### The Four Year Relation

### A

### MINOR PROJECT-I REPORT

Submitted in partial fulfilment of the requirements for the degree of

### **BACHELOR OF TECHNOLOGY**

in

### **COMPUTER SCIENCE & ENGINEERING**

By

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Dec-2021

### **CERTIFICATE**

I hereby certify that the work which is being presented in the B.Tech. Minor Project-I Report entitled **The Four Year Relation,** in partial fulfilment of the requirements for the award of the degree of *Bachelor of Technology* in *Computer Science & Engineering* and submitted to the Department of Computer Science & Engineering, *Sagar Institute of Science & Technology* (SISTec), Bhopal (M.P.) is an authentic record of my own work carried out during the period from July-2021 to Dec-2021 under the supervision of Prof. Rahul Dubey. The content presented in this project has not been submitted by me for the award of any other degree elsewhere.

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This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

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### **ABSTRACT**

In this project **The Four Year Relation** describes the four year of relation between Students and Hostel as we all know hostels play an important role in every student college life. The primary purpose for making this project is to solve REAL WORLD PROBLEMS. In the present scenario it has been observe that students suffer to find appropriate Hostel Rooms and to allot rooms manually is quite a long process. So, this project provides a platform which helps students to find room availability in College Hostel from any location according to their needs. Thus, The Four Year Relation will be a great outcome in future where all students find this project an efficient way to look forward for finding hostel rooms availability as per their needs. Following are the modules included in the project:

<u>1.Admin</u>: Admin is responsible to see the hostelers details, appointing and removing Hostel Managers and also see the person details who wants to contact us for information and their solution of their queries.

<u>2.Manager</u>: Manager is responsible to see room allotment of the hosteler, to check cleaning facility, to give solution of complaints, adding and removing the hosteler and also adding and removing mess.

<u>3.Student:</u> Student is responsible to apply for room availability, apply for mess, raise their complaints.

This project is a Web Application where all the functionalities perform as mentioned above.

### ACKNOWLEDGEMENT

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### **LIST OF ABBREVIATIONS**

ACRONYM	FULL FORM
MS VS Code	Microsoft Visual Studio Code
РНР	Hypertext pre-processor
MySQL	My Structured Query Language
HTML	Hypertext Markup Language
CSS	Cascading Style Sheet
JS	JavaScript
GB	Gigabyte
ER-Diagram	Entity Relationship Diagram
SRS	Software Requirement Specification
UML	Unified Modelling Language

# Chapter 1 Introduction

### **CHAPTER-1**

### **INTRODUCTION**

### 1.1 About Project;

- The Four Year Relation is a web application portal.
- Following are the modules included in the project:

### 1.1.1 Admin:

- Admin is the core module. It is responsible to see room allotment of the hosteler.
- Adding and removing the Hostel Manager, also view the enquiry by anyone who visit the website.

### 1.1.2 Hostel Manager:

- ➤ Hostel manager is responsible to see the room allotment request, see details of empty rooms and also responsible to vacate the rooms.
- ➤ Hostel manager see mess allotment by the students, allot the mess and vacate the mess seat when student leave hostel.
- ➤ Hostel manager is responsible to see the complaints raised by the students.

### 1.1.3 <u>Student</u>:

- > Students can apply for rooms and also apply for the mess.
- Raise their complaints against any problem.

### 1.2 Purpose:

The primary purpose for marking this project is to solve REAL WORLD PROBLEMS. It has been observed that students suffers to find appropriate Hostel Rooms. So this project provides a platform which helps students. In the recent situation every things has gone to be digitalized and a lot of colleges uses their old methods to allot the rooms and if someone wants to book their room. So they need to went at their place and manually book the room.

It creates problem in managing their records and headache of managing the stationery too and also have a chance some one easily manipulate or change the records.

our website is good alternative of that bulky records as well as it has the functionality to manage the students and hear the complaints of students and many more functions.

This project make it way more easier for the students as well as Hostel Manager.

### 1.3 Interface:

- ➤ User Interface:
  - Browser chrome latest version (supports HTML & JS).
- ➤ Hardware Interface:
  - Windows.

### 1.4 Design and Implementation Constraints:

- After sign up, user should validate his/her account.
- ➤ User must have their correct username and password to enter into their online accounts to perform any action.
- > The data is stored in a single database so it's prone to loss due to digital and physical calamities.
- The website requires an internet connection for all it's activity.
- ➤ The Website is available only in English.

### Chapter 2

# Software And Hardware Requirement

### **CHAPTER-2**

### SOFTWARE AND HARDWARE REQUIREMENTS

### 2.1 Software Requirement

### **2.1.1 For Developers:**

- > IDE
  - MS VS code(Microsoft Visual Studio Code(latest version)).
- ➤ Programming Languages(HTML, CSS, and JS).
- **>** Bootstrap Framework.
- > MySQL.
- > PHP(Hypertext Preprocessor).
- > Google Chrome for testing purpose.

### 2.1.2 For End-User:

- > Google chrome (latest version).
- > Internet connectivity.

### 2.2 Hardware Requirement

### 2.2.1 For Developers:

- ➤ **Processor:** Intel(R) Core<sup>TM</sup> i3-5005U CPU @ 2.00GHz\
- ➤ Minimum Ram: 2.00GB

### 2.2.2 For End-user:

➤ Any compatible browser

## Chapter 3

# Problem Description

### **CHAPTER-3**

### **PROBLEM DISCRIPTION**

Online learning is the 'new normal' now and it has been shown to increase day by day. Knowledge sharing and most of the things is done online in the era of 2021. It has been observed that most of the Colleges/Schools are suffering a lot as they did not have the proper system before 2020 but the problem of learning is now improving as the new learning apps and websites are upgrading and developing but In Hostels, hosteler suffers a lot as they doesn't have a proper system for managing the allotment of rooms for each student. Before lockdown allotment of rooms is managed offline when students come to college then they provide rooms manually which is a quite long process.

