**Project Design Phase**

**Solution Architecture**

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| 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:**

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