



Roomers Bay Online Hostel, PGs and Flat Booking System

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Abstract

The higher prices charged by brokers and hostel owners, the tiresome and time-wasting process of looking for hostels in addition to the difficulties hostel owners find when it comes to handling students' information, and employee details necessitated the development of the web-based hostel/PG's searching and booking system. The web-based hostel /PG's searching and booking system helps students to identify and locate hostels based on their own preferences and help hostel owners to manage students and employee information, thereby acting as one of the possible ways how the above problems would be solved. The result of the project was the web based hostel/PG's searching and booking system capable of allowing students to view, select and book hostel and allowing hostel owners to register students and manage their records.

Keywords: Web-based; Hostels; PG's; Owners; Students; Searching; Booking

Introduction

Roomers bay website was developed to provide hosteler's and employees to book hostels and PG's with ease. This project is basically a third party web based application which acts as a medium between the one who wants to sell room or hostel rooms online and the ones who wants to buy them [1]. Following are the services the user will get on our website. To ease the process of booking the hostel and help them select the good hostel.

Our website will help the landlords to connect with the one who wants to buy room on rent. And help the individuals to find the rooms in their desired area. And help students to pick up the good hostel by providing ratings given by other students so they don't have to suffer later [2-4]. The aim was to provide a platform that help them to search and book the rooms without visiting the place and at convenient price and location.

We used entity relationship and context diagrams to analyse and design the system. The technologies used in implementation of the objectives of this study included MongoDB database, Python for server connections, and HTML, CSS, JS for user interfaces. The technologies used are expandable *i.e.*, the website can be updated, more features can be added easily in future [5-7]. The features which are provided are finding searching the PG's/hostels/rooms based on location, one to one interaction between owner and customer *via* chat box, virtually looking the facilities provided in room/hostel *via* images, booking a particular room online and making payments [8].

Literature Review

This project is basically a third party web based application which acts as a medium between the one who wants to sell room or hostel rooms online and the ones who wants to buy them. Following are the services the user will get on our website (Table 1).

Title	Date and year of publication/release of project	Features	Previous features	Updated features
E-Locate	June, 2019	This study aimed to develop a website that will aid the client in finding rooms, boarding house, apartment for rent and the like. This website compares room rates, can add new account, and a real time update of the status of the availability of rooms. Rapid Application Development (RAD) was utilized which comprises of different phases; planning, analysis, design, and implementation.	It as a study which aimed to provide search results on basis of rent.	Our application provide search results based on location. The buyer can compare with other hostels and their facilities.
Rento Axis	December, 2018	The proposed system comprises of an android application where	It was specific with Durg and Raipur	Our proposed solution is basically focusing on Indore.

		<p>(i) The PG owners can advertise the PG details by registering into the application. (ii) The user (common people) can search for the PG, apartments, houses all over Durg and Raipur.</p> <p>(iii) The customers can also search the PG information based on some parameters such as nearby colleges, market, etc. In other words, this application will help PG owners to improve the management of their community and the tasks related to it.</p>		We provide a platform to directly contact with owner.
PG-Locator	June, 2017	<p>The proposed system is a android based application and maintains a centralized repository of all related information. The system allows one to easily access the relevant information and make necessary judgments regarding the PG's selection. User can look on different aspects of the information provided like location map, food, price, transportation facility and even security measures and select a best PG of their choice.</p>	<p>User can take a look on different aspects of the information provided like location map, food, price, transportation facility and even security measures and select a best PG of their choice.</p>	<p>User can take a look on different aspects of the information provided like location map, food, price, transportation facility and even security measures and select a best PG of their choice.</p> <p>The advancement is made in the facility, by providing a chat bot, where the buyer can directly chat with the seller.</p>

Table 1: User services in hostel room which is available on website.

Motivation

There's no single online platform giving all information about hostel, PG and room. We will get a good opportunity to learn and implement full stack. We as an outsider residing in Indore and search for compatible room with good food and living facility. We struggle a lot to find out an idle hostel and PG. The problem faced by the individuals and students in finding rooms and hostels encouraged us to work on this project, it is our personal experience as well. Students or individual who travels to metro cities for higher education or work [9]. The most common problem they face is the poor service provided by their hostels like poor quality food, inappropriate location of hostels, inappropriate money charged by the hostels and much more, similarly the individuals who wants to buy a room on rent also face problems in finding suitable rooms in large cities like Indore at appropriate price [10]. Our idea is to help these students or any individual to find good hostel, room or PG at affordable prices.

Problem domain

Our project will be based on a hypothetical hostel, PG's and room searching and booking system, which is targeted for use by students any individual who wants to book a hostel, any individual who wants to buy a room on rent, hostel owners, landlords, PG owners.

Problem definition

The students or individuals who travels to metro cities for higher education or work. The most common problem they face is the poor service provided by their hostels like poor quality food, inappropriate location of hostels, inappropriate money charged by the hostels and

much more, similarly the individuals who wants to buy a room on rent also face problems in finding suitable rooms in large cities like Indore at appropriate price. Our idea is to help these students or any individual to find good hostel, room, or PG's at affordable prices [11].

Discussion

Statement

Students or individual migrants facing problem in finding hostel, PG and room on rent at affordable rent and at suitable location.

Innovative content

In existing system there is option for searching hostel and PG's only. In our project user can search for flat on rent also other than hostel and PG's. We also add functionality of direct chatting between property owner and customer. Provide comparison among different facilities provided by different hostel, PG's and flat owner.

Solution methodologies/problem solving

- Students will be able to view all the services provided by the hostel on our website like types of rooms provided by hostels, meals offered, types of shops present near hostel, price based on room quality, reviews provided by other students on that hostel so students can easily take decisions [12].
- Individual who wants to find room will get the information of all the rooms currently present in the searched area like room dimensions, no. of rooms, types of shops present in that area, whether this room

is for girls only or boys or both, whether the owner is providing some furniture with room or not etc.