So,we come with a solution and developed a website named 'The Four year relation' where students can easily allot a room for themselves by just sitting at their homes and in offline mode they need not to follow a long process of room allotment. However, admin can update all the facilities and room availability for the students as per their requirements.

### Chapter 4

## Literature Survey

### **CHAPTER-4**

### **LITERATURE SURVEY**

A literature survey or a literature review in a project report is that section which shows the various analyses and research made in the field of your interest and the results already published, taking into account the various parameters of the project and the extent of the project.

As current room allotment process in hostels is quite long and time – consuming process. It may lead sometimes days to allot a room for each student. To maintain different registers for availability of rooms, availability of mess, complaints registers and many more register. Hence the organization needs new method with enhanced features. Features like, rooms availability, adding and removing student. Students can complaint for any issue or ask for help (if they need something) from Hostel manager. As we keep in our mind we made our website should be user friendly. We hereby are grateful to present our project through this report. Our proposed system is web based. Which provide various User web pages (Forms) for various operations and hence interactive.

### Chapter 5

# Software Requirement Specification

### **CHAPTER-5**

### **SOFTWARE REQUIREMENTS SPECIFICATION**

### **5.1 FUNCTIONAL REQURIEMENTS**

### 5.1.1 Actor Admin

Functional Requirements:

- Authenticate Admin
- View Enquires
- Appoints Hostel manager
- Remove Hostel manager
- View Students Details

### **5.1.2** Actor Manager:

Functional Requirements:

- Authenticate Manager
- View Allotment
- Allot Rooms
- Vacate Rooms
- View Profile
- Allot Mess
- Vacate Mess
- View Complaint
- View student details

### **5.1.3 Actor Student:**

Functional Requirements:

• Authenticate Student

- View Profile
- File Complaint
- Apply for Room Allotment
- Apply for Mess Allotment

### **Actor Admin:-**

### **5.1.1.1:** Authenticate Admin

### Description:

Authenticate the credentials and if user is already a part of system then login is successful and next screen prompts otherwise a message will be displayed ' Invalid credentials'.

### **Post-Condition:**

Successfully logged in to the system.

### Input:

- user\_name[150, mandatory]
- password[20, characters, mandatory]

### `Output:

Successfully logged in/Invaild credentials

### Processing:

The input provided is checked with the entries for the Admin in the database. If same entry is available then message displayed- "Successfully logged in" and the user is redirected to main screen.

If no such entry exist then message is displayed -"Invalid credentials".

### **5.1.1.2:** View Enquires

### Description:

This will let user to show the Enquires made by the Visitors of the website.

### Pre-condition:

The authorized user must be logged in.

### Input:

Click on Communicator Tab.

### Output:

See the Enquires of the Visitors.

### Processing:

When the user selects the communicator section and then clicks on it. The list of Enquires comes in front of him.

### **5.1.1.3:Appoints Manager**

### Description:

This will let user to appoint a Hostel manager in the system by filling information of that Manager.

### Pre-condition:

The authorized user must be logged in.

### Output:

Hostel manager Appoints Successfully.

### Processing:

The input provided is checked with the entries in the database. If same entry is available then message is displayed as "User Already Exist" and the user is redirected back to the Add manager form.

If no such entry exist then the input provided is saved by the system and a message is displayed "Manager Added Successfully".

### 5.1.1.4: Remove Manager

### Description:

This will let the user to remove the hostel manager who's already a part of the system or not any more the part of the system.

### Pre-condition:

The authorized user must be logged in and the manager should exist.

### Input:

Fill some manager Details and click on submit button.

### Output:

Successfully removed the manager.

### Processing:

The entry is updated in the system, and a message is displayed "Successfully removed".

### **5.1.1.4: View Student Details**

### Description:

This will let the user to view the details of the Student.

### Pre-condition:

The authorized user must be logged in.

### Post-condition:

Successfully displayed the all students.

### Input:

Select student option from navigation.

### Output:

Profile displayed.

### Processing:

When the user clicks or selects the students section. This fetch the details of students in the database. All student details is displayed.

If any error exists then a message is displayed "Something went wrong".

### **Actor Manager:-**

### **5.1.2.1:** Authenticate Manager

### Description:

Authenticate the credentials and if user is already a part of system then login is successful and next screen prompts otherwise a message will be displayed 'Invalid credentials'.

### Post-Condition:

Successfully logged in to the system.

### Input:

- user\_name[150, mandatory]
- password[20, characters, mandatory]

### `Output:

Successfully logged in/Invaild credentials

### Processing:

The input provided is checked with the entries for the Manager in the database. If same entry is available then message displayed- "Successfully logged in" and the user is redirected to main screen.

If no such entry exist then message is displayed -"Invalid credentials".

### 5.1.2.2: View Allotment

### Description:

This will let the user to view allotment.

### Pre-condition:

The authorized user must be logged in.

### Post-condition:

Successfully view the allotment.

### Input:

Select the option allotment.

### Output:

Allotment.

### Processing:

When the user selects the allotment option in admin panel. Allotment is displayed. If any error exists then a message is displayed "Something went wrong".

### 5.1.2.3: Room Allotment

### **Description:**

This will let the user to view the Allotment application of the Student And allot the rooms to the students.

### Pre-condition:

The authorized user must be logged in and student must apply for room allotment.

### Post-condition:

Successfully Allot the rooms to the students.

### Input:

Select allocate rooms option from navigation and click on allocate to allocate the rooms.

### Output:

Room Allocated successfully.

### **Processing:**

When the user clicks on the allocate button. The room is allotted to students in the database.

### 5.1.2.4: Vacate Rooms

### **Description:**

This will let the user to Vacate the Rooms of the student who's already a part of the system or not any more the part of the system.

### Pre-condition:

The authorized user must be logged in.

### Input:

Fill the room details and Click on vacate button.

### Output:

Successfully Vacate the room.

### Processing:

Message is displayed "Successfully Vacate the room".

### **5.1.2.5: View Profile**

### Description:

This will let the user to view the details of the user.

### Pre-condition:

The authorized user must be logged in.

### Post-condition:

Successfully displayed the Profile of the user.

### Input:

Select Profile option from navigation.

