

BookByers

PROJECT REPORT- Review 3

*Submitted in fulfilment for the J-Component of ITE1008 – Open Source
Programming*

CAL COURSE

in

B.Tech. (Information Technology)

by

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Under the guidance of

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SITE



VIT[®]
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

School of Information Technology and Engineering

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Abstract

Many people have a tough time choosing roommates and the type of room/block they want during hostel counseling. Sometimes vacancies in different hostel blocks become unpredictable. In the end, having no choice, some people will have to choose unknown roommates and continue with them for the next 1 year. The project "BookByers" makes this process smooth and flexible for everyone. Verified college students after joining the portal can either join a room or create a room. People who would like to create a room would be given an access code hence enabling other students to join using it and people searching for roommates can filter the existing rooms based on various criteria and put a request to join them. The room owner decides whether to accept it or not. This PHP and SQL based application would reduce the last-minute hassle in hostel room counseling and helps students choose better roommates. PHP + SQL is popular stack for problem statements of this kind because of complex data and entity relationship management. I'm expecting to achieve a good student community in the portal so that the process of room-mate finding will become easy for everyone.

Introduction

Choosing roommates should be done carefully because they influence the mentality and productivity of a student. It can either be in a good or a bad way. Since the nature of the original counselling process is unpredictable, choosing room-mates would be difficult at the last moment and students will have to go with those who ever have vacancies available at that point of time.

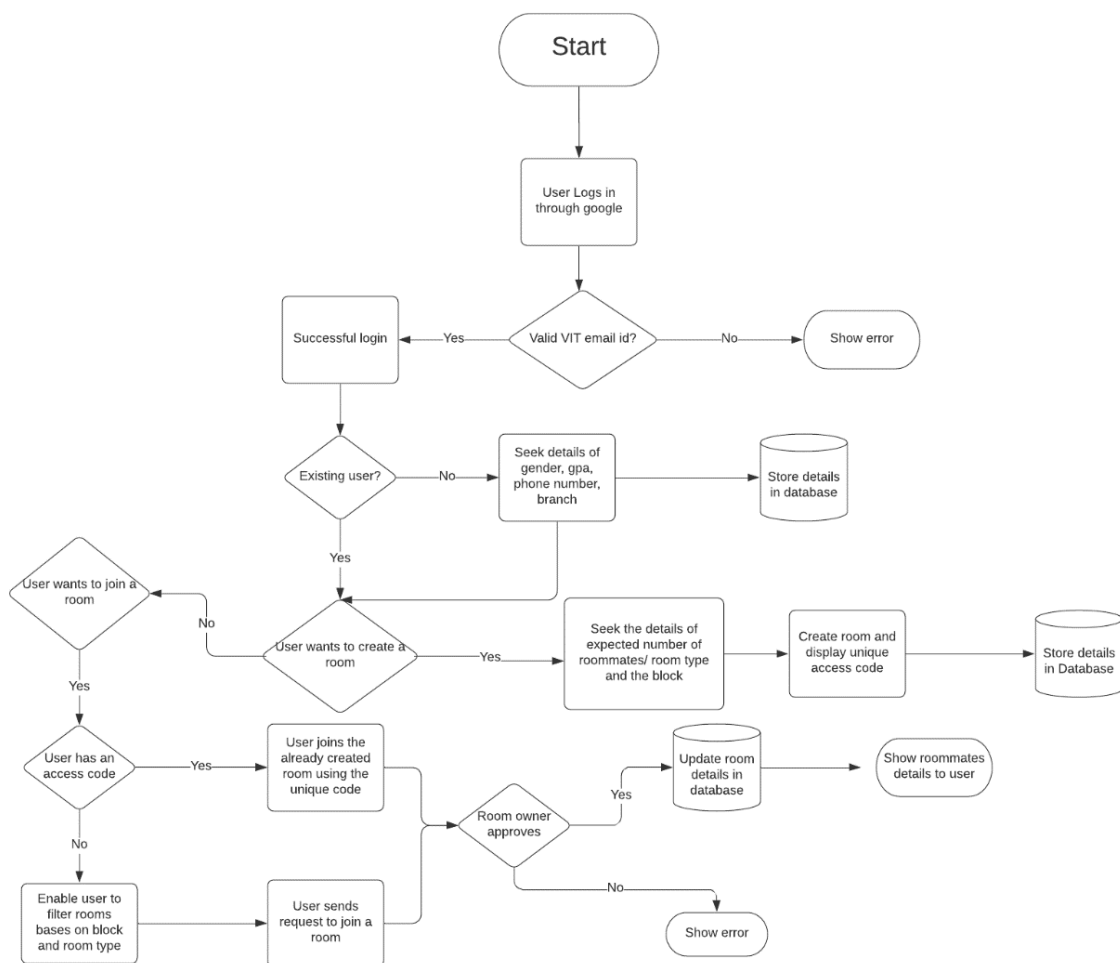
Students log in to the portal through their college email id. Hence using this, the year and the identity of the student are confirmed and verified. Only the students/rooms belonging to the same year category will be displayed to a person. Students can either create a room or join a room by putting up a request. The person who creates the room will be considered as the room-owner and will be given an access code after he/she provides the details like expected block, room type, minimum GPA to join the room, and the preferred roommates(Based on their original locality). For the students who want to join rooms, a table will be displayed and can be filtered according to various criteria. These students can request to join the room. It's the decision of the room-owner whether to accept the request or not. The existing room-mates details will be visible to everyone who has joined a room.

