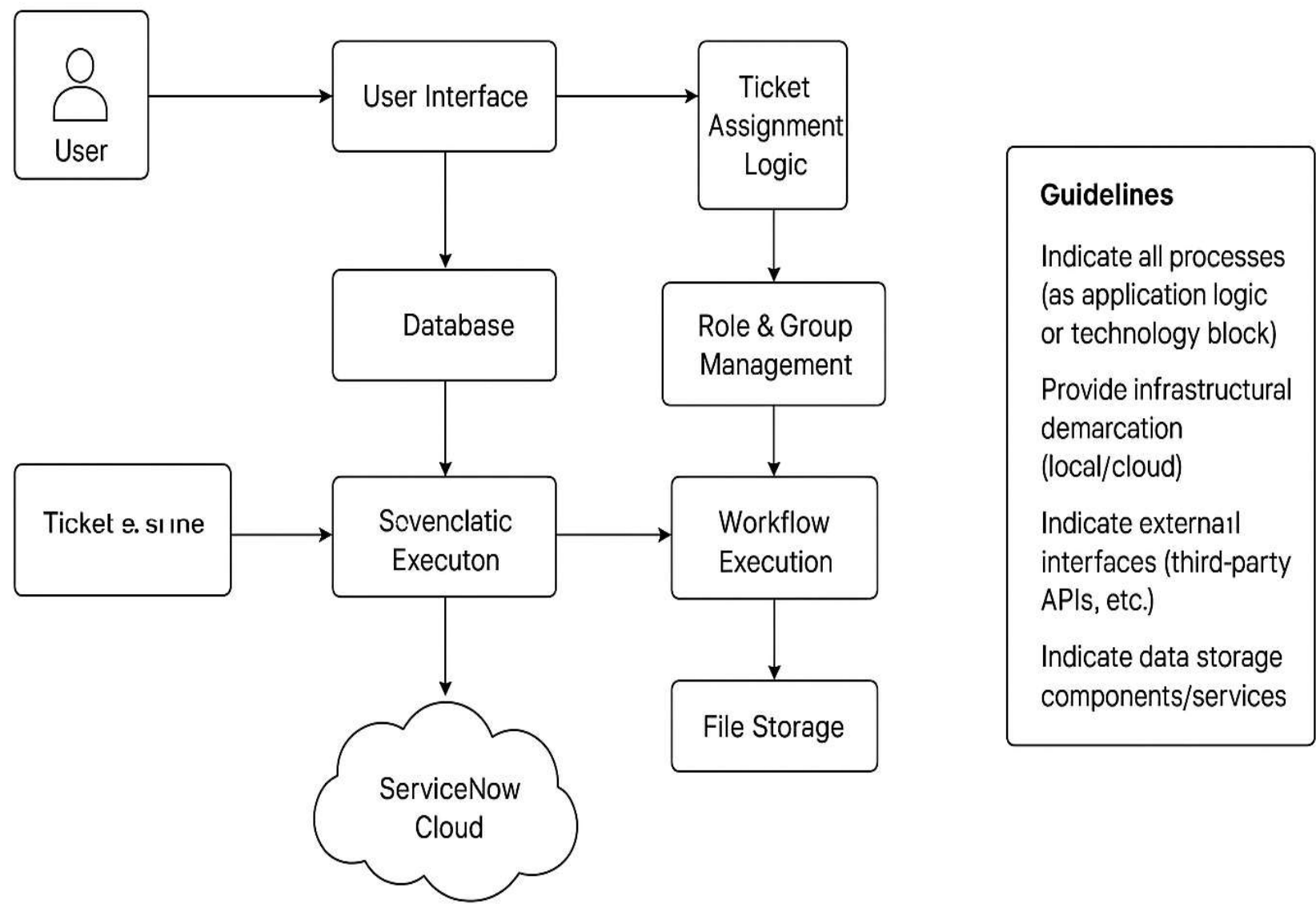


**Project Design Phase – II**  
**Technology Stack (Architecture & Stack)**

Date	2 NOVEMBER 2025
Team ID	NM2025TMID05410
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

**Technical Architecture:**

The project automates ticket creation, assignment, and tracking using ServiceNow to improve IT support efficiency. It uses user roles, groups, ACLs, and flow designer to control access, route tickets, and monitor progress automatically. All ticket data is securely maintained in ServiceNow Cloud Tables, ensuring faster response times and streamlined operations.



**Table–1: Components & Technologies**

S.No	Component	Description	Technology
1	User Interface	Admins and support staff manage and track tickets through the ServiceNow dashboard.	ServiceNow Web UI
2	Ticket Assignment Logic	Automates ticket creation and assignment to the correct group or user.	Business Rules, Flow Designer
3	Role & Group Management	Manages user roles, permissions, and group assignments for access control.	Client Scripts, ACLs
4	Workflow Execution	Tracks ticket lifecycle and automates progress updates.	Flow Designer
5	Database	Stores ticket, user, and group details for support operations.	ServiceNow Tables
6	Cloud Database	Ensures secure, scalable data storage in the ServiceNow cloud.	ServiceNow Cloud Database
7	File Storage	Stores attachments and ticket-related documents.	ServiceNow File Storage
8	External API (Optional)	Connects with external tools like email or chat for notifications.	REST API in ServiceNow
9	Machine Learning Model	Not applicable for this phase.	–
10	Infrastructure (Cloud)	Entire system hosted on ServiceNow SaaS environment.	ServiceNow Cloud (SaaS)

**Table–2: Application Characteristics**

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Not applicable as ServiceNow is a proprietary platform.	–
2	Security Implementations	Role-based access with ACLs to secure ticket and user data.	ACLs, Roles
3	Scalable Architecture	Supports multiple departments and teams through scalable modules.	ServiceNow Cloud Architecture
4	Availability	High uptime ensured by ServiceNow’s managed hosting.	Load-balanced Cloud Instances
5	Performance	Efficient automation ensures quick ticket routing and reduced response time.	Flow Designer, Business Rules