### Output:

Profile displayed.

### Processing:

When the user clicks or selects the profile section. The input provided is checked with the entries in the database. User's profile is displayed.

If any error exists then a message is displayed "Something went wrong".

### 5.1.2.6: Mess Allotment

### Description:

This will let the user to view the Allotment application of the Student And allot the Mess to the students.

### Pre-condition:

The authorized user must be logged in and student must apply for mess allotment.

### Post-condition:

Successfully Allot the mess to the students.

### Input:

Select allocate mess option from navigation and click on allocate button to allocate the mess.

### Output:

Mess Allocated successfully.

### Processing:

When the user clicks on the allocate button. The mess is allotted to students in the database.

### **5.1.2.7: Vacate Mess**

### Description:

This will let the user to Vacate the Mess of the student who's already a part of the system or not any more the part of the system.

### Pre-condition:

The authorized user must be logged in.

### Input:

Fill the Mess details and Click on vacate button.

### Output:

Successfully Vacate the room.

### Processing:

Message is displayed "Successfully Vacate the mess".

### **5.1.2.8: View Complaint**

### Description:

This will let the user to view the complaint raise by students.

### Pre-condition:

The authorized user must be logged in.

### Post-condition:

View the complaint.

### Input:

Select the option view complaint.

### Output:

Complaints of students

### Processing:

When the user selects the complaint section and then clicks on it. The list of complaints comes in front of him. Selecting one complaint will show the detailed view of that complaint.

### **5.1.2.9: View Student Details**

### Description:

This will let the user to view the details of the Student.

### Pre-condition:

The authorized user must be logged in.

### Post-condition:

Successfully displayed the all students.

### Input:

Select student option from navigation.

### Output:

Profile displayed.

### Processing:

When the user clicks or selects the students section. This fetch the details of students in the database. All student details is displayed.

If any error exists then a message is displayed "Something went wrong".

### **Actor student:**

### **5.1.3.1:** Authenticate Student

### Description:

Authenticate the credentials and if user is already a part of system then login is successful and next screen prompts otherwise a message will be displayed 'Invalid credentials'.

### **Post-Condition:**

Successfully logged in to the system.

### Input:

- Rollno[150, mandatory]
- password[20, characters, mandatory]

### `Output:

Successfully logged in/Invaild credentials

### **Processing:**

The input provided is checked with the entries for the Manager in the database. If same entry is available then message displayed- "Successfully logged in" and the user is redirected to main screen.

If no such entry exist then message is displayed -"Invalid credentials".

### 5.1.3.2: View Profile

### **Description:**

This will let the user to view the details of the user.

### Pre-condition:

The authorized user must be logged in.

### Post-condition:

Successfully displayed the Profile of the user.

### **Input:**

Select Profile option from navigation.

### Output:

Profile displayed.

### Processing:

When the user clicks or selects the profile section. The input provided is checked with the entries in the database. User's profile is displayed.

If any error exists then a message is displayed "Something went wrong".

### **5.1.3.3:** File Complaint

### **Description:**

This will let the user to file complaint.

### **Pre-condition:**

The authorized user must be logged in.

### Post-condition:

Successfully filed the complaint.

### **Input:**

Select the option complaint on complaint page.

### Output:

Filed Complaint

### Processing:

When the user selects the complaint section and then clicks on file complaint. An editable form is displayed. After editing the desired information user submit the details. The input provided is saved in the database. The message is displayed "Successfully filed the complaint".

If any error exists then a message is displayed "Something went wrong".

### **5.1.3.4:** Apply for Room Allotment

### Description:

This will let the user to fill the room allotment application.

### Pre-condition:

The authorized user must be logged in and student can't apply for room allotment before.

### Post-condition:

Successfully submit the Allotment application to the manager.

### Input:

Select Hostels option from navigation and fill the details and click on submit for allotment of the rooms.

### Output:

Application submitted successfully.

### Processing:

When the user clicks on the submit button. The application is send to manager for approval.

### **5.1.3.5:** Apply for mess Allotment

### Description:

This will let the user to fill the mess allotment application.

### Pre-condition:

The authorized user must be logged in and student can't apply for mess allotment before.

### Post-condition:

Successfully submit the mess allotment application to the manager.

### Input:

Select Mess option from navigation and fill the details and click on submit for allotment of the mess.

### Output:

Application submitted successfully.

### **Processing:**

When the user clicks on the submit button. The application is send to manager for approval.

### **5.2 NON-FUNCTIONAL REQURIEMENT:**

- 5.2.1 Adaptability
- 5.2.2 Correctness
- 5.2.3 Flexibility
- 5.2.4 Maintainability
- 5.2.5 Reliability
- 5.2.6 User friendly Interface

### **5.2.1: Adaptability**

There can be changes in the details stored in the database about Student, Admin, Room Allotment and their content.

### **5.2.2: Correctness**

The details stored in the database or in the view sections of our software should be same as entered by the actors.

### **5.2.3: Flexibility**

If need arises in future, software can be modified to change the requriements.

### **5.2.4:** Maintainability

Software can be easily repaired and modified if a fault occurs.

### 5.2.5: Reliability

No matter how many Admin or Student logged into the system, system must give the correct results at every point.

### **5.2.6: User Friendly Interface**

Any user technical and non-technical also use this website without any problem.

# Chapter 6 Software Design

### **CHAPTER-6**

### **SOFTWARE DESIGN**

### **6.1 Table Structure**

### 6.1.1 Student Signup Table:-

ATTRIBUTE	DATATYPE
Student_id	varchar(255)
Fname	varchar(255)
Lname	varchar(255)
Mob_no	varchar(255)
Dept	varchar(255)
Year_of_study	varchar(255)
Pwd	Longtext
Hostel_id	int(10)
Room_id	int(10)
Mess_id	int(10)
Mess_card_id	int(10)

### Purpose:-

a. Student\_id -Primary key refers to the Student sign up table.