Using this application, things become easier and smooth enabling students to properly plan their room-mates before the actual counselling process. The application will be made using Php and mySQL.

Problem-statement

To develop an application that enables students to plan out their room-mates before the actual hostel counselling process.

Process-flow diagram



Modules

The main stakeholders here are the students with a high gpa who want to create a room and the students who want to join a room.

- Login module

Students can login to our portal through google. For the people logging in for the first time, student names and emails will be stored in the database in the forms of columns. Each student will be given an ID which is the primary key. For re-visitors, the previous data they have exchanged with the website will be brought back (Like rooms created, star marked rooms).

- Student detail module

After the students successfully login, they will be asked about their details like gender, phone number, branch and preferred roommate locality. The details they provide will be updated in the database.

- Create room module

Students can create a room and invite other students to join them using the access code provided. Since people with a higher gpa have better chances of getting rooms of their choice, this feature is mainly for them.

- Filtering data based on user inputs

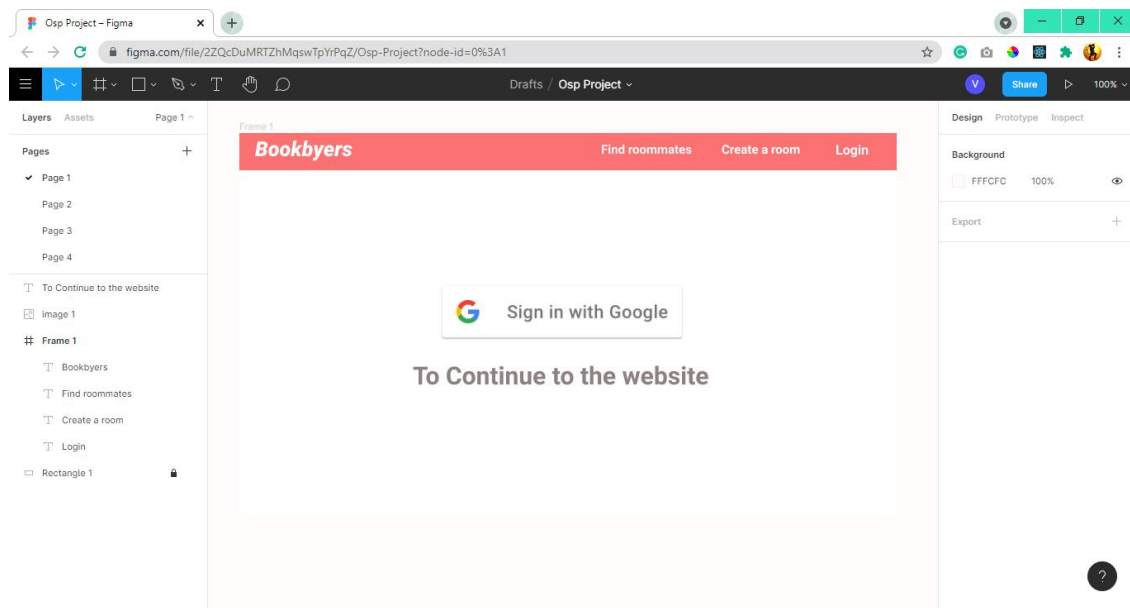
Students can filter the various rooms displayed according to the criteria of their choice and request to join a room they wish. The criteria of filtering can be room-type, block, room-owner locality, room-owner gpa etc.

