An Abstract
On

ROOMIE RADAR - Smart Roommate Finder Portal

By

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ROOMIE RADAR - Smart Roommate Finder Portal

ABSTRACT

Roomie Radar is an integrated roommate–accommodation management platform designed to optimize shared living experiences through intelligent matchmaking and secure booking workflows. The system employs a structured preference-acquisition model and a weighted compatibility-scoring algorithm to accurately match users based on lifestyle factors, habits, budget constraints, and personal preferences, thereby reducing mismatches and improving long-term roommate satisfaction.

Roomie Radar ensures system integrity through email verification, secure login, and structured user profiling, while offering a unified PG/hostel search and booking module for accessing verified listings and completing secure reservations. It also integrates digital contract generation and real-time in-app chat to support instant communication and legally valid agreements, all backed by a structured database and API-driven architecture that efficiently manages user data, listings, and compatibility-based matches.

By combining compatibility-driven roommate matching, secure authentication, unified accommodation booking, digital documentation, and live communication into a single ecosystem, Roomie Radar provides a technically robust, scalable, and user-centric solution that addresses the major gaps in current PG/hostel and roommate-finding systems.

PROJECT GUIDE

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