- b. Fname Contains the first name of the Student.
- c. Lname Contains the last name of the Student.
- d. Mob\_no only one single phone number.
- e. Dept Department of the student.
- f. Year\_of\_study Refers to the student current year of study.
- g. Pwd password for account.
- h. Hostel\_id foreign key constraint refers to the table hostel.
- i. Room\_id—foreign key constraint refers to the table room.
- j. Mess\_id- foreign key constraint refers to the table mess.
- k. Mess\_card\_id- foreign key constraint refers to the table mess\_allocation.

### **6.1.2 Application Table:-**

ATTRIBUTE	DATATYPE
Application id	int(100)
Application_id	Int(100)
Student_id	varchar(255)
Hostel_id	int(10)
Application_status	tinyint(1)
Room_No	int(10)
Message	varchar(255)

### Purpose:-

a. Application\_id – primary key refers to the current student which is auto increment.

- b. Student\_id -Foreign key refers to the Student sign up table.
- c. Hostel\_id Foreign key constraint refers to the table hostel.
- d. Application\_status Refers to the application is approved or not.
- e. Room\_No- Refers to the Room no. from room table.
- f. Message- To display the student message.

### 6.1.3 Application mess table:-

ATTRIBUTE	DATATYPE	
Application_id	int(100)	
Student_id	varchar(255)	
Mess_id	int(10)	
Application_status	tinyint(1)	
Mess_card_No	int(10)	
Message	varchar(255)	

### Purpose:-

- **a.** Application\_id- primary key refers to the current student which is auto increment.
- **b.** Student\_id- Foreign key refers to the Student sign up table.
- **c.** Mess\_id- foreign key constraint refers to the table mess.
- **d.** Application\_status Refers to the application is approved or not.
- **e.** Mess\_card\_No Refers to the application mess table.
- f. Message- Refers to the application mess table to display the student message

### 6.1.4 Contact us Table:-

ATTRIBUTE	DATATYPE
Id	int(11)
Name	varchar(50)
Phone	bigint(10)
Message	varchar(250)

### Purpose:-

- **a.** Id- primary key refers to the contact table and it is auto incremented.
- **b.** Name:- store the name of the visitor who want to contact.
- **c.** Phone:- for storing the phone number.
- **d.** Message:- refers to the contact table to display the visitor message.

### 6.1.5 Hostel table:-

DATATYPE
int(10)
varchar(255)
int(15)
int(15)
int(10)

### **Purpose:-**

- **a.** Hostel\_id- primary key refers to the table hostel.
- **b.** Hostel\_name- refers to the Hostel name of table hostel
- **c.** Current\_no\_of\_rooms- total number of occupy rooms.
- **d.** No\_of\_rooms- total numbers of available rooms.
- **e.** No\_of\_students- numbers of students in a hostel.

### 6.1.6 Hostel manager Table:-

ATTRIBUTE	DATATYPE	
Hostel_man_id	int(10)	
Username	varchar(255)	
Fname	varchar(255)	
Lname	varchar(255)	
Mob_no	varchar(255)	
Hostel_id	int(10)	
Mess_id	int(10)	
Pwd	Longtext	
Lsadmin	tinyint(1)	

### Purpose:-

a. Hostel\_man\_id- primary key refers the Hostel manager table.

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- **b.** Username- user name for manager to login
- c. Fname- first name of hostel manager
- **d.** Lname- last name of hostel manager
- **e.** Mob\_no- mobile no. of hostel manager.
- **f.** Hostel\_id- foreign key refers to the table hostel.
- **g.** Mess\_id- foreign key refers to the table mess.
- **h.** Pwd- it,s mandatory for login as manager.
- i. Lsadmin- person is manager or not.

#### 6.1.7 mess allocation Table:-

ATTRIBUTE	DATATYPE
Mess_card_id	int(10)
Mess_id	int(10)
Mess_card_No	int(10)
Allocated	tinyint(1)

#### purpose:-

- **a.** Mess\_card\_id- primary key refers to the mess allocation table which is auto incremented.
- **b.** Mess\_id- foreign key refers to the mess table.
- **c.** Mess\_card\_No- give number to the every student.
- **d.** Allocated-check weather it is allocated or not.

# 6.1.8 payment Table:-

ATTRIBUTE	DATATYPE
Student_id	Varchar(25)
Amount	int(10)
Status	tinyint(1)

#### Purpose:-

- **a.** Student\_id- foreign key refers to the student table.
- **b.** Status fees is paid or not.
- c. Amount-amount of fee

#### 6.1.9 room Table:-

ATTRIBUTE	DATATYPE
Room_id	int(10)
Hostel_id	int(10)
Room_No	int(10)
Allocated	tinyint(1)

#### Purpose:-

- **a.** Room\_id- this is a primary key refers to the room table which is auto increment
- **b.** Hostel\_id- this is the foreign key refers to the hostel table.
- **c.** Room\_no. refers to the room number of each room.
- **d.** Alloacted- indicates the room is occupied or vacate.

# 6.1.10 complaint Table

ATTRIBUTE	DATATYPE
id	Int(Auto increment)
Student_id	Varchar(255) foreign key
Status	Tinyint
Message	Varchar(255)

#### Purpose:-

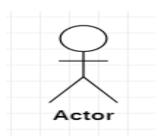
- **a.** id- this is a primary key refers to the complaint table which is auto increment
- **b.** Student\_id- this is the foreign key refers to the student table.
- **c.** message refers to the complaint sent by student.
- **d.** status- indicates the complaint is solved or not.

#### **6.2** Use Case Diagram

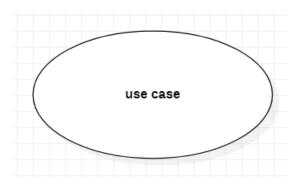
#### **6.2.1 Description**

Use Case diagram is the graphical representation that specifies the functions or activities that the external user performs. In RSMS, it specifies the user functionalities in a graphical manner.

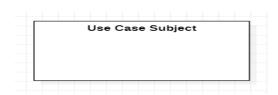
#### **6.2.2 Notation Used**



1:- It represents the actors that are the end users who will use the system.