- Approve/Reject module

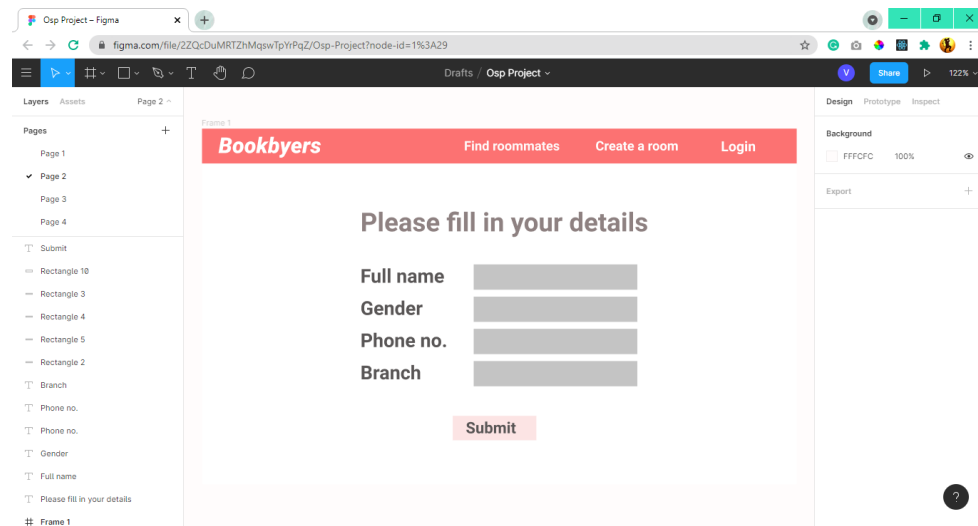
Room owners can approve or reject the requests put up by the people who want to join their room or bookmark them for later references. The room owner will have the power to delete any of the existing roommates.

Prototype

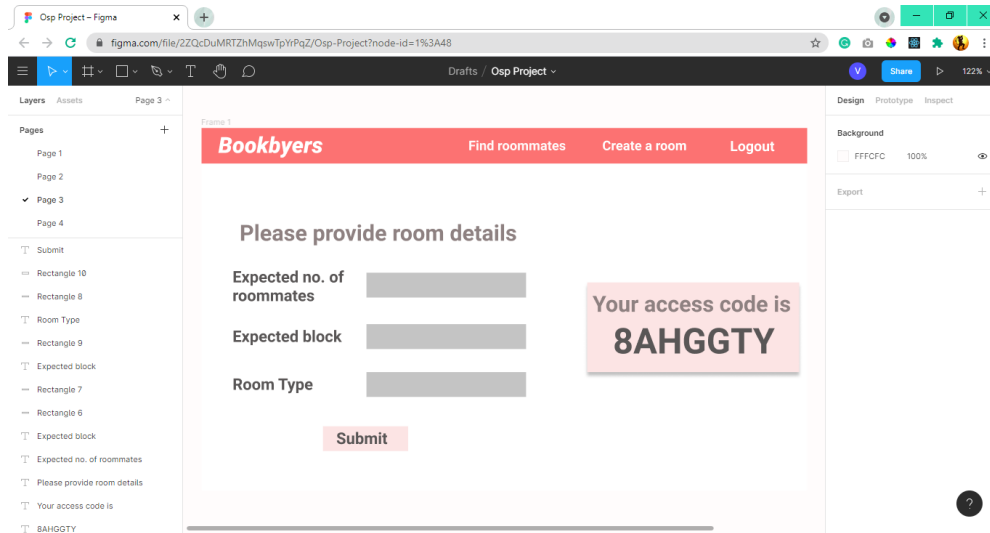
1. Login page



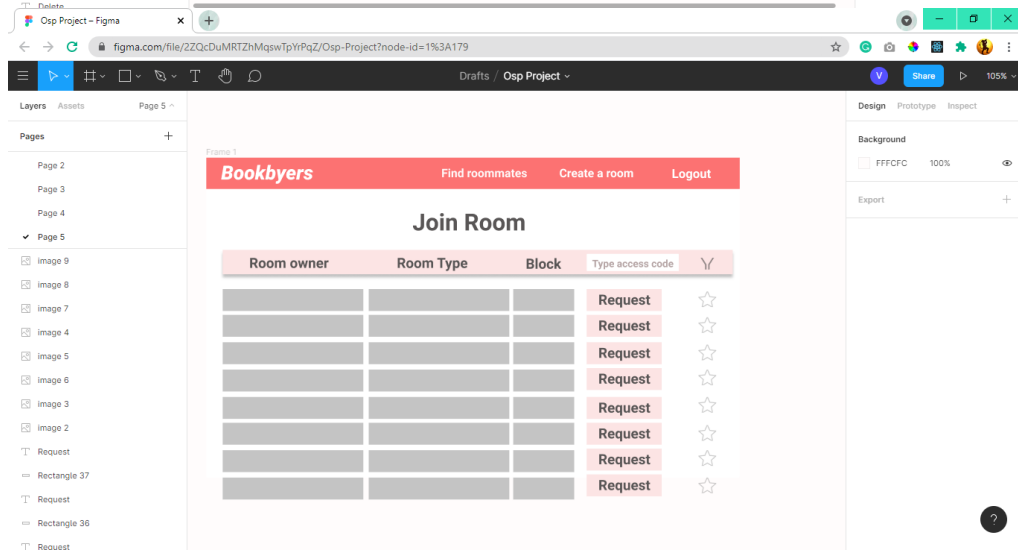
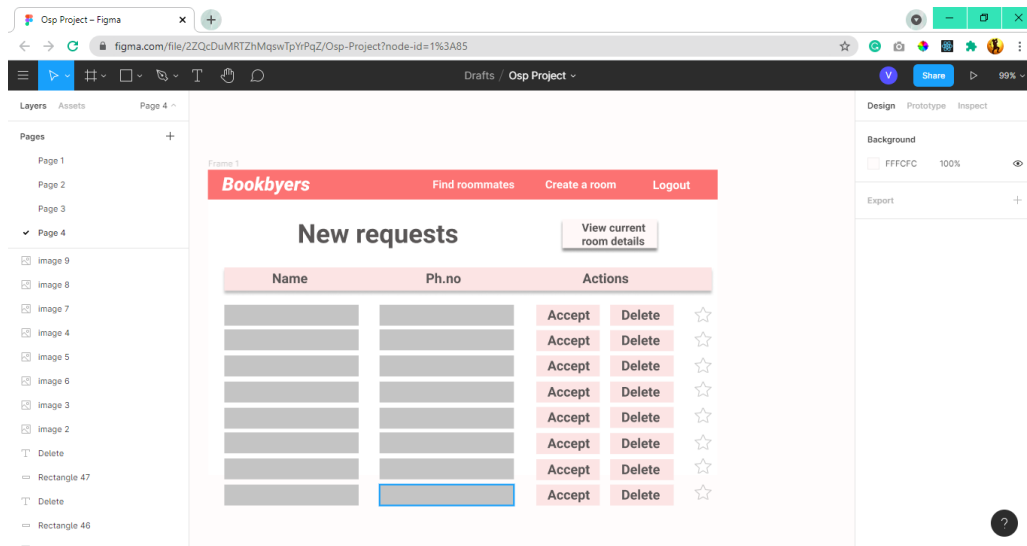
2. Students detail page



