

# Phase 1: Problem Understanding & Industry Analysis

## 1. Requirement Gathering

### Functional Requirements

- Students should be able to register and create profiles.
- Students can search for rooms/hostels/PGs by city, price, facilities, and availability.
- Landlords can register and list their rooms with details like rent, location, and facilities.
- A booking system should allow students to request rooms.
- Admin should approve and monitor listings.
- Notifications (email/SMS) should be sent for bookings and approvals.

### Non-Functional Requirements

- **Data security:** Only authorized users can access data.
- **Performance:** Search results should load quickly.
- **Usability:** Interface should be simple for students and landlords.
- **Scalability:** System should support multiple cities and thousands of listings.

## 2. Stakeholder Analysis

Stakeholder Role in the System		Needs/Expectations
Students	End users who search and book accommodation	Easy search, affordable options, safety info
Landlords	Provide rooms/PGs/hostels	Platform to list rooms and find tenants
Admin	Manages platform operations and approvals	Control over data, monitor activities
Colleges	Optional stakeholders for future integration	Verified housing options for students

## 3. Business Process Mapping

1. Student registers on the platform.
2. Student searches available rooms using filters (location, price, facilities).
3. Student selects a room and places a booking request.
4. Landlord receives notification and confirms availability.
5. Admin verifies and approves booking (if required).
6. Student receives confirmation email/SMS.
7. Feedback/complaint system allows students to rate their experience.

## 4. Industry-Specific Use Case Analysis

- **Education Industry:** Colleges want reliable housing solutions for their students.
- **Real Estate Industry:** Property owners get a new market (students) without brokers.
- **Technology/CRM Industry:** Salesforce provides a scalable, secure, and customizable platform for managing student-owner interactions.

## 5. AppExchange Exploration

Before custom development, we explored Salesforce AppExchange to check for existing solutions:

- **Property Management Apps:** Designed for large-scale real estate companies, not student-focused.
- **Rental Management Apps:** Expensive and more suited for commercial leasing.
- **Education Apps:** Focused on learning, not accommodation.