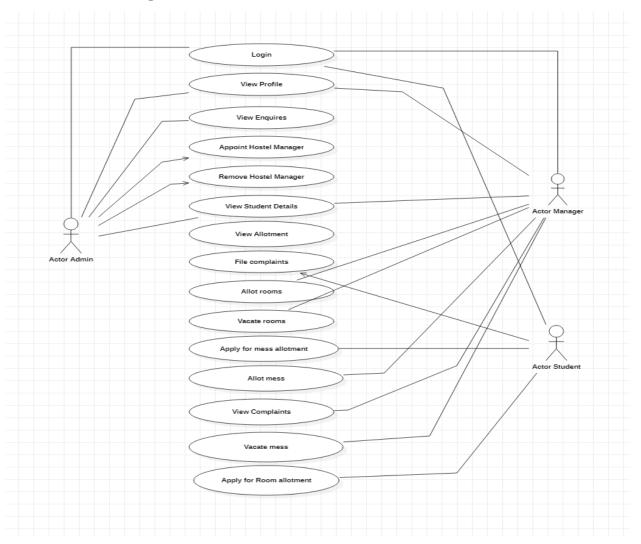


2:- It represents the functionalities/activities of the system.



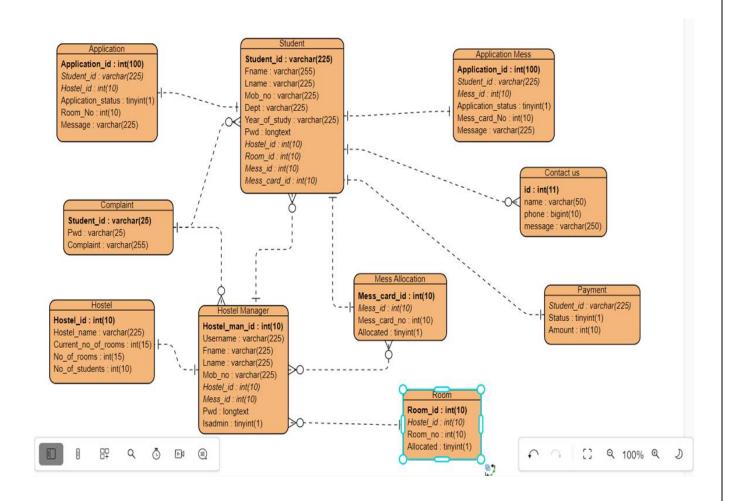
3:- represents the boundary of the system that is the complete environment inside which the system works.

# 6.3.3 Use case Diagram



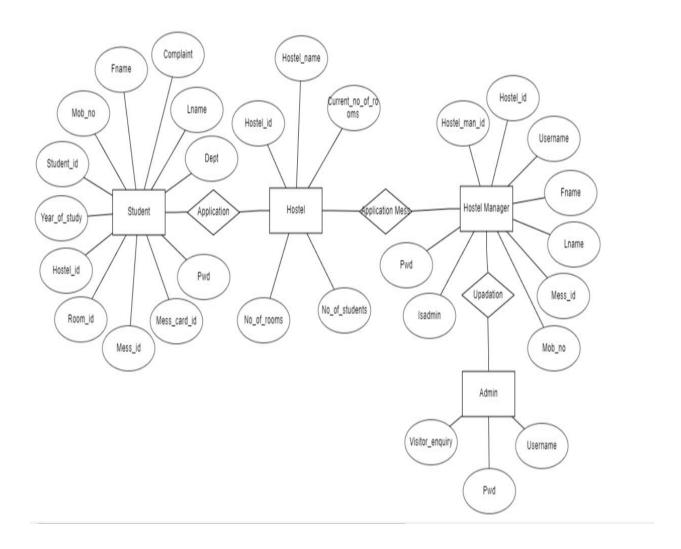
1.1 figure use case diagram

#### 6.3.4 Class Diagram



1.2 figure class diagram

# 6.3.4 ER Diagram



1.3 figure ER diagram

# Chapter 7

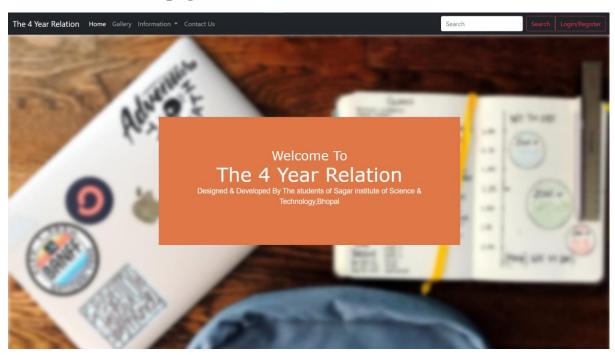
Output

Screen

#### **CHAPTER-7**

#### **OUTPUT SCREEN**

#### 1. Welcome page...



# 2. Welcome page Continue....

#### Hostels - Home Away from Home

Choosing a Hostel is also about choosing a new home. We ensure that students dwell in a healthy environment that helps them to grow and learn without any obstacle.

HOSTEL-That blessed word, which opens the adolescent heart to the most perfect glimpse of the outside world, and helps to carry it thither, as on a bird's wings. At SISTec, we provide the best of Hostel facilities for both boys and girls who come from far-off places. There are three hostels in the campus, two for boys and one for girls to accommodate more than 500 students. Each room is spacious enough to accommodate three students and they have been provided with bed, tables and chairs, cupboards, shoe racks and bookshelves. There is a great emphasis on cleanliness in the hostels. The availability of daily newspapers in all the three hostels keeps the students attuned to the day-to-day happenings. Wi Fi is also being provided so that students can access the internet.

College has Hostel is in the Campus has separate hostels for boys and girls with all modern facilities and attached mess. The hostel mess serves fresh and hygienic food. You will be provided with facilities like 24x7 Library,24x7 electricity,internet, music room, and common room with TV & cable facility, room for indoor games and a reading room, with a collection of national/international newspapers, magazines, etc. The hostels' houses have a fully equipped gym and separate courts for Volleyball, BasketBall, and Badminton and separate grounds for football and cricket lovers The concerned and highly-experienced staff looks after the Hostel assets and ensures that the hostel remains responsive all the time.

