**Project Design Phase**

**Solution Architecture**

|  |  |
| --- | --- |
| Date | 26 -05-2025 |
| Team ID | LTVIP2025TMID53011 |
| Project Name | HouseHunt: Finding Your Perfect Rental Home |
| Maximum Marks | 4 Marks |

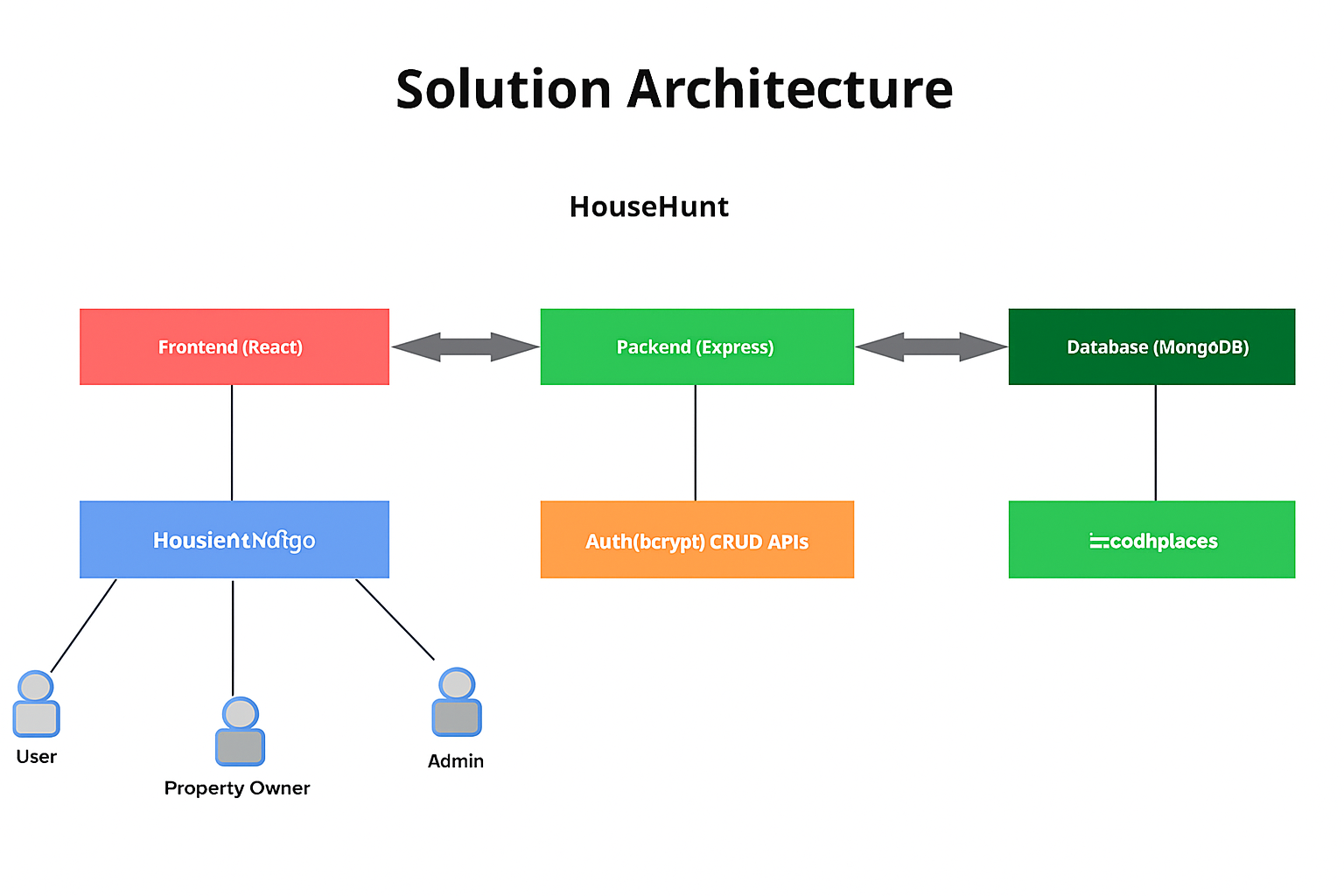
**🏗️ Solution Architecture – HouseHunt**

The solution architecture for HouseHunt ensures a scalable, secure, and intuitive rental platform that connects renters, property owners, and admins. The system is developed using the MERN stack (MongoDB, Express.js, React.js, Node.js) and supports role-based functionality for each user type.

**🧩 Key Architectural Highlights:**

* 🔍 Seamless property discovery and listing management
* 📩 Real-time booking inquiry and status updates
* 🔐 Secure login and authentication for users, owners, and admins
* ⚙️ Modular, RESTful backend APIs for scalability and maintenance
* 🔄 Efficient data flow between client (React), server (Express/Node), and MongoDB
* 🎛️ Role-based dashboards with conditional rendering and access control
* 🛠️ Admin panel for verifying listings, promoting trusted owners, and managing users

**Example - Solution Architecture Diagram:**

****