

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date: 28 June 2025

Team ID: LTVIP2025TMID28676

Project Name: Optimizing Role-Based Access and Task Workflows

Maximum Marks: 4 Marks

Technical Architecture

Architecture Diagram: (To be created visually)

- Client (Web UI) → Server (ServiceNow Platform) → Database (ServiceNow Tables)
- External APIs (Email Service)

Table-1: Components & Technologies

Component	Description	Technology
User Interface	Interaction layer for PM and Team Member	ServiceNow Web UI
Application Logic-1	Task Workflow Logic	ServiceNow Flow Designer
Application Logic-2	Access Control and ACL Checks	Scripted ACLs
Database	Task and User Tables	ServiceNow Tables
External API	Notification Email Services	SendGrid / SMTP
Infrastructure	Cloud-hosted ITSM system	ServiceNow Cloud Platform

Table-2: Application Characteristics

Characteristics	Description
Open-Source Frameworks	Not applicable (ServiceNow platform used)
Security Implementations	Role-based ACL, User authentication, field-level restrictions
Scalable Architecture	ServiceNow scalable instance model
Availability	High uptime via ServiceNow managed infrastructure
Performance	Optimized table indexing and minimal script execution