REVA UNIVERSITY
Bengaluru, India

A Mini Project Report On

"HOSTEL ROOMMATE ALLOTMENT SYSTEM"

Submitted

In partial fulfillment of the requirement for the VI Semester of Bachelor of Technology in Computer Science and Engineering during the academic year 2018-19

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CERTIFICATE

This is to certify that the mini project entitled "**HOSTEL ROOMMATE ALLOTMENT** SYSTEM" is a bonafide work carried out by**, Neha Yadav ,Nithesh G, Nayaz Ahamed I S, Mrinal Mohan,** bearing **R16CS271, R16CS277, R16CS269, R16CS259** respectively in partial fulfillment of 6th semester of Computer Science and Engineering program of Bachelor of Technology, REVA University during the academic year 2018-19. It is certified that all the corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the school library. The mini-project report has been approved as it satisfies the academic requirements in respect of mini-project prescribed for the 6th semester of CSE program.

Signature of the Guide

(SHRUTHI G)

Signature of the Director

(Dr. Sunilkumar S. Manvi)

Signature of External

ACKNOWLEDGEMENT

Any given task achieved is never the result of efforts of a single individual. There are always a bunch of people who play an instrumental role is leading a task to its completion. Our joy at having successfully finished our mini project work would be incomplete without thanking everyone who helped us out along the way. We would like to express our sense of gratitude to our REVA University for providing us the means of attaining our most cherished goal.

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ABSTRACT

In our University there are students of different states and countries who use the accommodation facility of our hostels. A significant amount of students tend to feel homesick and are unable to perform well in college due to lack of compatibility with their roommates, who belong to a totally different culture with a different personality.

This is a major problem among freshers and according to online research 65% of students suffering from depression is due to feeling homesick and lack of socialism and hence, it is a major problem that need to be solved as soon as possible and thus this project proposes a minor step towards solving this major problem.

This project presents an idea to solve the above mentioned problem in which a fresher student will be filling a questionnaire and according to that our website will find the most suitable roommate with matching personality and of similar interests.

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Chapter 1

INTRODUCTION

A significant amount of students tend to feel homesick and are unable to perform well in college due to lack of compatibility with their roommates it is a major problem that need to be solved as soon as possible and thus this project proposes a minor step towards solving this problem.

Our project is a web based application in which students can fill a questionnaire. According to the answers a matching algorithm searches a perfect roommate, from a database.

1.1 Motivation:

Increased rate in student depression due to lack of social interaction in college.
Unhealthy roommate conflicts.
Poor academic result of hostilities as compared to day scholars.

1.2 Objectives of the project:

The visionary aim of this project is to achieve the speed and accuracy with which the roommates are identified; this is achieved with the help of technology i.e. HTML, CSS, and PHP.

The main objective of our project is to build a user-friendly website with easy to answer survey so as to provide the hostilities with most suitable room partners.

As colleges and universities have evolved, students with disabilities have been given greater support and resources to allow them to thrive in the collegiate atmosphere.

Chapter 2

LITRATURE SURVEY

The challenges of living with a roommate

-The purpose of this study was to explore the challenges that students face while living with a roommate. These were explored to determine the impact those challenges have on their experience living on campus.A survey was adapted from a study on living with a roommate and a study on the supports for college students with disabilities.
Drawback is that it considers students with only disabilities.[1]

Understanding roommates, conflicts using technology

-Roommates seem to go hand in hand with the college experience. Conflicts are inevitable in life and when a pair or small group of college students live together, conflict is likely to occur. The purpose of this study was to find out what conflicts roommates experience, how they communicate those conflicts, and how they resolve those conflicts. All conflicts would involve a Minnesota State University, Mankato (MSU) student and their roommate(s). An online survey, consisting of twenty questions, was created and administered to Dr. Kristen Treinen's SPEE 100: Fundamentals of Speech Communication class; twenty out of 750 students responded. Drawback is that the research was done only for the students of a particular university of USA [2].

The Virtual Search for perfect roommate

-The University of Toronto Student Housing Service introduced its new Roommate Finder, an online matchmaking service that allows students to find the right person with whom to share an apartment.[3]

Chapter 3

SYSTEM DESIGN AND ANALYSIS

EXISTING SYSTEMS:

The Virtual Search For the Perfect Roommate- University Of Toronto.

-The University of Toronto Student Housing Service introduced its new Roommate Finder, an online matchmaking service that allows students to find the right person with whom to share an apartment.

Roomster - Android Application.

-Roomster is a roommate finder and roommate search service. Roomster has verified Roommates and rooms for rent. Search Roommates, Apartments & Sublets.

Roomiematch.com - A Web Application For Finding the Roommate.

-Since anyone contacting you will have access to your Roommate Behavior Ratings, they should be good roommate matches.

However, the only subscribers that will be able to contact you will be Cheap Roommate Searchers (other Free Roommate Searchers won't have access to your contact info).You stay in this category unless you choose Cheap Roommate Search.

PROPOSED SYSTEM:

The proposed system is basically a web based application where, we are going to give the questionnaire for the students , based on their response the matching algorithm searches a perfect roommate .

