

Project Design Phase – II

Technology Stack (Architecture & Stack)

Date	1 NOVEMBER 2025
Team ID	NM2025TMID02860
Project Name	Educational Organisation Using ServiceNow
Maximum Marks	5 Marks

Technical Architecture:

This project manages educational processes using **ServiceNow** by automating admissions, student progress, and Salesforce data. It enables admins to efficiently create, update, and track records through forms and auto-number generation, ensuring scalability and real-time access in the ServiceNow cloud.

Example: Student admission and progress tracking in educational institutions using ServiceNow.

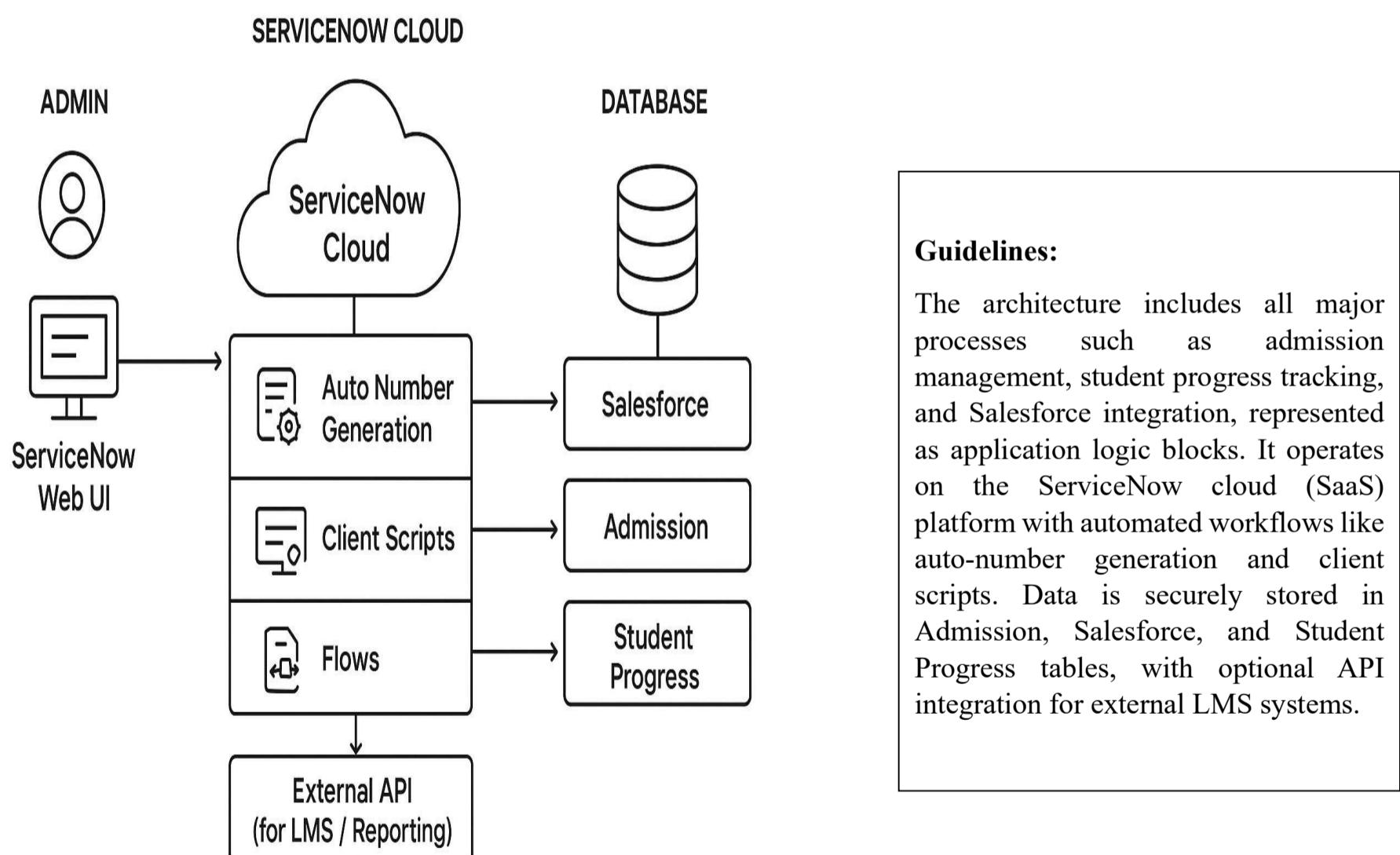


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1	User Interface	Admin and staff interact through ServiceNow web dashboard.	ServiceNow Web UI
2	Application Logic-1	Manages auto-generation of Admission Numbers.	Business Rules, Server Script
3	Application Logic-2	Validates student details and avoids duplicate entries.	Client Script, GlideRecord
4	Application Logic-3	Updates and tracks student progress records.	Flow Designer
5	Database	Stores Admission, Salesforce, and Student Progress details.	ServiceNow Tables
6	Cloud Database	Data maintained on ServiceNow cloud platform.	ServiceNow Cloud Database
7	File Storage	Minimal use, logs and reports stored internally.	ServiceNow File Storage
8	External API-1	Optional LMS integration for reports.	REST API in ServiceNow
9	External API-2	Not applicable.	—
10	Machine Learning Model	Not applicable for this phase.	—
11	Infrastructure (Cloud)	Hosted on ServiceNow SaaS environment.	ServiceNow Cloud (SaaS)

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Not applicable (ServiceNow is proprietary).	—
2	Security Implementations	Role-based access control and ACL for secure user data handling.	ServiceNow ACL, Roles, Scoped Apps
3	Scalable Architecture	SaaS-based system, scalable through ServiceNow's cloud architecture.	ServiceNow Cloud Platform
4	Availability	High uptime ensured by ServiceNow-managed hosting and redundancy.	Load-balanced Instances
5	Performance	Optimized through GlideRecord queries and efficient background scripts.	GlideRecord, Business Rules