



**Tribhuvan University**

**Faculty of Humanities and Social Science**

## **HOSTEL MANAGEMENT SYSTEM**

### **PROJECT REPORT**

**Submitted to**

**Department of Computer Application**

**Saptagandaki Multiple Campus**

*In partial fulfillment of the requirements for the Bachelors  
in Computer Application*

**Submitted by**

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2080/05/25

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**Under the Supervision of**

**Mr. Jiban Pandit**



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**Faculty of Humanities and Social Sciences**

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### **Supervisor's Recommendation**

I hereby recommend that this project prepared under my supervision by SUBHADRA SAPKOTA and TILISMA PAHARI entitled "HOSTEL MANAGEMENT SYSTEM" in partial fulfillment of the requirement for the degree of Bachelor of Computer Application is recommended for the final evaluation.

-----  
**SIGNATURE**

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**Faculty of Humanities and Social Sciences**  
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## **LETTER OF APPROVAL**

This is to certify that this project prepared by SUBHADRA SAPKOTA and TILISMA PAHARI entitled " **HOSTEL MANAGEMENT SYSTEM**" in partial fulfillment of the requirement for the degree of Bachelor in Computer Application has been evaluated. In our opinion it is satisfactory in the scope and quality as a project for the required degree.

<p>-----</p> <p>Mr. Jiban Pandit  <b>Supervisor</b></p> <p>BCA Department,  Bharatpur-10, Chitwan</p>	<p>-----</p> <p>Ravi Tiwari  <b>Program Coordinator</b></p> <p>BCA Department,  Bharatpur-10, Chitwan</p>
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## ABSTRACT

HOSTEL MANAGEMENT SYSTEM is a comprehensive software solution designed to streamline and automate the operations of a hostel facility. This project aims to enhance the efficiency and effectiveness of managing hostel resources, including room allocation, fee collection, attendance tracking, and maintenance requests. The system provides a user-friendly interface for both administrators and residents, allowing them to perform various tasks seamlessly. Administrators have access to a dashboard that enables them to view and manage hostel details, allocate rooms based on preferences and availability, track payments, and generate reports for analysis. Residents can utilize the system to request room changes, report maintenance issues, and make online payments. Additionally, the system incorporates a robust notification system to keep all stakeholders informed of important updates and events. The Online Hostel Management System not only reduces administrative burden but also enhances the overall experience for residents by providing a convenient and efficient platform for hostel-related activities. This project represents a significant step towards modernizing hostel management, offering a reliable and scalable solution for institutions of various sizes.

**Keywords:** Online System, Room allocation software, User interface, Administrator dashboard.

## ACKNOWLEDGEMENT

We would like to express our heartfelt gratitude to all those who have contributed to the successful completion of the Online Hostel Management System project. Firstly, we extend our deepest appreciation to our project guide for their invaluable guidance, support, and insightful feedback throughout the development process. Their expertise and dedication played a pivotal role in shaping this endeavor. We are also thankful to our professors for their encouragement and belief in our capabilities. Furthermore, we would like to acknowledge the immense contribution of our peers who provided valuable suggestions, constructive criticism, and shared their expertise, which significantly enriched the quality of the project. We extend our gratitude to the library staff for providing access to crucial resources. Additionally, We would like to thank our family for their unwavering support and encouragement throughout this journey. Finally, we are indebted to the developers of the technologies and tools that were employed in this project, as their innovations formed the foundation upon which this system was built. This project has been a collective effort, and we are truly grateful to each and every individual who played a role, no matter how small, in bringing this vision to fruition.

We will be ever grateful to our supervisor **Mr. Jiban Pandit**, Lecturer without whose guidance, this project would not have become successful. We are also grateful to our department coordinator **Mr. Ravi Tiwari**.

Finally, our greatest appreciation and love goes to our families, friends and mentors and for sure this would not have happened without their unconditional love, care and support.

Subhadra Sapkota  
Tilisma Pahari

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## **List of Abbreviation**

CSS: Cascading Style Sheet  
DB: Database  
DFD: Data Flow Diagram  
ER: Entity Relationship Diagram  
HTML: Hypertext Markup Language  
OHMS: Online hostel managemenet System  
PHP: Hypertext Pre-processor  
SQL: Structured Query Language  
UI: User Interface

# **Chapter 1: Introduction**

## **1.1. Introduction**

The Online Hostel Management System is a comprehensive software solution designed to streamline and automate the administrative processes involved in managing a hostel or similar accommodation facility. In an era characterized by rapid technological advancements, it has become imperative for institutions, such as educational establishments and organizations, to employ efficient and reliable systems to oversee the accommodation needs of their residents. This system seeks to address the challenges and complexities associated with manual hostel management, offering a user-friendly interface and a wide range of features tailored to meet the specific requirements of hostel administrators, staff, and residents alike.