Comparing to other existing system, our system is student friendly without any complicated procedures.

DESIGN AND IMPLEMENTATION:

Step 1: Start

Step 2: If login id exists go to step 3,

Else go to step 5

Step 3: LOG IN

Go to the Login Page.

Enter the Username and Password.

If Credentials match go to next Step else Step 5.

Step 4: Login Successful. Go to step 6.

Step 5: SIGN UP

Click on Sign-up Button.

Enter details like Name, Branch, Year, E-Mail, Password.

Sign-up Successful. Go to step 3.

Step 6: Answer the questions and submit .

Step 7: The matched student details (SRN,email-id,name) are displayed along with number of questions matched.

Step 8: Stop

Chapter 4

SYSTEM REQUIREMENTS

4.1 Hardware requirements:

a) Pentium and above Processor.
b) 2GB RAM.
c) Keyboard.
d) Hard disk.
e) Internet Connection.

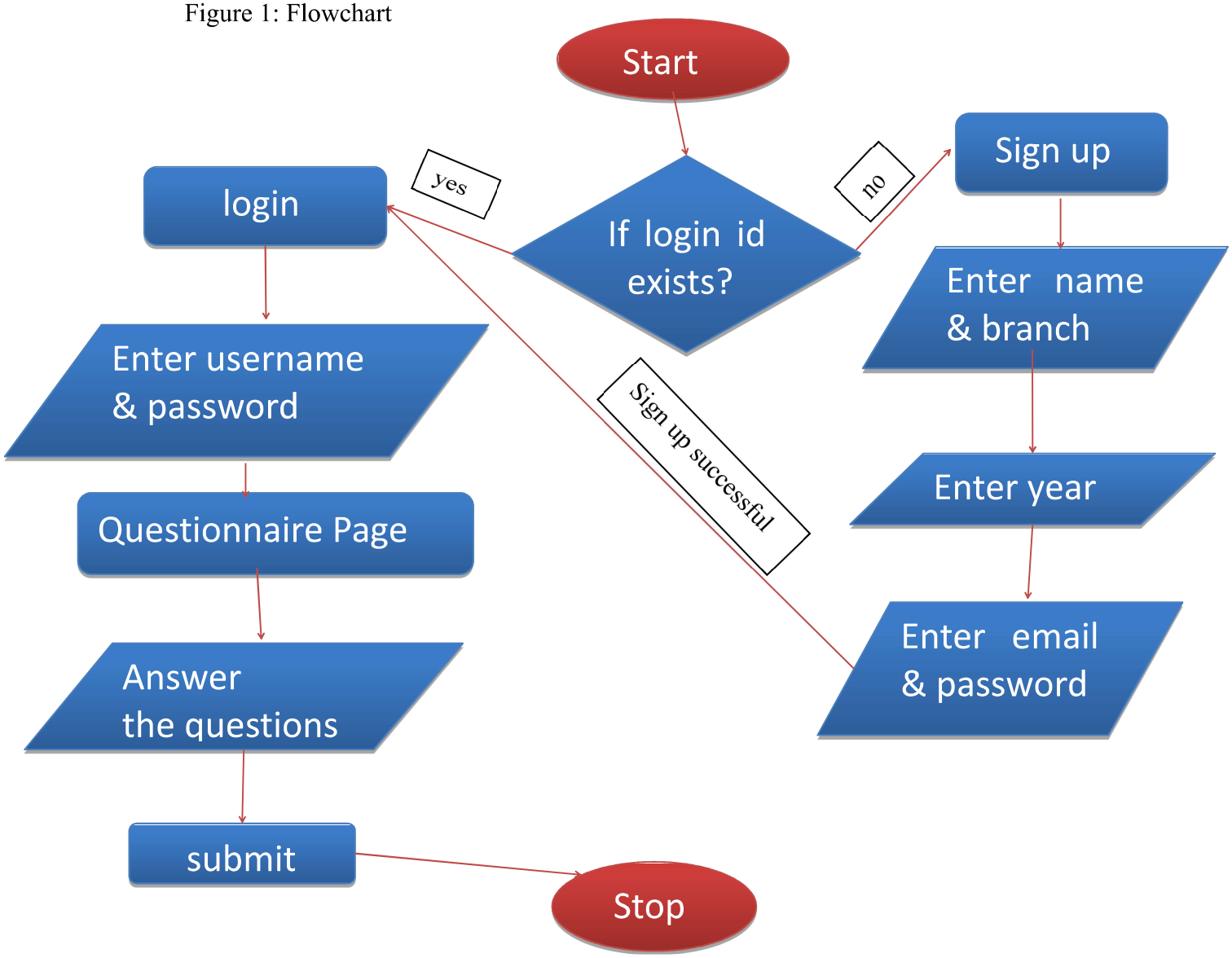
4.2 Software requirements:

a) **Win XP/ Win 7/ Win 10**: Microsoft Windows is a group of several graphical operating system families, all of which are developed, marketed, and sold by Microsoft. Each family caters to a certain sector of the computing industry.
b) **HTML**: Hypertext Mark-up Language is the standard mark-up language for creating web pages and web applications. With Cascading Style Sheets and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web
c) **XAMPP**: XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, Maria DB database, and interpreters for scripts written in the PHP and Perl programming languages.
d) **PHP**: Hypertext Pre-processor is a general-purpose programming language originally designed for web development. It was originally created by Rasmus Lerdorf in 1994.

