

Project Design Phase
Solution Architecture

Date	
Team ID	PNT2025TMID09657
Project Name	Rentease-HOUSE RENT APP USING MERN
Maximum Marks	4 Marks

Solution Architecture:

Central Rental Platform: This is the core of the solution. It acts as a single, trusted hub that connects all users and facilitates every process. Its main purpose is to bring all rental activities into one organized and efficient system.

User Roles: The diagram shows the three main user types who interact with the platform:

- **Tenants:** Individuals looking to find and rent properties.
- **Owners:** Individuals or landlords who list and manage their properties.
- **Administrators:** The team that manages the platform, ensuring all activities are legitimate and the system runs smoothly.

Key Solution Modules: The arrows and modules surrounding the central platform represent the key features designed to address specific problems:

- **Streamlined Property Search:** This module solves the tenant's problem of finding suitable homes. By providing robust search filters and a user-friendly interface, it makes the process faster and more efficient.
- **Secure Application Process:** This module addresses the issues of a complex application process and lack of trust. It ensures that tenant data is protected and that owners have a reliable, standardized way to screen applicants.
- **Unified Communication:** This feature solves the problem of poor communication. It provides a built-in messaging system for tenants and owners to communicate directly and securely, keeping all conversations in one place.
- **Payment Gateway Integration:** This module tackles the complexities and security concerns of financial transactions. It allows for secure and efficient online rent payments, providing peace of mind for both tenants and owners.

Solution Architecture Diagram:

