

# Solution Architecture – HouseHunt: Finding Your Perfect Rental Home

## Team Details

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Project name	HouseHunt: Finding Your Perfect Rental Home

## Project Overview

HouseHunt: Finding Your Perfect Rental Home is a digital platform designed to simplify and streamline the rental process for both tenants and property owners. It allows users to browse listings, apply filters based on their preferences, and connect directly with landlords or property managers—all within a single, integrated MERN-stack web application.

## Scenario-Based Case Study

Alice, a renter, logs in to HouseHunt to find a new apartment. She uses filters to define her preferred location, budget, and requirements. Upon finding a suitable property listed by Bob, a verified owner, she sends a booking request. The owner reviews and confirms the booking. All actions are monitored and authorized by the admin to maintain platform integrity. Alice completes the lease agreement and moves in. The process is seamless, user-centric, and fully managed within HouseHunt.

## Technical Architecture

The technical architecture of HouseHunt follows a client-server model powered by the MERN stack (MongoDB, Express.js, React, Node.js). The frontend handles user interactions and communicates with the backend using RESTful APIs via Axios. The backend manages application logic and data exchange. MongoDB supports scalable and fast data storage for listings, users, and transactions. The architecture ensures real-time communication, data reliability, and a smooth UX for renters, owners, and admins alike.

## Solution Architecture Diagram

# Solution Architecture

HouseHunt: Simplifying Rental Property Search