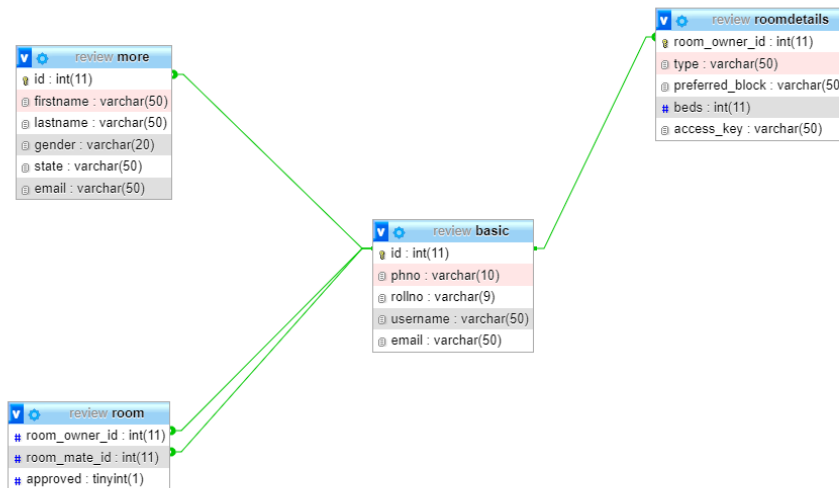
3. Room-creation



4. Room filtering and approve/reject



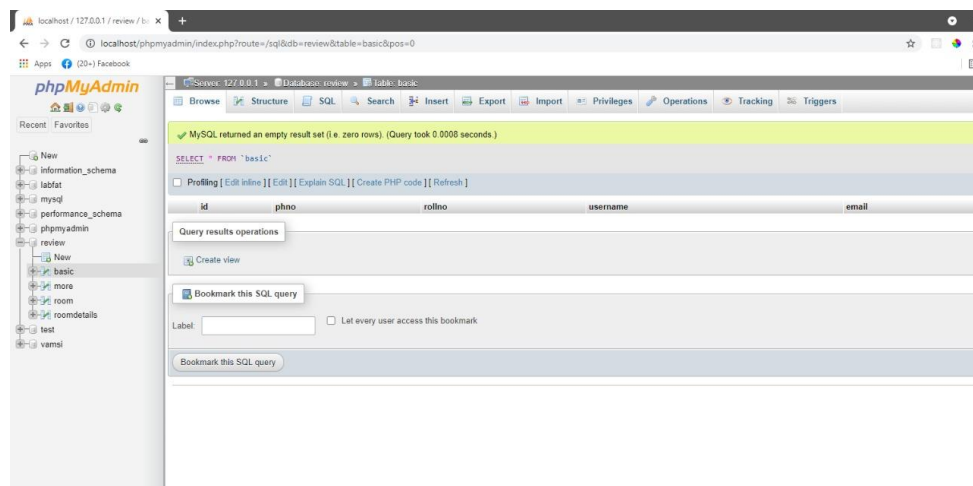
Entity Relationship Diagram



Database Design

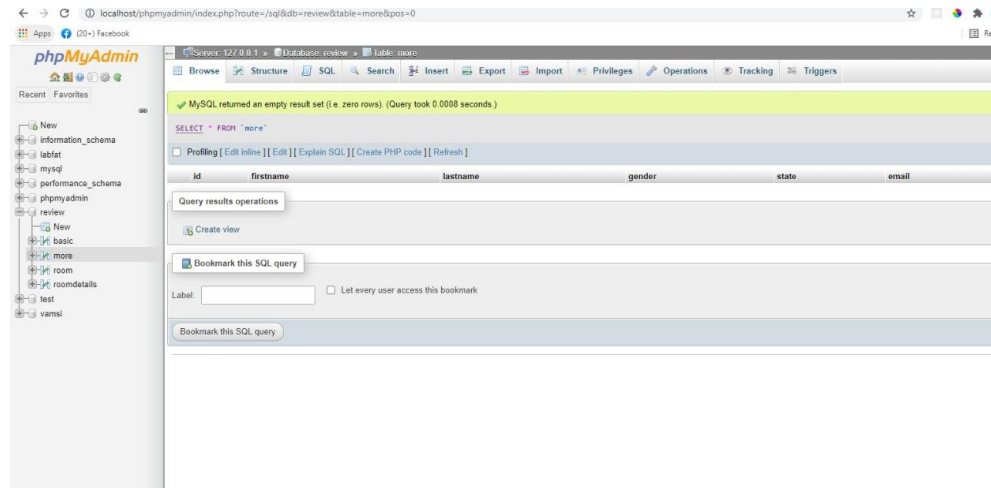
1.basic_details table

ID (PK)	phno	ph.no	roll.no	username	email
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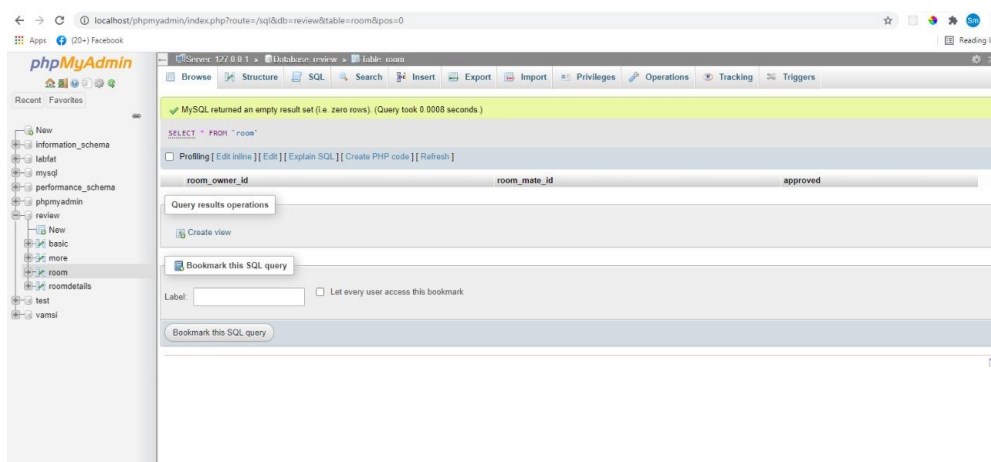
2.more_details table

ID(FK)	first_name	last_name	gender	state	email