This innovative system provides a centralized platform where all aspects of hostel management can be seamlessly integrated. From the registration and allocation of rooms to the tracking of occupancy, fee collection, and maintenance requests, every facet of hostel administration is meticulously handled. Moreover, the system offers real-time access to information, ensuring that all stakeholders are kept informed and up-to-date with the latest developments pertaining to hostel operations. Additionally, it incorporates a robust security protocol to safeguard sensitive data, reinforcing the trust and confidence of users.

One of the key strengths of the Online Hostel Management System lies in its ability to enhance transparency and accountability. Through features such as digital record-keeping, automated reports, and audit trails, administrators can easily monitor and analyze various aspects of hostel functioning, allowing for data-driven decision-making. This not only facilitates efficient resource allocation but also aids in optimizing the utilization of available spaces and amenities, ultimately resulting in cost savings and improved service delivery.

Furthermore, the system prioritizes user convenience and accessibility. Residents can conveniently apply for accommodation, view available rooms, and make online payments, reducing the administrative burden on both staff and residents. The integrated communication module also allows for seamless interaction between hostel authorities and residents, facilitating timely dissemination of information and addressing concerns promptly.

In summary, the Online Hostel Management System represents a significant leap forward in

hostel administration. Its user-centric design, robust functionality, and emphasis on automation promise to revolutionize the way hostels are managed, enhancing efficiency, transparency, and overall satisfaction for all stakeholders involved. With the integration of cutting-edge technology, this system not only meets the current needs of hostel management but also provides a scalable and adaptable solution for the future.

In other hand this system will help the owner or the admin to keep the record in the secured way as this will also help to keep the record of the student in a web based medium and the web based medium is now known for the secured medium to keep the record this system is designed to eradicate the out dated means to keep the record of the student as there might be the chances of data loss due to thief and other reasons as to overcome such conditions hotel management system is designed and once the system is ready to use it will be easier to keep the record of the student .

## **1.2. Problem Statement**

There are a lot of drawbacks in keeping and maintaining a hostel. Especially with a manual system. Since most hostels are being run by only one hostel manager, the number of students in a room are sometimes not known by the officer. He has to go room by room to ensure that a room is occupied or not. Sometimes people may be owing in the hostel and they are saved on papers or huge notebooks, and sometimes receipts. If the books should go missing or stolen, one would never be able to know if a student is owing or not. Room allocation also becomes a problem as the officer might not know which rooms are available or not. And some hostels have a lot of rooms or have mare storey and it would be very tedious to go through all storey in search of a free room for an applicant. Also the officer might not know the number of students in a room or know if a room is full or not.

## **1.3. Objectives**

Online Hostel Management system is the system that manages the student data, staff data, student's admission process and create receipts for the fees paid by the student who stay in the hostel and also help in maintaining visitor's messages.

1. Students will no longer apply for their hostel manually.
2. Help the admin to disseminate the information to students without calling for a meeting or moving room to room.

3. Control the status of the hostel fee payment.
4. Edit the details and modify the student's records.

## **1.4. Scope and Limitation**

### **1.4.1 Scope**

The Online Hostel Management System is designed to efficiently manage all aspects of hostel administration, including room allocation, resident registration, fee collection, maintenance requests, and communication between administrators and residents. It offers a user-friendly interface and real-time access to information, enhancing transparency and accountability. The system aims to optimize resource allocation and improve service delivery through data-driven decision-making. It provides a secure platform for residents to apply for accommodation, view available rooms, and make online payments, reducing administrative workload.

### **1.4.1 Limitation**

While the system offers substantial benefits, it's important to acknowledge its limitations. It may require a reliable internet connection for seamless operation, which could be a constraint in certain environments. Additionally, initial setup and training may be needed for administrators and users unfamiliar with the system. The system's effectiveness may also be contingent on regular updates and maintenance to ensure optimal performance. Lastly, it may not completely replace manual intervention in exceptional cases or unforeseen circumstances, which may still require manual oversight.

## **1.5. Report Organization**

The report can be organized into 5 chapters which are given below:

Chapter 1 includes introduction includes the brief introduction of the system, statement of problem, objectives, scope and limitation.

Chapter 2 includes background study and literature review includes the previous work related to the systems and similar works were studied and are summarized.

