

**INSTITUTE FOR ADVANCED COMPUTING AND  
SOFTWARE DEVELOPMENT  
AKURDI, PUNE**

**SRS Document**

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**Project Title:** PG-Booking Application

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## 1. Introduction

This document explains the system requirements and scope for developing **PG Booking Application**.

This is a basic system that will keep record of rooms available in PG Houses available on rent and will work as connecting bridge between Users (Students and Professionals) and property owner.

Due to this system, there is no need to visit various places in search of desired room. The information of various PGs in various locations can be accessible at one place.

This system will provide a platform to post Properties for rent. This will keep record of PGs available on rent with their rates and other details and make this available to customers. Also, this application will show contact details of responsible person for particular PG upon login of the user.

**PG Booking Application** can be divided in three main parts, Admin part, User part and the PG part.

This document describes the system requirement of the Account part.

### **1.1 Purpose:**

The purpose of this web application is to create a functional website for people to be able to rent rooms. Users of this website will be able to create an account which helps them in order to Rent rooms. User can navigate through different categories of rooms and PGs as per their choice. Wish List functionality will be built in to allow users to save the favorite PG.

### **1.2 Definitions, Acronyms and abbreviations**

SRS	Software Requirement Specifications
PG	Paying Guest

### **1.3 Intended Audience and Reading Suggestions:**

The intended audience of this document would be admin and user of PG-Booking System, and project team with the objective to refer and analyze the information. This is a prototype for the project, and it is restricted within the college premises. This has been implemented under the guidance of college professors. The SRS document can be used in any case regarding the requirements of the project and the solution that has been taken. The document would

finally provide a clear idea about the system that is building.

Brief outline of the document is:

1. Overall Description
2. System Features
3. Functional Requirements
4. Non-Functional Requirements

## **1.4 System Requirements:**

### **1. Database Requirement:**

We need to use MySQL as a database in our system. There are not any legal requirements involved in this system.

### **2. Software Requirements:**

- Spring Tool Suite (v 3.9.18 and above)
- Visual Studio Code
- MySQL Workbench

### **3. Technologies Used:**

- Backend: Java (Spring Boot), MySQL
- Frontend: React JS

### **4. Hardware Requirements:**

- Windows 7 or above
  - 2GB RAM (min.)
  - 500GB HDD
  - Processor: Dual Core or above

## 1.5 References

[1] Hostel Management System

[2] ER Diagram Tutorial:

[https://www.tutorialspoint.com/dbms/er\\_diagram\\_representation.htm](https://www.tutorialspoint.com/dbms/er_diagram_representation.htm)

[3] Online Rental Property Management:

<https://myengineeringprojects.in/engineering-project/online-rental-property-management-system/>

[4] Case Study:

<https://www.scribd.com/search?query=house%20rental%20management%20system>

[5] Data Flow Diagram:

<http://myyee.tripod.com/cs457/dfd.htm>

## 2. Functional Requirements

The Account part of PG Booking System has two modules which are divided in 16 processes described as below.

No	BRS Requirement ID	Description
<b>2.1</b>	<b>Admin Module</b>	
2.1.1	F1	Account Creation Process
2.1.2	F2	Login Process
2.1.3	F3	Update Account Process
2.1.4	F4	Search PGs
2.1.5	F5	Publish PGs
2.1.6	F6	Update PG Details
2.1.7	F7	Delete PGs
2.1.8	F8	Manage All Users
<b>2.2</b>	<b>User Module</b>	
2.2.1	F9	Account Creation Process
2.2.2	F10	Login Process
2.2.3	F11	Update Account Process
2.2.4	F12	Search PG
2.2.5	F13	Add PG to Wishlist
2.2.6	F14	Rent Room In PG
2.2.7	F15	Get Booking Details
2.2.8	F16	Cancel Booking

## 2.1 Admin Module

- Admin is the user of the system to wants to Rent their property as a Paying Guest House (PG)

### 2.1.1 Account Creation Process:

- **PG Booking Application** compels to create the account for Posting PG details on it. So, PG Booking Application should provide the function which makes admin create new account.
- When admin creates new account, the function demands information to be provided as described below.
  1. Admin name
  2. Mobile Number
  3. Email Id
  4. Password
  5. Address



- All items are compulsory demanded.
- Admin Name
  - ✓ Admin should enter his full name
- Password
  - ✓ Password has the constraints. It should be of minimum 6 characters length and maximum 20 characters length. It should contain minimum one numeric value, one lowercase letter, one uppercase letter and one special character.
- Email ID
  - ✓ Email ID should be Unique and valid, otherwise Account creation process will fail.
- Mobile Number
  - ✓ Mobile Number should be Unique and valid, otherwise Account creation process will fail.
- Address
  - ✓ Address is compulsory for account creation.