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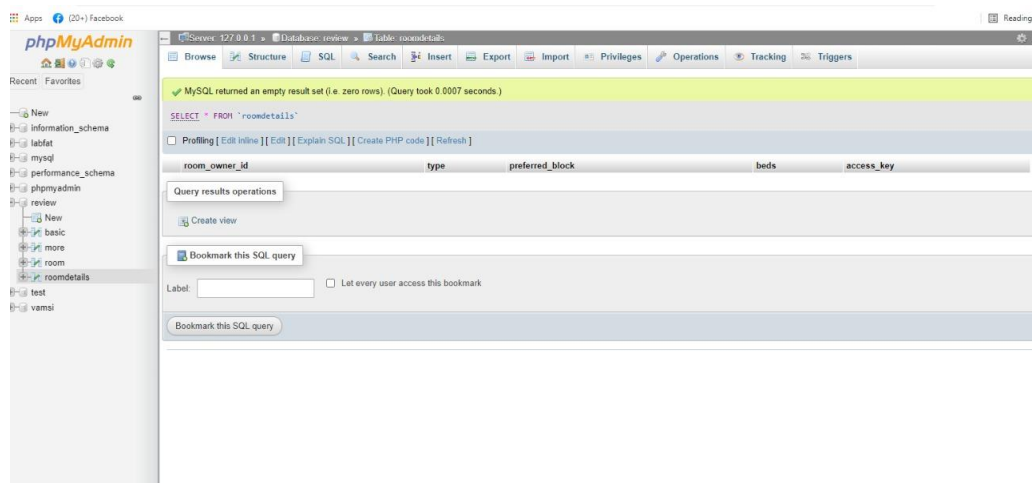
3.roommates_table

room_owner_id (FK)	room_mate_id(FK)	approved
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4.room_details

room_owner_id	type	preferred_block	beds	access_key
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Conclusion

This application will be really useful to students when we launch it. It reduces the burden and stress of students have while selecting roommates.

