

PROJECT SYNOPSIS

**OPEN SOURCE SOFTWARE LAB**

**MINOR PROJECT**

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**MyRoomie – Social Network**

This project builds a social networking platform in a college which would help choosing your most stable roommate in the easiest manner. Not just this, the Room Map tool helps getting the room of your choice. The inbuilt Chat feature lets you know people better before you actually send them MyRoomie Requests. This aims at ending the practise of allocating random roommates in colleges.

VISION

This project aims to bring a change in the way the roommates are being allotted in the college hostels. Based upon the feedbacks from various college hostels, the roommates allocation system is very random and a hectic process for the administration. After the allocation, there are people complaining about their roomies, willing to change their rooms and a host of other problems. Letting the students choose their own roommate in a college can be a cumbersome and a chaotic process where the number of students are in thousands.

This network aims at reducing these problems on both - the institution and the hostellers. With our network, we hope that the satisfaction rate amongst the roommates is higher than before. The roomies are self-chosen and well-known to each other prior to the allocation. Thus, we wish to make this process much simpler, better and logical with our revolutionary approach- MyRoomiE.

PROJECT OVERVIEW

This project builds a social networking platform in a college which would help choosing your most stable roommate in the easiest manner. Not just this, the Room Map tool helps getting the room of your choice. The inbuilt Chat feature lets you know people better before you actually send them MyRoomie Requests. This project aims at ending the practise of allocating random roommates in colleges.

OBJECTIVE

Choosing a stable roommate is not an easy task. This network finds a perfect roommate match for you based upon common likes and interests. This also takes into account several other parameters viz. Food Choice, Future plans, Hometown etc. Based upon all the above parameters, a stability percent is calculated through our algorithm.

After the registrations for the hostels get closed, the room-maps can generate the hostel list indicating the room numbers with the allotted students.

LANGUAGES USED

* ANDRIOD
* HTML
* CSS
* PHP/Node JS
* BOOTSTRAP
* JAVASCRIPT

FEATURES

1. **Web and Andriod App – Dual mode:**

MyRoomie Network can be accessible via Web as well as on Andriod Application. All the features will be supported on both these platforms. Both these platforms would be interlinked i.e. a user registering on the website can access with the same credentials on the Andriod app.

1. **Room Maps Tool:**

After the user gets his roommate allocated, they can choose a room of their choice seeing the room map i.e. the exact location of the room in the hostel. Designed in a very attractive UI, The Room Map disables the room that has been already allocated, a green room indicates selected room, grey indicates available rooms. After selecting the room, their Roomie must approve to get the room allocated.

1. **In-built Chat Option:**

Just a glance on the profile picture and displayed information may not be all to know the person completely. With the chat feature, you can ask for the details of the person you are looking for, know him better before making a choice to send him MyRoomie Request.

1. **MyRoomie Request:**

Allocating roomies just on the basis of higher stability percent may not always guarantee stable roomies. After all, this does not get you a roomie of your choice. So, before the suggestions for your Roomie are flashed based upon your inputs, you can look on their profile, chat with them, and then send them MyRoomie Request. After your request has been accepted by the other, voila, you found your roommate.

1. **User-friendly Platform:**

The entire process, right from registration to the selecting of the room has been designed keeping in mind the attractive, simple and easy to use USER Interface. However, if you have some problem, you can write your problem to the Support Team via the Chat Box on the corner of the website/App.

ARTIFICIAL INTELLIGENCE APPROACH

The “Roomie Suggestions” given by the app/website is by determining a stability percentage amongst each pair. This takes into account several parameters viz. Food Choice, Future plans, Hometown, Favourites, Interests etc. The pair with a higher stability percent is likely to be a more stable roommate.

**DETERMING THE STABILITY PERCENT :**

Step 1: If the priority of interest is not zero, add twice the difference in their priority number to 15. The computed value is then added to the overall score.

Step 2: If the priority of interest is 0 i.e. the student is not interested in that category, add 8 to the computed score.

Step 3: If the food choice matches, add 10 to the computed score.

Step 4: If the hometown/surname matches, add 10 to the computed score.

Step 4: If the net score > 100, then update score to 100.

SCOPE

This website and app can be used by any institution which provides Hostel Facility. The website can be customized by the institution to cater to the hostel capacity and size by the institution. This is not only limited to a college but can be extended by the private hostels, PG’s, where the number of people residing is high and are unknown to each other.