

## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	30 June 2025
Team ID	LTVIP2025TMID30150
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

### Technical Architecture:

#### User Interface:

- Web-based UI (ServiceNow UI Builder / Form Designer)
- Intuitive dashboards for agents and managers
- Custom forms to capture issue details and priority

#### Application Logic:

- ServiceNow Flow Designer: For workflow automation and dynamic ticket routing
- Script Includes & Business Rules: For custom server-side logic
- Decision Tables: For routing logic based on priority, team, and ticket type

#### Database & Storage:

- ServiceNow CMDB: To maintain user, department, and configuration data
- Incident & Task tables: For storing and managing tickets

#### Machine Learning/AI (Optional Advanced Phase):

- Predictive Intelligence (ServiceNow): To auto-categorize and assign incidents
- Performance Analytics: For SLA tracking and efficiency insights

**Infrastructure:**

- Hosted on ServiceNow's cloud platform (multi-instance architecture)
- Scalable and secure with built-in compliance features

**External Interfaces:**

- Email Integration (for notifications)
- Virtual Agent (for user self-service via chat)
- Slack/MS Teams (optional integration for notifications and ticket updates)

**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	Custom forms and dashboards	ServiceNow Form Designer, UI Builder
2.	Application Logic	Workflow & routing logic	Flow Designer, Business Rules, Script Includes
3.	Ticket Intelligence	Auto-categorization and prioritization	Predictive Intelligence (optional)
4.	Database	Ticket storage and user data	Incident Table, CMDB
5.	Notifications	Alerts for ticket status updates	Email, SMS, Virtual Agent
6.	Infrastructure	Hosting and scalability	ServiceNow Cloud Platform

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Platform-based Design	Uses pre-built and configurable platform tools	ServiceNow

S.No	Characteristics	Description	Technology
2.	Security	Role-based access, data encryption	ACLs, HTTPS, Instance Security Policies
3.	Scalable Architecture	Can support large enterprise support teams	Multi-instance architecture of ServiceNow
4.	Availability	Always accessible through web	Hosted via ServiceNow's secure cloud
5.	Performance	Track and improve support KPIs	ServiceNow Performance Analytics, SLA tracking