Future prospectus will be to expand the application to other universities . I'm glad to have finished my first PHP project under the guidance of Jayakumar sir.

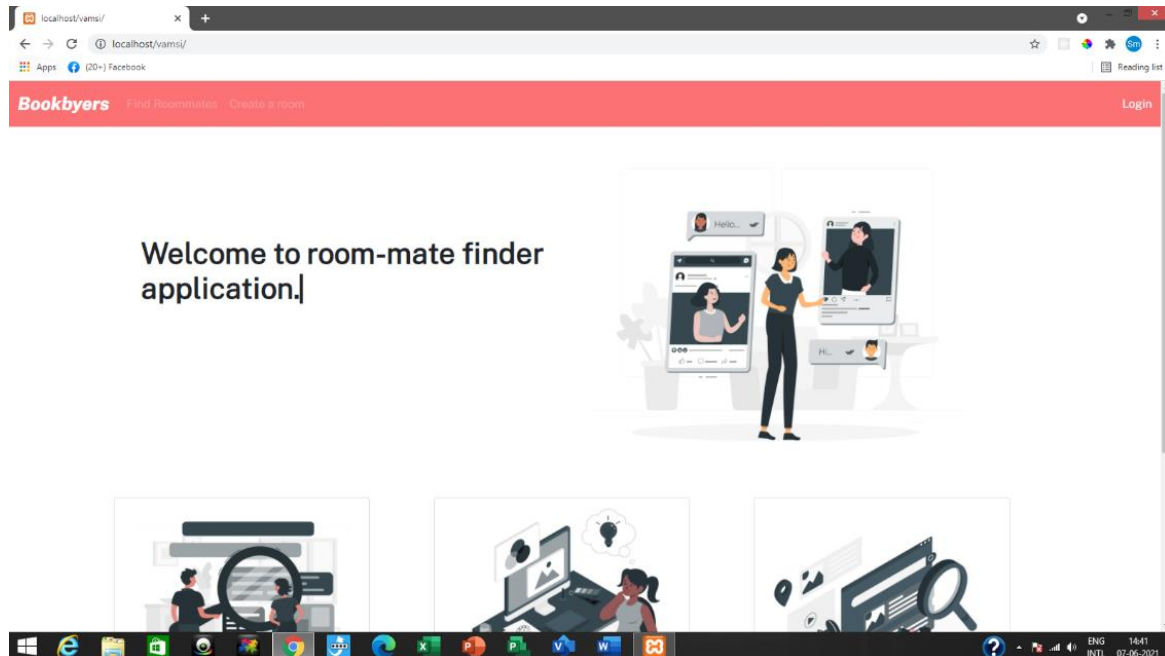