Chapter 5

METHODOLOGY

Figure 1: Flowchart



In the above control flow diagram,

The student is asked to enter the login id and password if he is already a registered user, if not, he should sign-up by entering his/her name, branch,year ,email and password.

Upon successful sign-up the browser will take him/her to the login page and after the successful login he/she would be given with a set of questionnaires .

Students should answer the questions based on their interest, the result of this process will be displayed in the matched student details web page when student clicks on submit button.

Chapter 6
EXPERIMENTAL RESULTS

Snapshots:

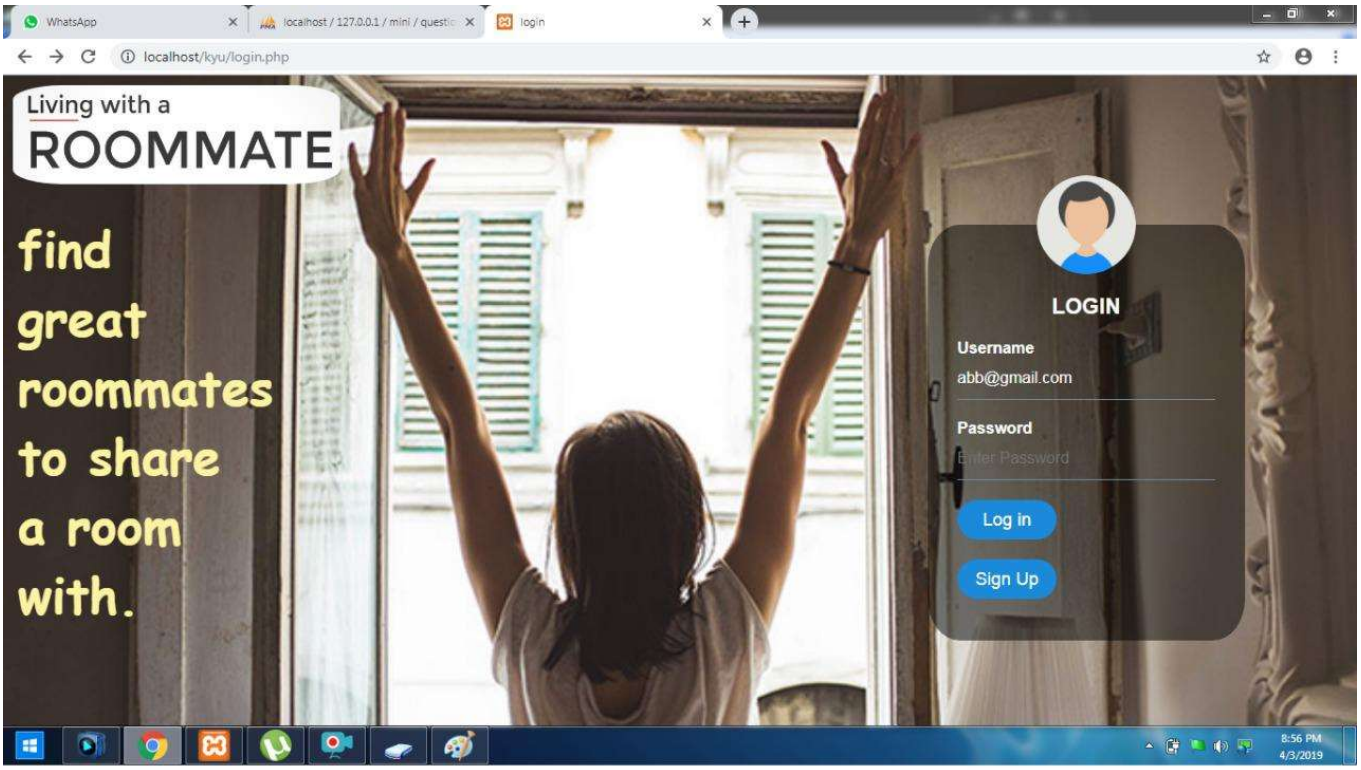


Figure 2: Login Page

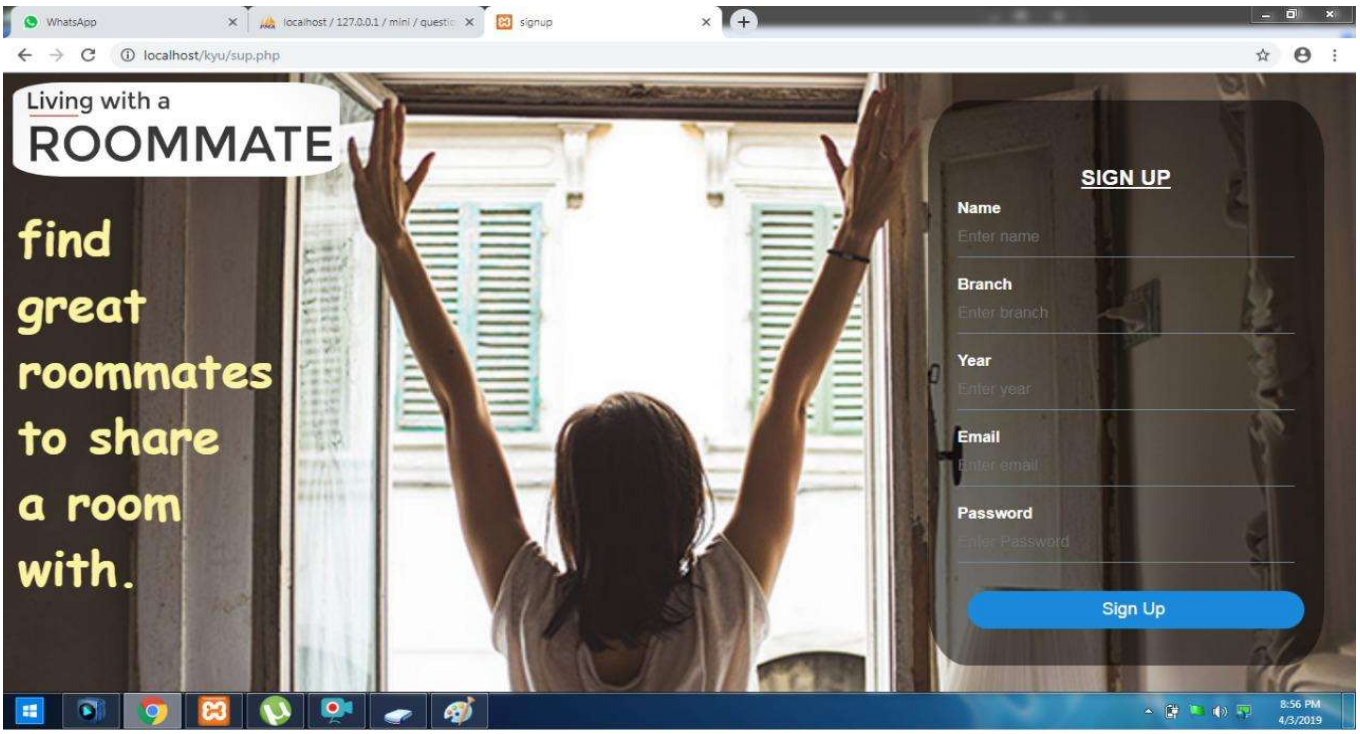


Figure 3: Sign-up Page

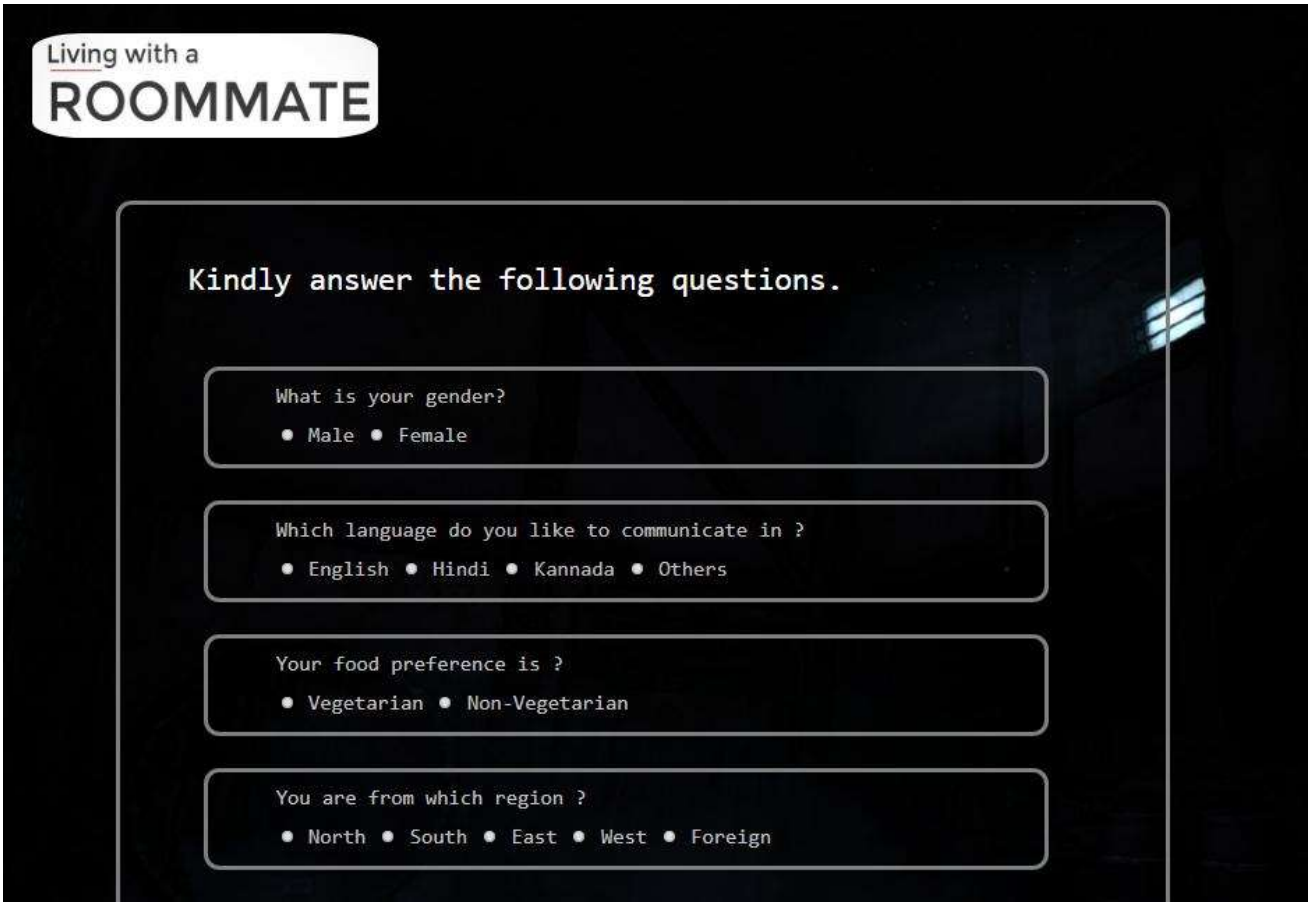


Figure 4: List of questionnaire.

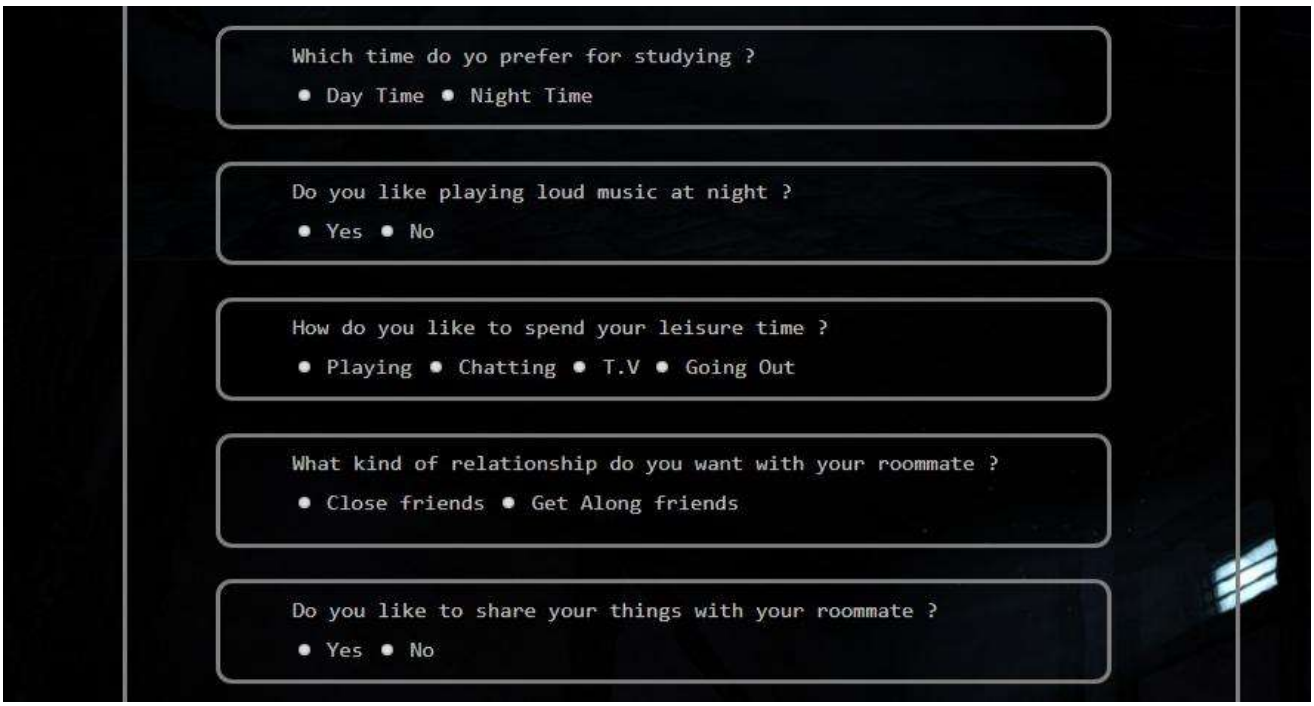


Figure 5: List of questionnaire.

