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

Date	24 June 2025
Team ID	LTVIP2025TMID30187
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Mentor Name	Dr Shaik Salma Begum
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2
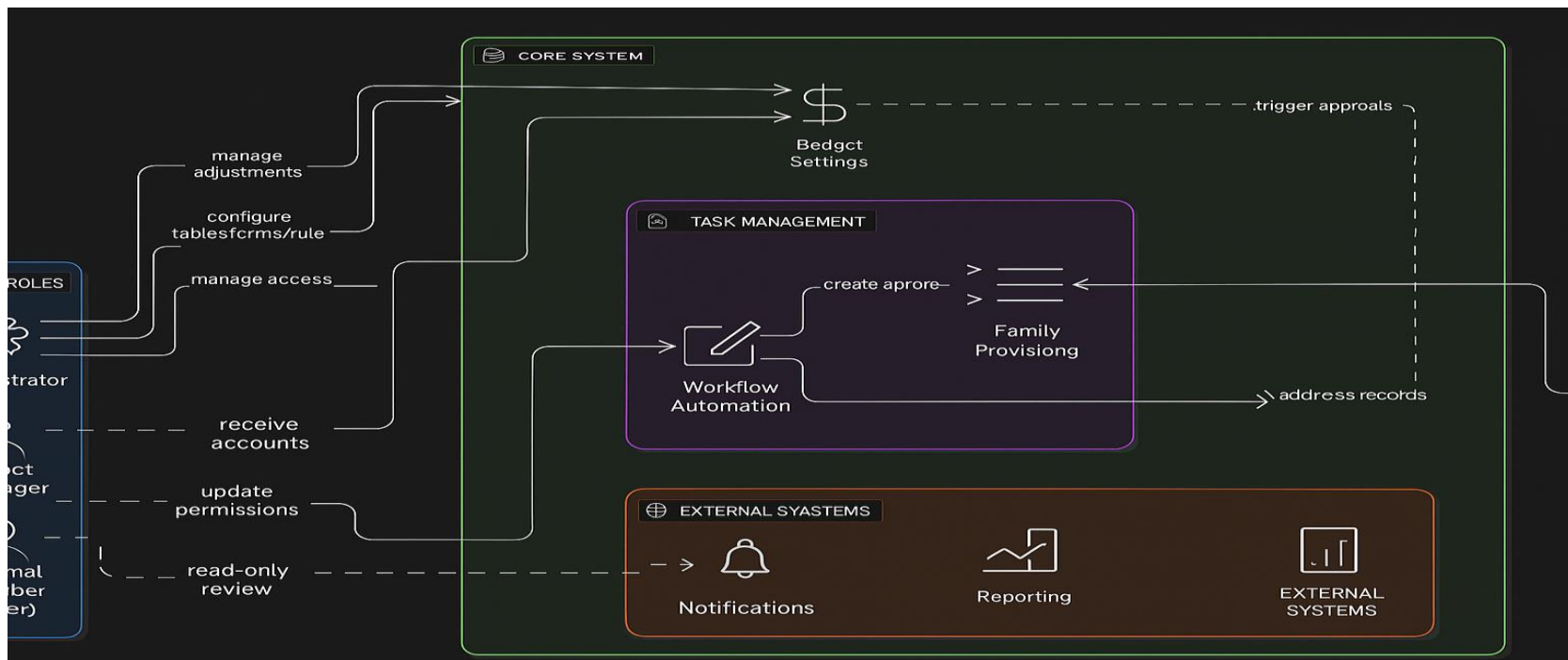
Table-1 : Components & Technologies:

Component	Description	Technology
User Interface	Web-based ServiceNow interface for managing users, roles, and tasks	ServiceNow UI Builder, Forms, Lists
Application Logic-1	Dynamic behavior for forms, role-based field visibility, validations	ServiceNow Client Scripts, UI Policies, GlideForm API
Application Logic-2	Automation of task assignment, role validation, and workflow transition	ServiceNow Flow Designer, Business Rules
Application Logic-3	Trigger email notifications on status updates and assignment changes	ServiceNow Notification Engine
Database	Store user details, roles, tasks, workflow states, and logs	ServiceNow custom tables (Users, Roles, Tasks, Logs)
External API-1	Allow integration with third-party task reporting or audit tools	ServiceNow REST API
Infrastructure (Server / Cloud)	Hosted ServiceNow PDI instance in the cloud	ServiceNow SaaS Cloud Platform

Table-2: Application Characteristics:

Characteristics	Description	Technology
Open-Source Frameworks	Uses JavaScript for client and server logic within ServiceNow	JavaScript, AngularJS (optional)
Security Implementations	Role-based access control to manage user permissions and HTTPS security	ServiceNow ACLs, HTTPS, TLS
Scalable Architecture	Easily add new roles, workflows, or users as team grows	ServiceNow Cloud Platform, REST APIs
Availability	Accessible 24/7 during development via ServiceNow PDI	ServiceNow Cloud Infrastructure
Performance	Optimized load times and operations via caching and streamlined workflows	ServiceNow Caching, CDN support