#### **Facilities at Hostels**



# 24X7 Power Supply Keeping students's requirements in

Keeping students's requirements in mind, college provides quality residence (offering above average necessities) for their living comforts.

#### Free Wi-fi Internet Service

Internet is the need of today's education, college provides 60 Mbps net speed across campus to the students for endless performance



#### Well Furnished Common rooms

entertainment is essential in life, college always supports and pays attention to the students in having fun

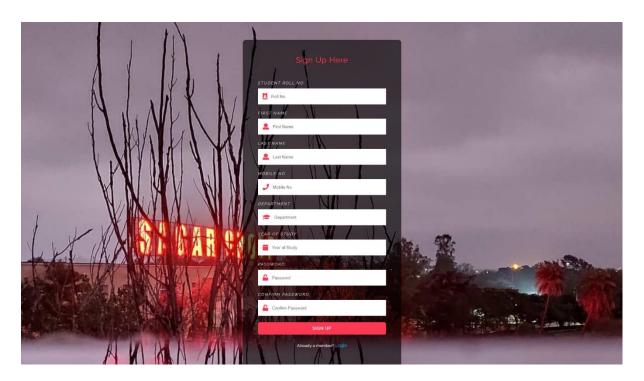
# **3.** Welcome Page End...



# 4. Student/Admin/Hostel-Manager Login page...



# 5. Student Registration Page...



# 6. Admin dashboard page...



# 7. Hostel Manger Appoint and remove...





# 8. Admin Profile...

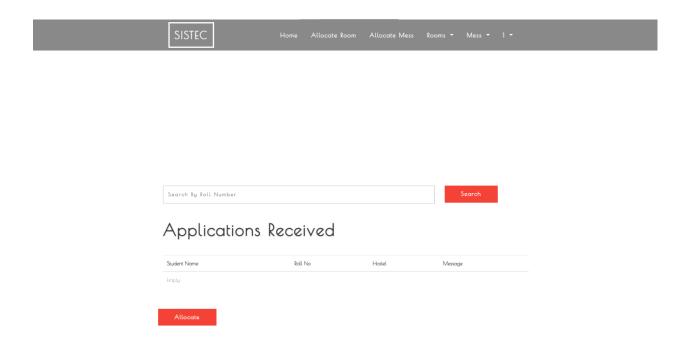


# 9. Manager Dashboard...

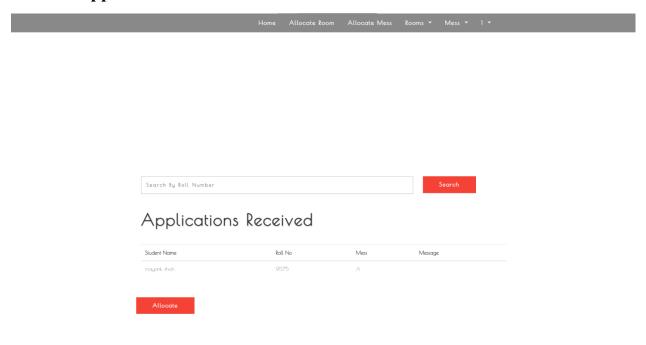


#### SISTec/B.Tech/CS/2021/5/Project-I/72

# 10. Application received for Rooms allotment...



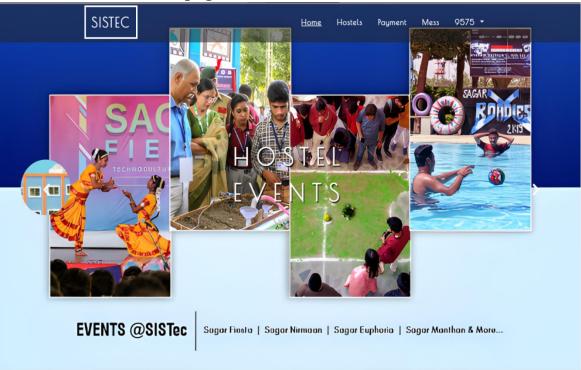
# 11. Application received for mess allotment...



12.Hostel Manager profile...



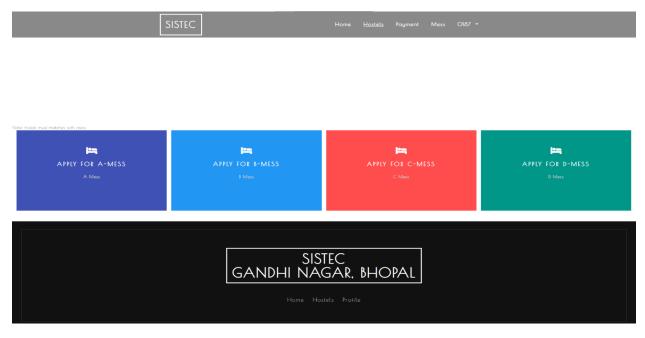
13. Student dashboard page...



# 14. Student Register for Hostel...



# 15. Student register for mess...



#### SISTec/B.Tech/CS/2021/5/Project-I/72

# 16.Student Pay fee first...



# 17. Student profile...



# Chapter 8 Deployment

#### **CHAPTER-8**

#### **DEPLOYMENT**

#### 8.1 INTRODUCTION

This chapter describes how to deploy the project on a fresh machine. It includes Installation steps & snapshots of pre-required software's like XAMPP . XAMPP is a short form for Cross-Platform, Apache, MySQL, PHP, and Perl. XAMPP is a popular cross-platform web server that allows programmers to write and test their code on a local webserver. It includes MariaDB, Apache HTTP Server, and interpreters for PHP and Perl, among other computer languages

#### 8.2Installation of XAMPP Server

#### 8.2.1 Download XAMPP Server

XAMPP is a release made available by the non-profit project Apache Friends. Versions with PHP 5.5, 5.6, or 7 are available for download on the Apache Friends website.

