Project Design Phase
Solution Architecture

Date	15 February 2025
Team ID	LTVIP2026TMIDS73881
Project Name	Prevent User Deletion in ServiceNow
Maximum Marks	4 Marks

Solution Architecture: Prevent User Deletion in ServiceNow:

The system is built on the ServiceNow platform where the admin and users interact through the ServiceNow User Interface (UI). When an administrator attempts to delete a user record from the sys_user table, the request is processed by the ServiceNow Application Layer.

A custom Business Rule (Before Delete) is implemented in the ServiceNow Server-Side Logic. This Business Rule automatically queries the Incident table to check whether the selected user is assigned to any active incidents.

If the user is linked to one or more incidents, the Business Rule aborts the delete action and displays an error message to the admin, thereby preserving data integrity. If no incidents are associated, the deletion process is allowed to proceed.

The architecture consists of:

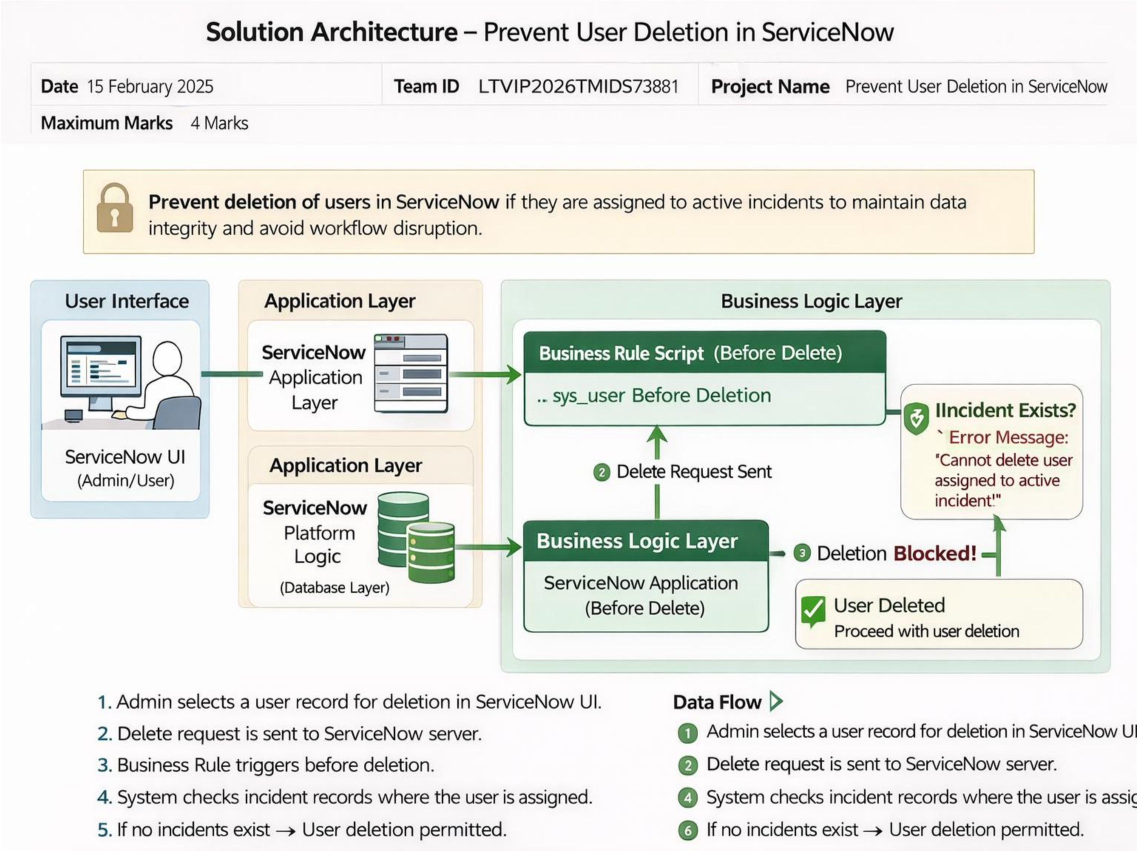
- User Interface: ServiceNow UI (Admin/User)
- Application Layer: ServiceNow Platform Logic
- Business Logic Layer: Business Rule Script (Before Delete)
- Database Layer: ServiceNow Tables (sys_user, incident)

Data Flow:

1. Admin selects a user record for deletion in ServiceNow UI.
2. Delete request is sent to the ServiceNow server.
3. Business Rule triggers before deletion.
4. System checks incident records where the user is assigned.
5. If incidents exist → deletion blocked with error message.
6. If no incidents exist → user deletion permitted.

This architecture ensures secure, scalable, and automated validation within the ServiceNow environment without requiring external APIs or additional infrastructure.

Example - Solution Architecture Diagram:



Solution Architecture – Prevent User Deletion in ServiceNow

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Prevent deletion of users in ServiceNow if they are assigned to active incidents to maintain data integrity and avoid workflow disruption.

1. Admin selects a user record for deletion in ServiceNow UI.
2. Delete request is sent to ServiceNow server.
3. Business Rule triggers before deletion.
4. System checks incident records where the user is assigned.
5. If no incidents exist → User deletion permitted.

Data Flow ▷

1 Admin selects a user record for deletion in ServiceNow UI
2 Delete request is sent to ServiceNow server.
4 System checks incident records where the user is assig
6 If no incidents exist → User deletion permitted.

Figure 1: Architecture and data flow of the voice patient diary sample application

Reference: https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-researchpowered-by-ai-on-aws-part-1-architecture-and-design-considerations/