- Landlords who want to give their room on rent will register on web app and fill the basic details of room like dimensions, types of documents required for paying guests, whether it is available for only girls, boys, or both, whether he is providing some furniture's like bed with room or not [13,14].
- Hostel owners that visit our website to register for their hostel will have to fill basic details like how many rooms are there in the hostel, no. of individuals residing in one room, meals offered every day, specialties of their hostel (Figures 1 and 2).

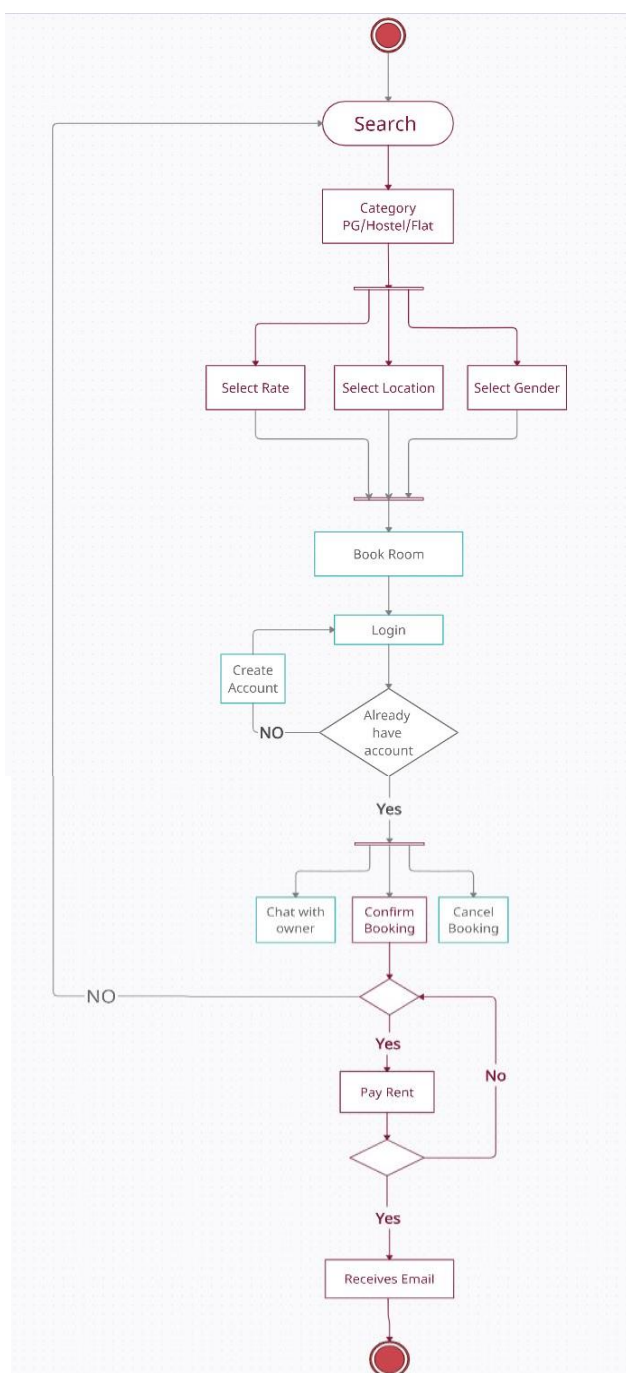


Figure 1: Customer activity diagram.

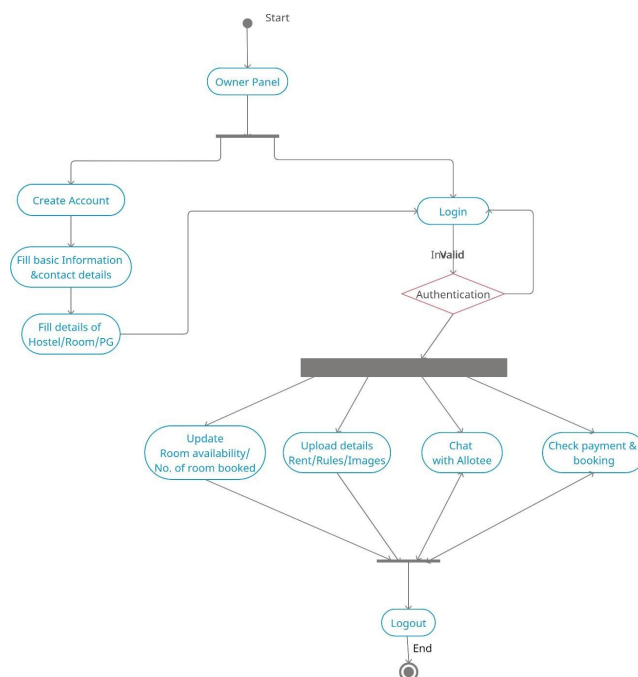


Figure 2: Owner activity diagram.

Conclusion

In this paper we have provided the detailed research on the scope and work done on Roomers Bay website. We have analyzed how and what technique is used, implementation of data set, type of dataset. Current websites are not able to provide online booking facility, with the different payment options, and the feature of chatting for interaction of owner and the customer, so that there is no broker in between which will directly reduce the extra cost. Our website will help migrants to find the perfect locality of hostel, PG's and flat. Student or migrant can explore about ratings and facilities of different hostel, PG's and flat. Other than online exploring, migrants can do all basic process of registration required at time of booking. Our website will also help the PG/hostel owners, landlords to widen their business. The website is extendable, as more features can be added like 360 degrees view of the rooms for better user experience, providing comparisons between various facilities provided by different hostels, with information of the hostels information about the daily menu of food provided by them.

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