

Project Design Phase
Problem – Solution Fit

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

Problem–Solution Fit:

The Problem–Solution Fit for this project reflects how the proposed system resolves key issues small project management teams face when handling task assignments, roles, and workflows. It ensures alignment between the solution and the operational challenges of real users—specifically Project Managers and Team Members—improving both clarity and control.

Purpose

- Solve problems related to role ambiguity, insecure access, and inefficient workflows in small project teams.
- Accelerate task completion and decision-making by implementing structured workflows and access controls.
- Improve team communication, clarity, and accountability by clearly defining roles and permissions.
- Build trust and consistency in project delivery through visibility, logging, and approval mechanisms.
- Support scalability and onboarding through automation and centralized role management.

Problem–Solution Summary

Identified Problem	Proposed Solution
Undefined roles and confusion in task responsibilities	Clear role definitions for Project Manager and Team Member
Lack of access control leading to task mismanagement	Role-based Access Control (RBAC) restricting actions based on user roles
No structured workflow to guide task progress	Implemented task lifecycle (e.g., To-Do → In Progress → Review → Complete)

Identified Problem

Difficulty onboarding or scaling new users/teams

Proposed Solution

Centralized user and role management with automation features

Outcome

- By achieving problem–solution fit, this project ensures:
- Project Managers and team members clearly understand and adhere to their responsibilities.
- Tasks are securely managed with proper access and permission layers.
- Project workflows are enforced with structured task stages, reducing delays and errors.
- Team operations scale smoothly with clear onboarding procedures and system automation.
- The system fosters transparency, accountability, and improved collaboration within teams.

Template:

Problem-Solution fit canvas 2.0

Purpose / Vision		
CUSTOMER SEGMENTS CS Small project management teams (e.g., startups, academic groups, agile teams) Project Managers and team members who collaborate on task execution and planning Teams needing clear structure, permissions, and accountability	2. CUSTOMER CONSTRAINTS (J&P) CC <ul style="list-style-type: none">▪ Generic task boards (e.g., Trello) assures▪ Used for simple interface and ease of setup▪ Budget or access limitations for enterprise grade tools	5. AVAILABLE SOLUTIONS (AS) <ul style="list-style-type: none">▪ Generic task boards (e.g., Trello, Asana) with limited access control▪ Email based or spreadsheet driven tracking (prone to errors)▪ Tools with either user roles or workflow not both combined
1. JOSS-TO-BE DONE / PROBLEMS J&P Assign and manage tasks with clarity and ownership Track task progress using a structured, reviewable workflow Prevent task duplication or unauthorized editing Ensure accountability for task completion and approvals	3. PROBLEM ROOT CAUSE (RC) RE <ul style="list-style-type: none">▪ No unified system to manage (Track and track tasks)▪ Lack of structured workflow, task delegation▪ Rely on enforced workflows leading to inconsistent task completion▪ No logging or audit trail for accountability	7. BEHAVIOUR (DS) <ul style="list-style-type: none">▪ Assign tasks via chat or email without clear tracking▪ Rely on shared documents to follow up task progress▪ Escalate only when problems occur, not proactive visibility
8. TRIGGERS BEFORE / AFTER TR Confused, overwhelmed, request initiated and frustrated by miscommunication Confident, in control, supported by structured workflow and access rules	10. YOUR SOLUTION (SL) SL <ul style="list-style-type: none">▪ A centralized role and workflow management system Built on ServiceNow▪ Defined roles (Project Manager permission control)▪ Structured task workflow (Create → Assign → In Progress → Review → Done)▪ Activity logging, notifications, and approvals for task completion▪ Scalable onboarding with automated role and group management	6. CHANNELS OF BEHAVIOUR <ul style="list-style-type: none">▪ Online, Task management forums (Github Discussions, lightweight social media)▪ Offline Whiteboard updates, stand-up meetings, email chains for task review▪ BETA TESTING▪ Collect feedback, iterate, improve SL
9. EMOTIONS BEFORE / AFTER EM Confused, overwhelmed, reactive and frustrated by miscommunication After: Confident, in control supported by structured workflow and access rules		