#### 8.2.2 Run .exe file

Once the software bundle has been downloaded, you can start the installation by double clicking on the file with the ending .exe

#### 8.2.3 Deactivate any antivirus software

Since an active antivirus program can negatively affect the installation process, it's recommended to temporarily pause any antivirus software until all XAMPP components have successfully been installed.



#### 8.2.4 Deactivate UAC



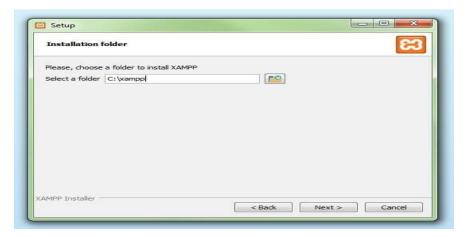
User Account Control (UAC) can interfere with the XAMPP installation because it limits writingaccess to the C: drive, so we recommend you deactivate this too for the duration of the installation process. To find out how to turn off your UAC, head to the Microsoft Windows support pages.



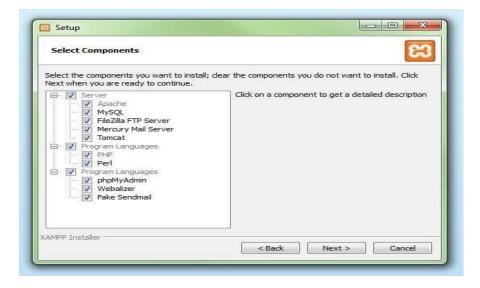
# 8.2.5 Start the setup wizard

After you've opened the .exe file (after deactivating your antivirus program(s) and taken note of the User Account Control, the start screen of the XAMPP setup wizard should appear automatically. Click on 'Next' to configure the installation settings

#### 8.2.6 choose software component



Under 'Select Components', you have the option to exclude individual components of the XAMPP software bundle from the installation. But for a full local test server, we recommend you install using the standard setup and all available components. After making your choice, click 'Next'.



#### **8.2.7** Choose the installation directory

In this next step, you have the chance to choose where you'd like the XAMPP software packet tobe installed. If you opt for the standard setup, then a folder with the name XAMPP will be created under C:\ for you. After you've chosen a location, click 'Next'.

#### 8.2.7 installation process

Once all the aforementioned preferences have been decided, click to start the installation. The setup wizard will unpack and install the selected components and save them to the designated directory. This process can take several minutes in total. You can follow the progress of this installation by keeping an eye on the green loading bar in the middle of the screen



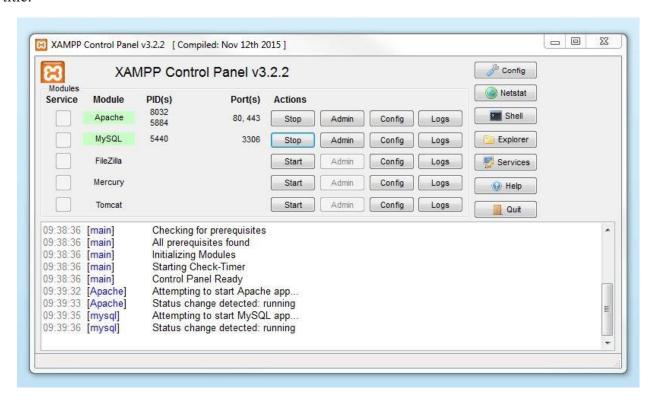
#### 8.2.8 complete installation

Once all the components are unpacked and installed, you can close the setup wizard by clicking on 'Finish'. Click to tick the corresponding check box and open the XAMPP Control Panel once the installation process is finished



#### 8.2 Starting modules

Individual modules can be started or stopped on the XAMPP Control Panel through the corresponding buttons under 'Actions'. You can see which modules have been started because their names are highlighted green under the 'Module' title.



# 8.4 Deploy project on XAMPP Server

Okay so here is the most interesting step. Locate the directory where you installed your XAMPP application. and then go to ".../XAMPP/htdocs/". Extract the project zip file in htdocs folder. Next, import minor\_project\_db.sql file to your phpmyadmin, which came after extraction of zip file.

Finally, project can be executed by typing following url in browser :localhost/minor\_project/index1.php

# **REFERENCE**

https://www.w3schools.com/php/

https://www.w3schools.com/bootstrap/bootstrap\_ver.asp

https://www.w3schools.com/w3css/default.asp

https://www.w3schools.com/sql/default.asp

https://www.w3schools.com/css/default.asp

https://www.w3schools.com/html/default.asp

https://www.geeksforgeeks.org/css-tutorials/

https://www.geeksforgeeks.org/web-development/?ref=lbp

https://www.geeksforgeeks.org/bootstrap-tutorials/?ref=lbp

https://www.geeksforgeeks.org/php-tutorials/?ref=lbp

# PROJECT SUMMARY

# About Project

Title of the project	The Four Year Relation
Semester	5 <sup>th</sup>
Members	Aryan Shah , Mohit modi, Gunjan Khilwani, , Harshita Soni
Team Leader	Aryan Shah
Describe role of every member in the project	Frontend: Mohit, Harshita Backend: Aryan, Gunjan Documentation: Gunjan, Harshita, Aryan
What is the motivation for selecting this project?	The primary purpose for making this project is to solve REAL WORLD PROBLEMS. This project provides a platform which helps students to find room availability in College Hostel from any location according to their needs.
Project Type (Desktop Application, Web Application, Mobile App, Web)	Web Application

**Tools & Technologies** 

Programming language	Html, CSS, Javascript, PHP
used	
Compiler used	
(with version)	
IDE used	Sublime text 4 (version: build 4113), MS VS Code (version: 1.56)
(with version)	
	Html 5, CSS 3, Bootstrap Framework 5.1.1 , Javascript
Front End Technologies	
(with version, wherever	
Applicable)	

	PHP (version 7.3)
<b>Back End Technologies</b>	
(with version, wherever	
applicable)	
Database used	MySQL(1.2.12) and PHP my admin
(with version)	

# Software Design& Coding

Is prototype of the	No
software developed?	
	A 11 16 1 1
SDLC model followed	Agile Model
(Waterfall, Agile, Spiral	
etc.)	
Why above SDLC model is	Agile model has a set of guidelines that are: small, highly
followed?	motivated project team and supports changing requirements. We need both guidelines to develop our project.
Justify that the SDLC	We are the team of four members. Since, we didn't exactly know
model mentioned above is	all the functionalities or the functionalities were frequently
	changing, we use Agile model, so that we could make desired
followed in the project.	changes whenever needed.
Software Design approach	
followed	
(Functional or Object	
Oriented)	
ŕ	Use Case diagram, Table Structures, class diagram and Er
Name the diagrams	Diagram
developed	
(according to the Design	
approach followed)	
In case Object Oriented	
approach is followed,	
which of the OOPS	
principles are	
covered in design?	