### **2.1.2 Login Process**

- PG Booking Application always compels user authentication before using the application.
- The admin authentication demands Email and Password. The Email and Password should be checked in a way
  - ✓ First, the Email ID and the password should exist and correct
  - ✓ If the Email ID and the password are not matching with what the user has provided while creating an account, the user authentication cannot be provided.

### **2.1.3 Update Account Process**

- PG Booking Application should provide the function which makes it easier for Admin to keep the account updated.
- The information which admin can update is as described below.
  - i. Name
  - ii. Email ID
  - iii. Password
  - iv. Mobile Number

- v. Address
- vi. Profile Picture
- vii. Birthdate

#### **2.1.4 Search PG**

- Search can be done with or without following filters:
  - i. PG Location (City)
  - ii. Rent
  - iii. Room Occupancy Type
  - iv. Gender

#### **2.1.5 Publish PG**

- Admin can publish any number of PGs through publish new PG feature.
- For publishing PG all details should be filled.

#### **2.1.6 Update PG Information**

- All PG details can be updated.

#### **2.1.7 Delete PG Information**

- After publishing if admin wants to remove any PG then he can remove it.

### **2.1.8 Manage All Users**

- Admin can manage users. If there is any suspicious user, admin can remove that user.

## **2.2 User Module**

- User is the customer who wants to take room on rent in the PG of their choice.

### **2.2.1 Account Creation Process**

- **PG Booking Application** compels to create the account for renting room in PG of their choice. So, PG Booking Application should provide the function which makes user create new account.
- When user creates new account, the function demands information to be provided as described below.
  1. Admin name
  2. Mobile Number
  3. Email Id
  4. Password
  5. Profession
  6. Address

- All items are compulsory demanded.
- Admin Name
  - ✓ User should enter his full name
- Password
  - ✓ Password has the constraints. It should be of minimum 6 characters length and maximum 20 characters length. It should contain minimum one numeric value, one lowercase letter, one uppercase letter and one special character.
- Email ID
  - ✓ Email ID should be Unique and valid, otherwise Account creation process will fail.
- Mobile Number
  - ✓ Mobile Number should be Unique and valid, otherwise Account creation process will fail.
- Address
  - ✓ Address is compulsory for account creation.

### **2.2.2 Login Process**

- PG Booking Application always compels user authentication before using the application.
- The user authentication demands Email and Password. The Email and Password should be checked in a way
  - ✓ First, the Email ID and the password should exist and correct
- If the Email ID and the password are not matching with what the user has provided while creating an account, the user authentication cannot be provided.

### **2.2.3 Update Account Process**

- PG Booking Application should provide the function which makes it easier for User to keep the account updated.
- The information which user can update is as described below.
  - i. Name
  - ii. Email ID
  - iii. Password

- iv. Mobile Number
- v. Address
- vi. Profile Picture
- vii. Birthdate
- viii. Profession

#### **2.2.4 Search PG**

- Search can be done with or without following filters:
  - i. PG Location (City)
  - ii. Rent
  - iii. Room Occupancy Type
  - iv. Gender

#### **2.2.5 Add PG to wish list**

- User can add their favorite PG to wish list so whenever user wants, they can come back to wish list and book room in the PG of their choice.

#### **2.2.6 Book PG room**

- User can see all the available PGs and book a room on rent in PG of their choice.