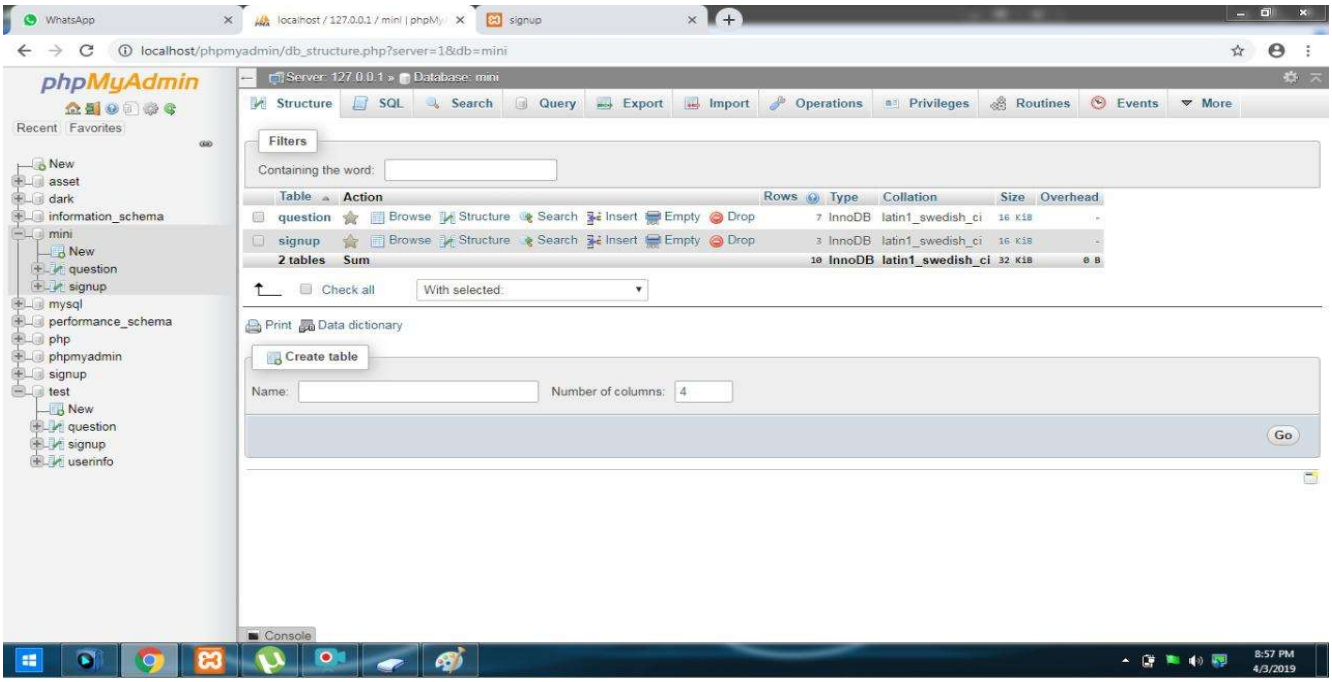


Figure 6: Tables in Database.

