automatically on the service request form, removing the need for manual lookups in a separate system. Finally, to enforce policy and prevent delays, Sarah needs to **trigger an automatic email approval flow** (e.g., to the department head for any withdrawal request), ensuring auditability and compliance.

C. IT Staff Persona (Ben, The IT Support Technician)

The IT staff stories focus on context and diagnostic speed. **As an IT Technician**, Ben needs the system to **automatically link a classroom number** on a service ticket to its associated **Projector Configuration Item (CMDB record)**, so that he knows precisely what equipment is failing before arriving on-site. Furthermore, to effectively manage service expectations, Ben wants to **view all current outages** and the full list of affected services in a single dashboard, enabling him to communicate accurately about system availability during major campus-wide incidents.

🔄 Flow Chart: Student Service Request Liferycle on SeroVowe

The Student's Journey from Request to Resolution

Service InItiation
Student accesses Unified Portal, searches Knowledge Base

Answer Found? — YES → **Self-Service Deffection** (Flow Ends)

Request Submission
Fills out digital form (Service Catlog)

Automatic Triage & Routing
Flow Designer routes to correct Fuffillament Group

4. Contextual Data Lookup
System fetches student data from SIS

Policy-Based Approval
Automated approval flow (e. g. Advisor)

Approval Required? — YES

6. Fuffiment & Resolution
Staff works tiks ticket, status updated

Notification & Closere
CSAT feedback requested

Reporting & Analytics
Data updates performance dashboards