# Proposed Solution – Lease Management System

**📅 Date:** 15 February 2025  
**🧾 Team ID:**  LTVIP2025TMID30244  
**📂 Project Name:** Lease Management System  
**🎯 Maximum Marks:** 2 Marks

**1. Problem Statement (Problem to be Solved)**

Property managers and tenants face inefficiencies, delays, and confusion due to the manual handling of lease agreements, rent collection, communication, and document storage. There is no unified platform that automates these processes, resulting in missed deadlines, poor tenant satisfaction, and compliance risks.

**2. Idea / Solution Description**

Our proposed solution is a **cloud-based Lease Management System** that offers a centralized platform for managing lease agreements, rent schedules, tenant communication, and document storage. The system includes:

* Web and mobile interfaces for property managers and tenants
* Automated rent reminders and lease expiry alerts
* Tenant self-service portal for access to documents and requests
* Online rent payment and receipt generation
* Secure cloud storage for all legal documents
* Role-based access (Admin, Manager, Tenant)
* Dashboards with analytics on lease status, occupancy, and payment trends

The system is built on a scalable microservices architecture and supports integration with payment gateways, email/SMS APIs, and cloud storage providers.

**3. Novelty / Uniqueness**

* **Tailor-made for lease lifecycle management**, unlike generic CRM or finance tools
* Combines **automation, communication, and document management** in one platform
* **Tenant-facing features** like service requests and rent visibility improve satisfaction
* Real-time **compliance tracking and alerts**, reducing legal risks
* Supports **multi-property and multi-user management**, scalable for portfolios

**4. Social Impact / Customer Satisfaction**

* Enhances transparency and trust between landlords and tenants
* Improves tenant living experience with timely updates and responses
* Reduces stress for landlords and managers by simplifying operations
* Promotes **digital transformation** in the real estate/rental industry
* Supports **paperless operations**, contributing to environmental sustainability

**5. Business Model (Revenue Model)**

The platform follows a **SaaS (Software as a Service)** revenue model:

* **Subscription Plans**:
  + Free basic plan for up to 2 properties
  + Monthly/annual paid plans based on number of properties or users
* **Add-on Services** (Optional Revenue Channels):
  + Digital signatures (e.g., DocuSign integration)
  + Premium reporting or analytics
  + White-labeled solutions for real estate companies

This model ensures continuous revenue while scaling with customer needs.

**6. Scalability of the Solution**

* Designed using **cloud-native architecture** (AWS/GCP/Azure)
* Built with **microservices and containerization (Docker/Kubernetes)** to support horizontal scaling
* Easily expandable to support additional features like CRM, vendor management, or IoT-based smart locks
* Can be adapted for **residential, commercial, or co-living properties**
* Multi-language and multi-currency support enables international deployment