### **2.2.7 Get Booking Details**

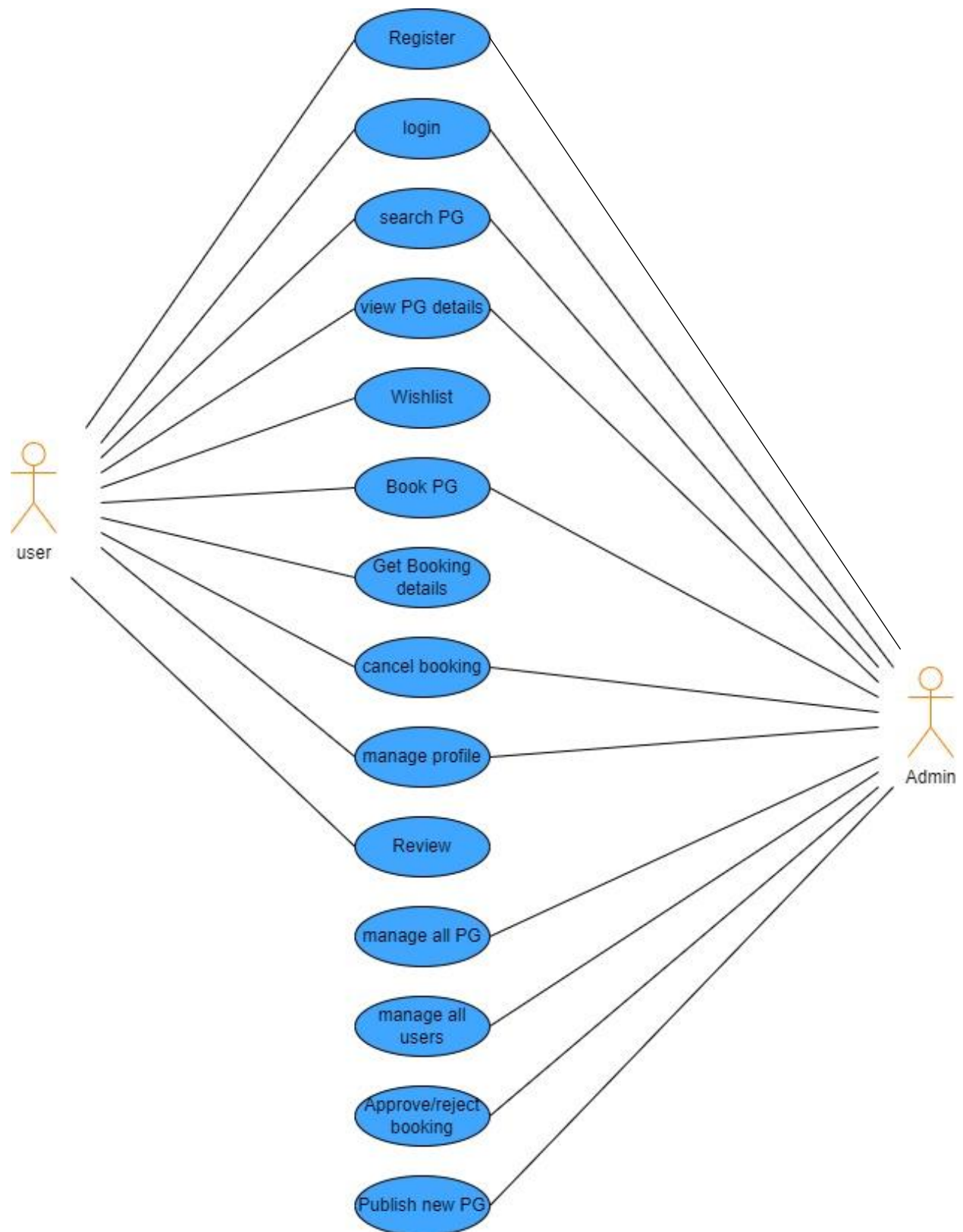
- After complete booking, User can see all its booking details and payment processes.

### **2.2.8 Cancel Booking**

- User can also cancel the booking if required due to some circumstances.



## 2.3 Use Case Diagram:



### **3. Non - Functional Requirements:**

#### **3.1. Security Requirements:**

- In Online Mode Security is core issue that must be considered.
- To avoid cyber-attacks, we need to provide a security solution
- Security can be provided by encryption and Secure socket layer.
- So that hacker cannot hack the database of the system and system should get secured.

#### **3.2. Availability:**

- The system will be available all the time except at downtime.
- Downtime should be every Saturday at 1.00am to 2.00am
- Alternate page should be displayed to user at the time of downtime

#### **3.3. Maintainability:**

System will should not be shut down for more than once in 24hrs of period for maintenance.

### **3.4. Portability:**

- The System can be used on Windows, Linux OS or Android.
- System should be easy to port on any server.

### **3.5. Performance:**

- The System has adequate performance requirements.
- It should not take more than 10sec to load new page