References

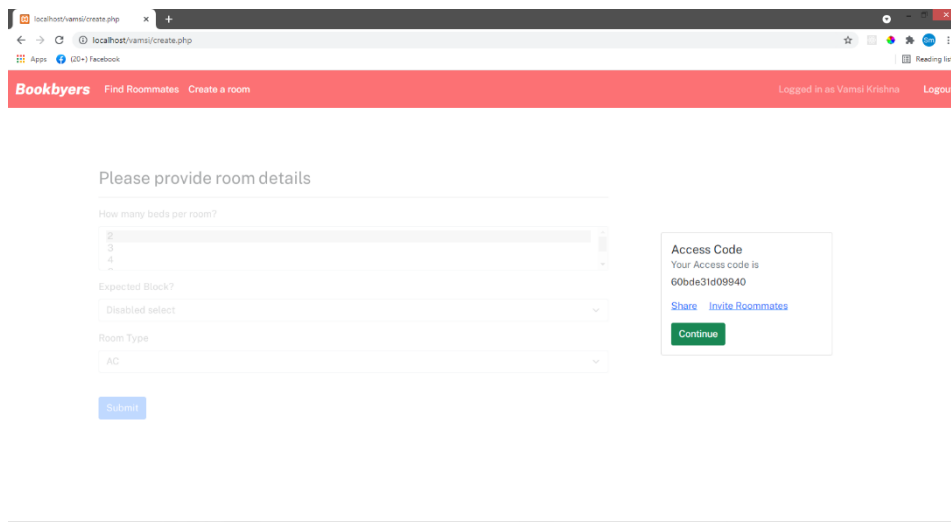
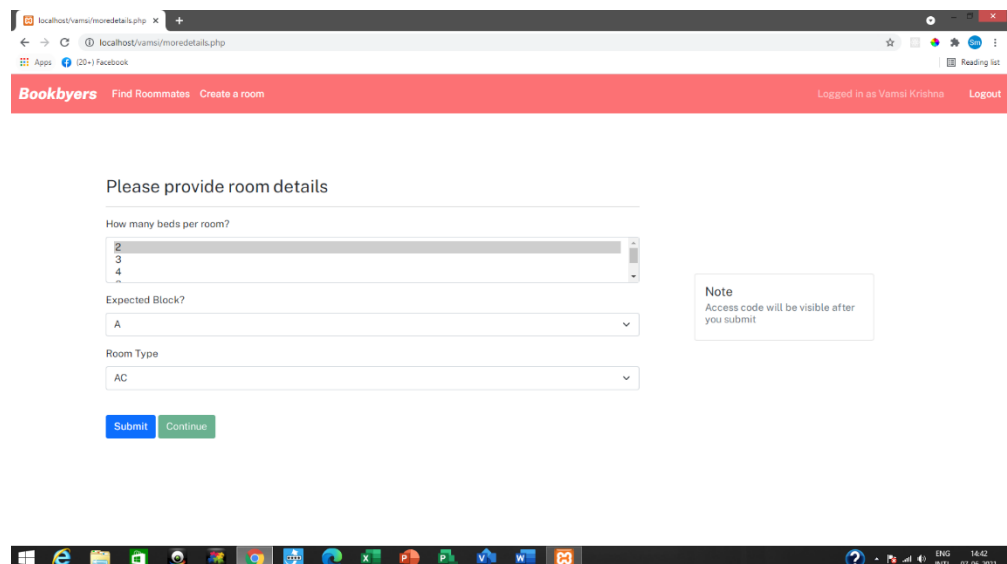
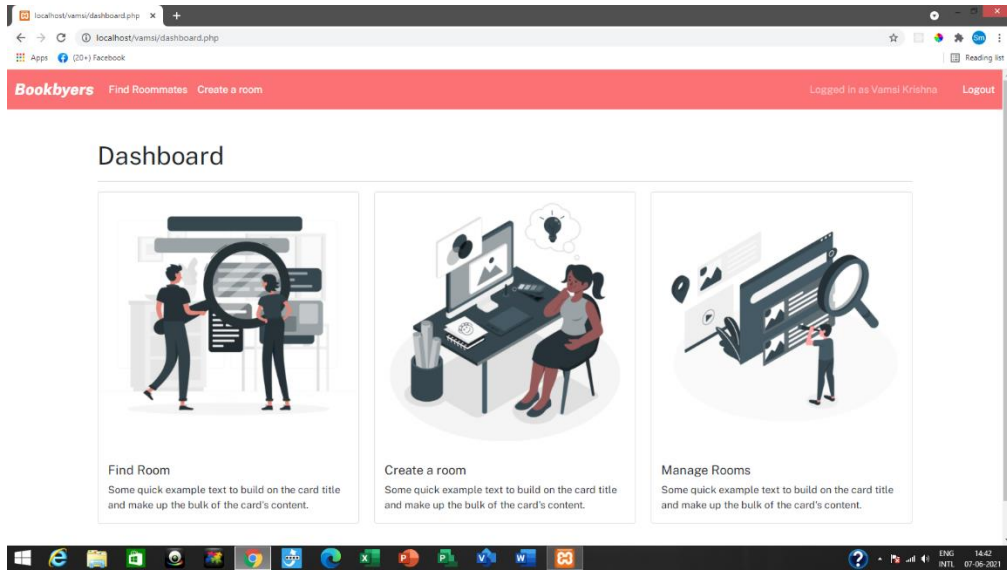
<https://storyset.com/> - For human illustrations