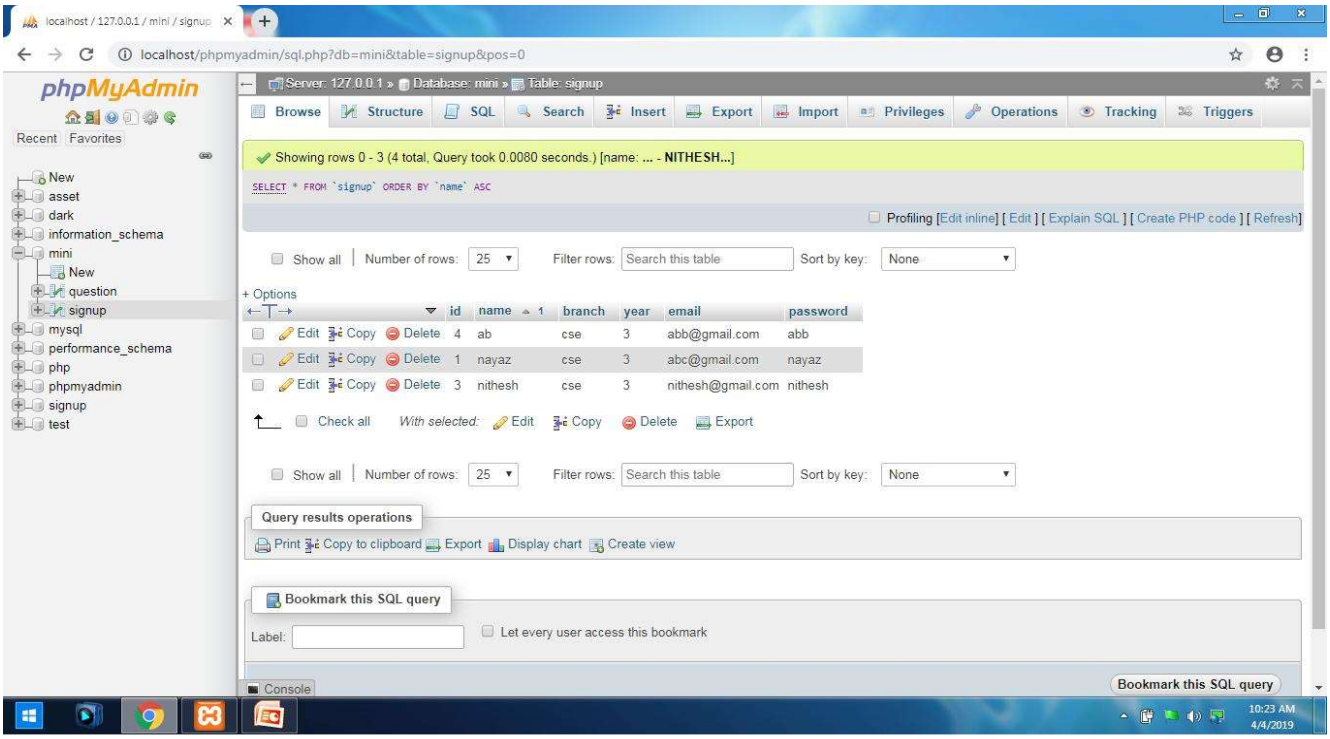


Figure 7: Sign up table.

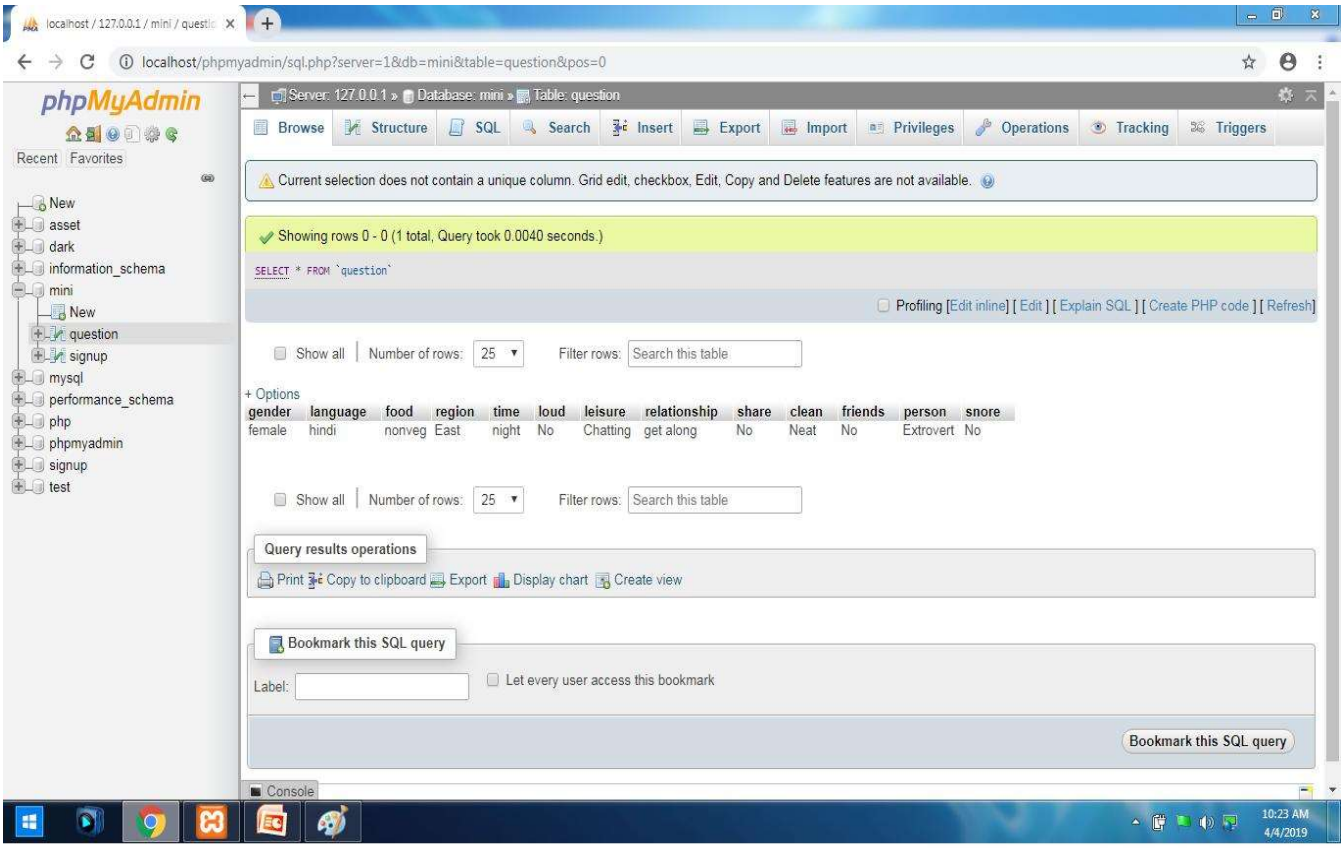


Figure 8: Question table..