No. of Tiers	
(example 3-tier)	
Total no. of front end	23
pages	
Total no. of tables in	12
database	
Database is in which	2NF
Normal Form?	2141
Are the entries in	Yes(password are encrypted)
	Tes(password are energyptea)
database encrypted?	Yes
Front end validations	les
applied (Yes / No)	V
Session management done	Yes
(in case of web	
applications)	
Is application browser	Yes
compatible	
(in case of web	
applications)	
<b>Exception handling done</b>	Yes
(Yes / No)	
<b>Commenting done in code</b>	Yes
(Yes / No)	
Naming convention	Yes
followed	
(Yes / No)	
	We didn't exactly know all the functionalities and the
What difficulties faced	functionalities were frequently changing this thing made the
during deployment of	project little bit complex for us
project?	
Total no. of Use-cases	1
	The four year relation
Give titles of Use-cases	
STITE VILLES OF CHECK	

# **Project Requirements**

1 Toject Requirements	
MVC architecture followed	
(Yes / No)	
If yes, write the name of	
MVC architecture followed	
(MVC-1, MVC-2)	
Design Pattern used	
(Yes / No)	
If yes, write the name of	
Design Pattern used	
Interface type	GUI
(CLI / GUI)	
No. of Actors	3
Name of Actors	Admin, Manager, Student
Total no. of Functional	19
Requirements	
	Correctness, Flexibility, Reliability and Maintainability.
List few important non-	
<b>Functional Requirements</b>	

# **Testing**

Which testing is performed? (Manual or Automation)	Manual
Is Beta testing done for this project?	No

# Write project narrative covering above mentioned points

The title of project is THE FOUR YEAR RELATION This project provides a platform which helps students to find room availability in College Hostel from any location according to their needs. This is a web application which runs on any browser we make this website with the help of sublime text editor and Microsoft vs code IDE which supports HTML, CSS, JS, Php programming languages and MySQL for database. This project follows the Agile SDLC model because we didn't exactly know the functional requirement, we use Agile model, so that we could make desired changes whenever needed. We applied the frontend validations also and for security purpose the database password entry is encrypted, for better understanding of project we made a class diagram, use case diagram, ER Diagram and also done the commenting in code exception handling and session management also. The interface is GUI based and we have 3 actors in our project which is Admin, hostel manager, student. We gave 19 functional dependencies according to the role of actors. We also done the manual testing on different compatible browser with latest version of it.

Aryan Shah (0537CS191019) Mohit Modi (0187CS191091) Gunjan Khilwani (0187CS191058) Harshita Soni (0537CS191063)

(Prof. Rahul Dubey sir)

#### **APPENDIX-1**

#### GLOSSARY OF TERMS

(In alphabetical order)

A

ASD Agile Software Development. An approach to software development under which requirements and solutions evolve through the collaborative effort of self-organizing and small highly motivated team. It advocates continual improvement and encourages rapid and flexible response to change.

C

- CD Class Diagram. A class diagram in the unified modeling language is a type of static structure diagram that describe the structure of a system by showing the system's classes, their attributes, operations, and the relationships among objects.
- **CSS** Cascading Style Sheets. CSS describes how HTML elements are to be displayed on screen, paper, or in other media. It can control the layout of multiple web pages all at once.

 $\mathbf{E}$ 

**ERD** Entity Relationship Diagram. ERD is a diagram that displays the relationship of entity sets stored in a database. ERD help to explain the logical structure of databases. ER Diagrams are created on the basic concepts: entities, attributes and relationships.

F

**FR** Functional Requirements. FR are the working characteristics of a product. These are based on how end users will use the product.

 $\mathbf{G}$ 

- **GHz** Gigahertz. A computer's processor clock speed determines how quickly the central processing unit (CPU) can retrieve and interpret instructions. This helps your computer complete more tasks by getting them done faster.
- GUI The graphical user interface, is a type of user interface that allows users to interact with electronic devices through graphical icons and visual indicators such as secondary notation, instead of text-based user interfaces, typed command labels or text navigation. GUIs were introduced in

#### SISTec/B.Tech/CS/2021/5/Project-I/72

reaction to the perceived steep learning curve of command-line interfaces (CLIs), which require commands to be typed on a computer keyboard.

**GB** Gigabyte. The gigabyte is a multiple of the unit byte for digital information. One gigabyte is one billion bytes.

Н

**HTML** Hypertext Markup Language. HTML is formatting system for displaying material retrieved over the Internet. Each retrieval unit is known as a Web page, and such pages frequently contain hypertext links that allow related pages to be retrieved.

I

**IDE** An Integrated Development Environment (IDE) is a software suite that consolidates the basic tools developers need to write and test software.

M

**MVC** Model View Controller is a software design pattern commonly used for developing user interfaces that divides the related program logic into three interconnected elements. This is done to separate internal representation of information from the ways information is presented to and accepted from the user.

N

**NFR** Non-Functional Requirements. NFRs define system attributes such as security, reliability, performance, maintainability, scalability etc.

 $\mathbf{0}$ 

**OOP** Object Oriented Programming. OOP is a computer programming model that organizes software design around data, or objects, rather than functions and logic.

U

**UML** Unified Modelling Language. It is a general purpose modelling language. It's not a programming language, it is rather a visual language. UML is linked with object oriented design and analysis. UML makes the use of elements and forms associations between them to form diagrams.