# 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 |