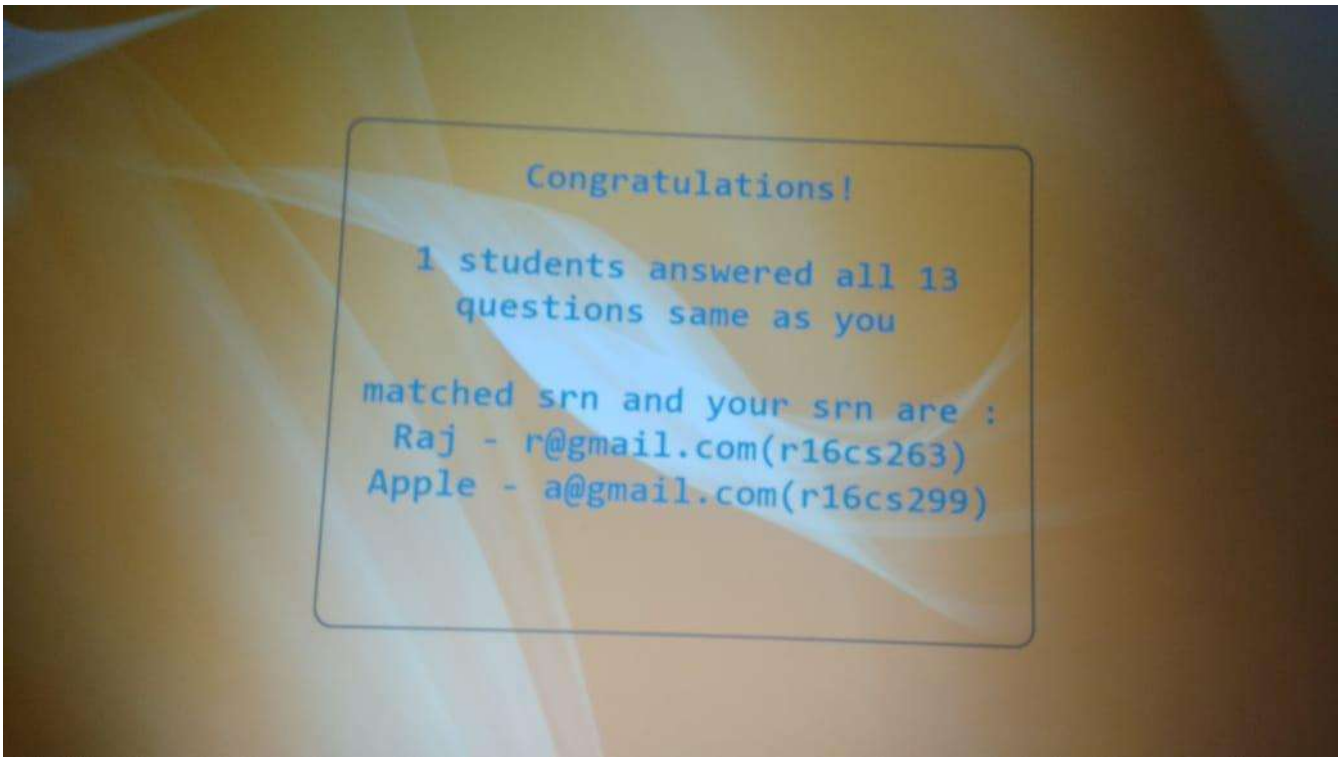


Figure 9: Matched student results.

Table 1: Sign-up Table

FIELD ID	DESCRIPTION	FIELD DATA TYPE	FIELD SIZE
1	ID	VARCHAR	255
2	Name	VARCHAR	255
3	Branch	VARCHAR	255
4	Year	VARCHAR	255
5	Email	VARCHAR	255
6	Password	VARCHAR	255

Table 2: Question Table

FIELD ID	DESCRIPTION	FIELD DATA TYPE	FIELD SIZE
1	Gender	VARCHAR	255
2	Language	VARCHAR	255
3	Food	VARCHAR	255
4	Region	VARCHAR	255
5	Time	VARCHAR	255
6	Loud	VARCHAR	255
7	Leisure	VARCHAR	255
8	Relationship	VARCHAR	255
9	Share	VARCHAR	255
10	Clean	VARCHAR	255
11	Friends	VARCHAR	255
12	Person	VARCHAR	255
13	Snore	VARCHAR	255

Chapter 7

APPLICATIONS

It has a wide range of applications for people of academia as well as corporate world:

- Used in Hostels to find compatible roommate.
- The similar structure (idea) could be adopted for 'PG Roommate Allotment'.
- Working professionals can use to find a roommate.
- Is a means of socializing and adjusting for people new to city or state.
- Similar structure is present in matrimony websites.

CONCLUSION AND FUTURE ENHANCEMENT

An attempt has been made to develop a user-friendly web based application in which students can fill a simple as efficient questionnaire and search for their compatible roommate.

The development of the mini project has given us a good exposure to web development and MYSQL by which we learnt an efficient and easy way to solve roommate problems to a certain extent.

Hence, it is helpful for us even to take up this project further with better technologies and provide a contribution to Academic world.

The future enhancements for this project could include:

1) The project can also include direct chatting facility with your matched roommate.

2) The code can also be developed to show which questions were matched positive and which were negative.

3) The resultant matched view could be extended to show further details of matches along with SRN and name.

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[2] K Halpin **“ Understanding roommates conflicts using technology”** -2009 .

[3] Graham F Scott **“The Virtual Search for perfect roommate” -** University Of Toronto.

WEBSITES:

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