Chapter 3 includes system analysis and design includes different feasibility analysis and designed system architecture, system flow diagram, data-flow diagram.

Chapter 4 includes implementation and testing includes various implementation method and tools and also contains description of testing.

Chapter 5 includes conclusion and future recommendations includes outcomes of system, conclusion to the system and description about what features can be added in the future.

## **Chapter2: Background Study and Literature Review**

### **2.1Background Study**

As a Student, We can well understand the problems which we face daily in our life. Actually, I have got many things in my mind about the Final project system. And finally, I have planned to do a system for applying online hostel registration, bill payment method, maintain student details, visitor details, and more facilities without any problems for Hostel Management. We was thinking about final project as few days that what to do for the final project. Last week Decided to develop a system for Hostel management which is more usable thing at the current situation for our Hostel Students. When I have discussed with our respective teachers also they have allowed and encouraged us to develop this good system for good purpose of students to save their time and money because they said, usually this activity being as a time consuming for students because they have to get renewal or registration or hostel fees payment form, fill it up, get sign from warden and Director. So, this procedure taking more than two days. This system is designed in favour of the hostel management which helps them to save the records of the students about their rooms and other things. It helps them from the manual work from which it is very difficult to find the record of the students and the mess bills of the students, and the information about those who had left the hostel years before. This system gives an idea about how a student and fee details, room allocation, mess expenditure are maintained in a better way. The hostel management system will also contain special features like how many students are in a room, student's id and free rooms or space available. The administration has a unique identity for each member as well as student details.

### **2.2. Literature Review**

The In this section we are going to analyse the existing system and provide solutions to errors or build a new system all together.

#### **EXISTING SYSTEM**

The existing system is manual based and need lot of efforts and consume enough time. In the existing system we can apply for the hostels online but the allotment processes are done manually. It may lead to corruptions in the allocation process as well as hostel fee calculation. The existing system does not deals with mess calculation .

## DISADVANTAGES:

- More human power
- Data redundancy.
- Difficulty to update data.
- Record keeping is difficult.
- Backup data can not be easily generated.

## PROPOSED SYSTEM

This project is aimed at developing a system for keeping records and showing information about or in a hostel. This system will help the hostel officer to be able to manage the affairs of the hostel. This system will provide full information about a student in the hostel. It will show rooms available or not and number of people in a particular room. This will also provide information on students who have paid in full or are still owing. This system will also provide a report on the summary detail regarding fees and bills students are owing. Also included is a user module for employees or the hostel officer. There will also be an administrator module which will be accessed by the administrator and has the ability to delete, add and edit records. This system will be developed based on Software Development Life Cycle (SDLC) with PHP and MySQL server. PHP is good for the development and design of web based programs while MySQL is good for databases because of its security and its advanced features and properties.

## Chapter 3: System Analysis and Design

### 3.1. System Analysis

Requirement collection provides detailed analysis of user requirements, functional & non-functional requirement and system requirement. The front-end is done using HTML&CSS whereas in back-end JavaScript is used for Client side and PHP for Server side. MySQL is used for Database programming.

