

Feature: Hotel Search

1. Overview

The **Hotel Search** feature allows users to search and compare accommodations based on destination, dates, occupancy, and preferences, returning a ranked list of properties with real-time availability.

2. Goals & Objectives

- Provide comprehensive accommodation coverage
- Enable easy comparison of prices and amenities
- Drive conversion to hotel booking flow

3. In Scope

- City, landmark, and map-based search
- Date-based availability
- Room occupancy handling
- Price comparison across partners

4. Out of Scope

- Property management tools
- Host/partner onboarding
- Post-booking modifications

5. User Flow

1. User enters destination (city/landmark)
2. Selects check-in and check-out dates

3. Selects number of guests and rooms
4. Clicks **Search**
5. Hotel results page is displayed

6. Functional Requirements

ID	Requirement
FR-HS-01	System must support autocomplete for destinations
FR-HS-02	Results must show nightly & total price
FR-HS-03	Results must display ratings & review count
FR-HS-04	Availability must be date-specific
FR-HS-05	Sort by price, rating, distance

7. Non-Functional Requirements

- **Performance:** Initial results $\leq 2.5\text{s}$
- **Data Freshness:** Availability refresh every search
- **Reliability:** Graceful fallback on partner failure

8. Edge Cases

- Fully booked dates

- Invalid date ranges
- Property removed after indexing
- Currency conversion failures

9. Success Metrics

- Search → hotel detail click-through rate
- Conversion rate
- Average booking value