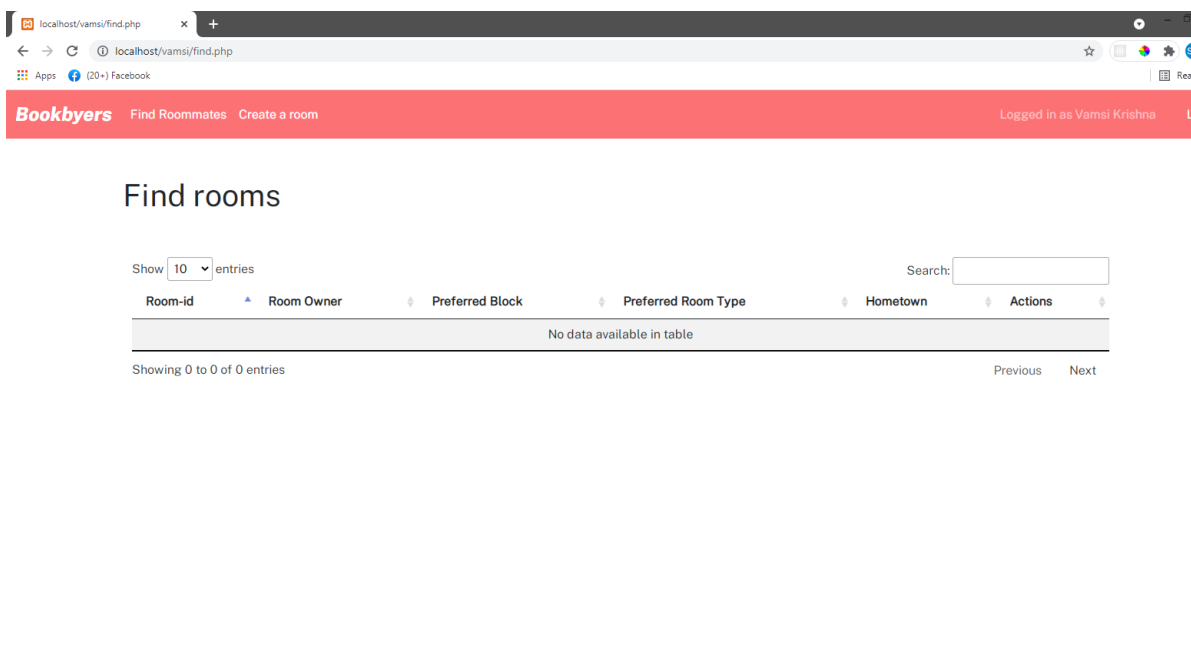
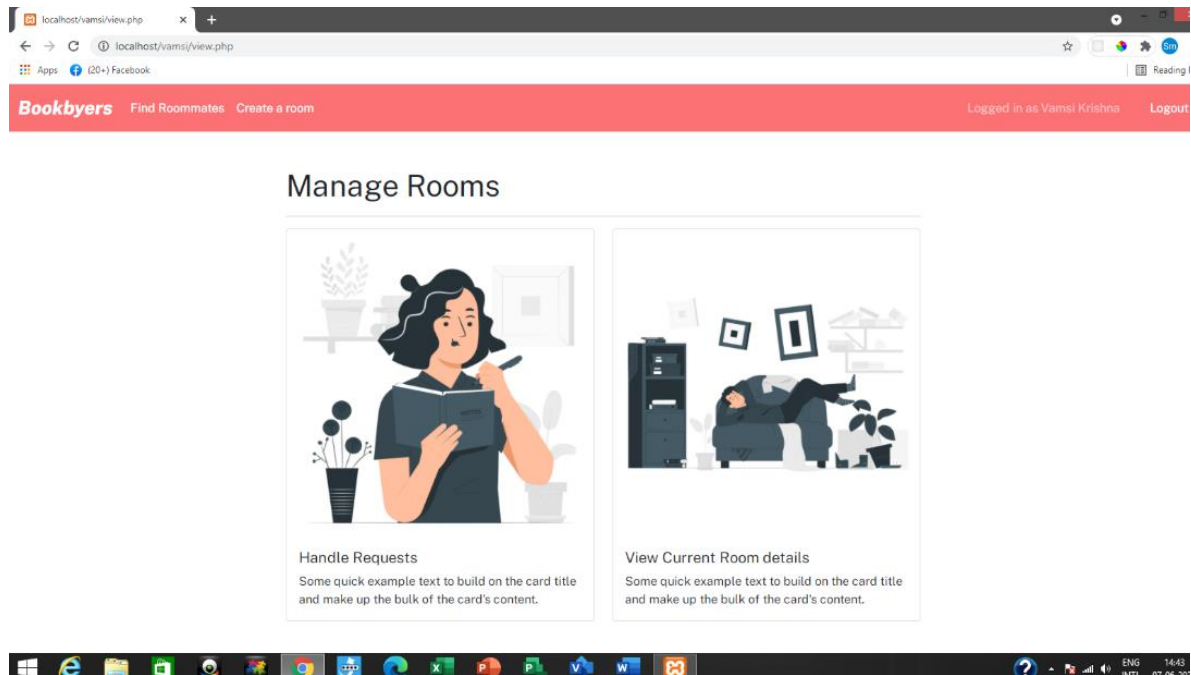
<https://getbootstrap.com/docs/5.0/getting-started/introduction/> - For UI components

<https://medium.com/swlh/building-a-simple-registration-system-with-php-89d6218a063c>

Snapshots

A screenshot of the 'Bookbyers' registration form, accessed via 'localhost/vamsi/details.php#'. The form is displayed on a white background with a red header containing the 'Bookbyers' logo, navigation links, and a 'Logout' button. The form fields are arranged in a grid: 'First name' (Vamsi), 'Last name' (Krishna), 'Username' (with an '@' icon), 'Phone Number' (8074493156), 'Roll Number' (empty), 'Gender' (Choose... dropdown), and 'State' (Choose... dropdown). Below the fields is a yellow warning box with the text 'Please read the [terms and conditions](#) before you submit'. At the bottom is a blue 'Submit details' button.





Source Code

https://github.com/JayakumarClassroom/19BIT0238_Proj