#### 3.1.1 Requirement Analysis

##### i. Functional Requirement

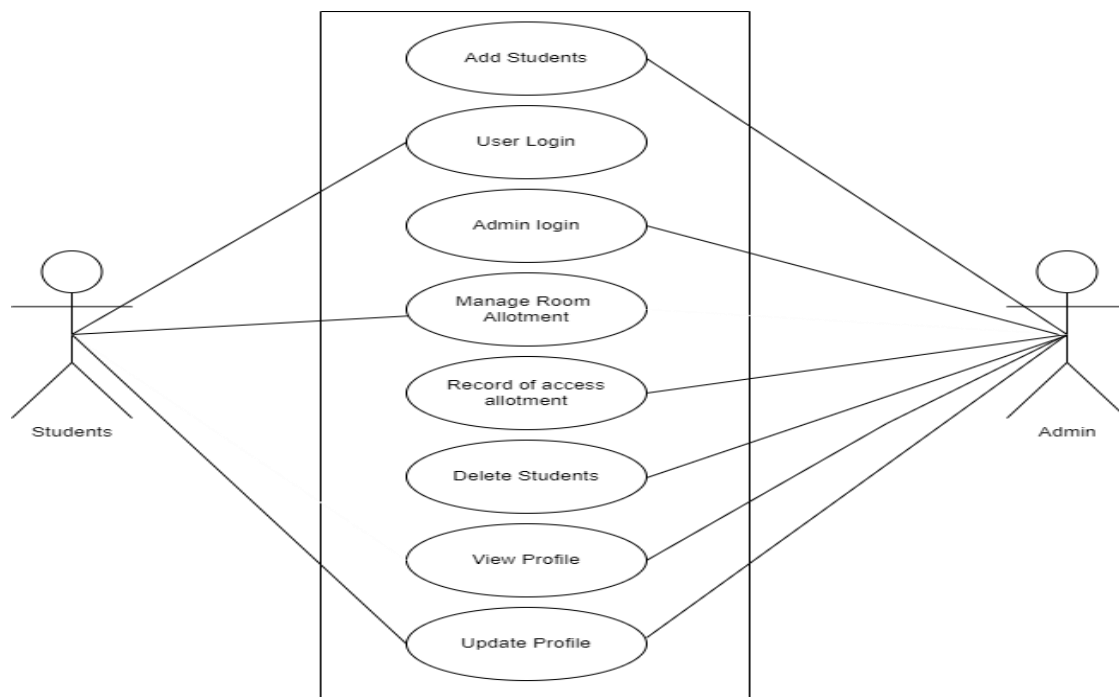


Figure 1:Use Case Diagram of online hostel management system

The use case diagram represents the requirement of the system comprising use cases, students, admin and their relationships which is shown below:

#### Use Cases:

**Add Students:** It enables efficient registration, allocation of rooms, and tracking of occupancy for seamless hostel administration..

**User Login:** It access for residents, enabling them to perform tasks such as viewing available rooms, making reservations, and managing their accommodation details.

**Admin Login:** Allows admin to log into the system as users.

Manage Room Allotment: It Enables facilitates the allocation of rooms to residents based on their preferences, availability, and administrative criteria.

Record of access Allotment: It tracks and logs the allocation of hostel rooms to residents, providing a comprehensive record of room assignments.

Delete Students: It helps to removing their information and allocations from the database which has been inserted incorrect.

View Profile: It allows users to access and update their personal information and preferences related to hostel accommodation.

Update Profile: It allows residents to modify their personal information and preferences within the system.

### **Actors:**

Students: It can only login to the system and update profile.

Admin: Admin is responsible for system management, verification of users, publication of notice result and mailing users.

### **Relationships:**

Students login as a users: Relationship between users and registration.

Students manage as a room : Relationship between students and administration.

Admin logs in: Relationship between users and login.

Admin students add in: Relationship between students and admin.

Admin Update profile : Relationship between Admin and students.

Admin manages the system: Relationship between admin and system management.

### **Constraints:**

One-time login: Students can cast a single registration after login; same credentials can't be used again.

Unregistered Users Cannot login: Only registered users (students or users) can cast login.

## **ii. Non-functional Requirement**

### **Performance Requirements:**

Performance requirements define acceptable response times for system functionality. Depending on the user internet connection speed. The load time for user interface screens should take no longer than two seconds. The log in information shall be verified within five seconds.



**Reliability:**

This quality attribute specifies how likely the system or its element would run without a failure for a given period of time under predefined conditions.

**Portability:**

It usually include the hardware and software platforms on which the information system can run, and how easy it is to transfer the system from one to another.

**3.1.2 Feasibility Analysis****i. Technical Feasibility**

Since the project is design with PHP as code behind and MySQL as back-end it is easy to installing the systems whenever needed. It is more efficient, easy and user friendly to understand by almost everyone. Huge amount of data can be handled efficiently using MySQL as back-end. Hence this project has good technical feasibility.

**ii. Operational Feasibility**

The system is operationally feasible as it provides enough response and throughput time. Also, manpower to operate this system are easily available. The project has been developed in such a way that it becomes very easy even for a person with little computer knowledge to operate it. This software is very user friendly and does not require any technical person to operate .Thus the project is even operationally feasible.

**iii. Economic Feasibility**

Economic feasibility is mainly concern with the cost incurred during their implementation of the software. Since the project is developed using PHP and MySQL which is more commonly available and free. Similarly, it is to recruit persons for operating the software. Since almost all the people are aware of PHP and MySQL. Even if we want to train the person in these areas, The cost involved in training is also very less. Hence this project has good economic feasibility.

**iv. Schedule Feasibility**

The time required to complete the project is calculated and classified using the following Gantt-Chart:

Week \ Task	1	2	3	4	5	6	7	8	9	10	11	12
Planning												
Analysis												
Design												
Documentation												
Coding												
Testing												
Delivery												

Figure 2:Gantt Chart

### 3.1.3 Data Modeling using ER-Diagram

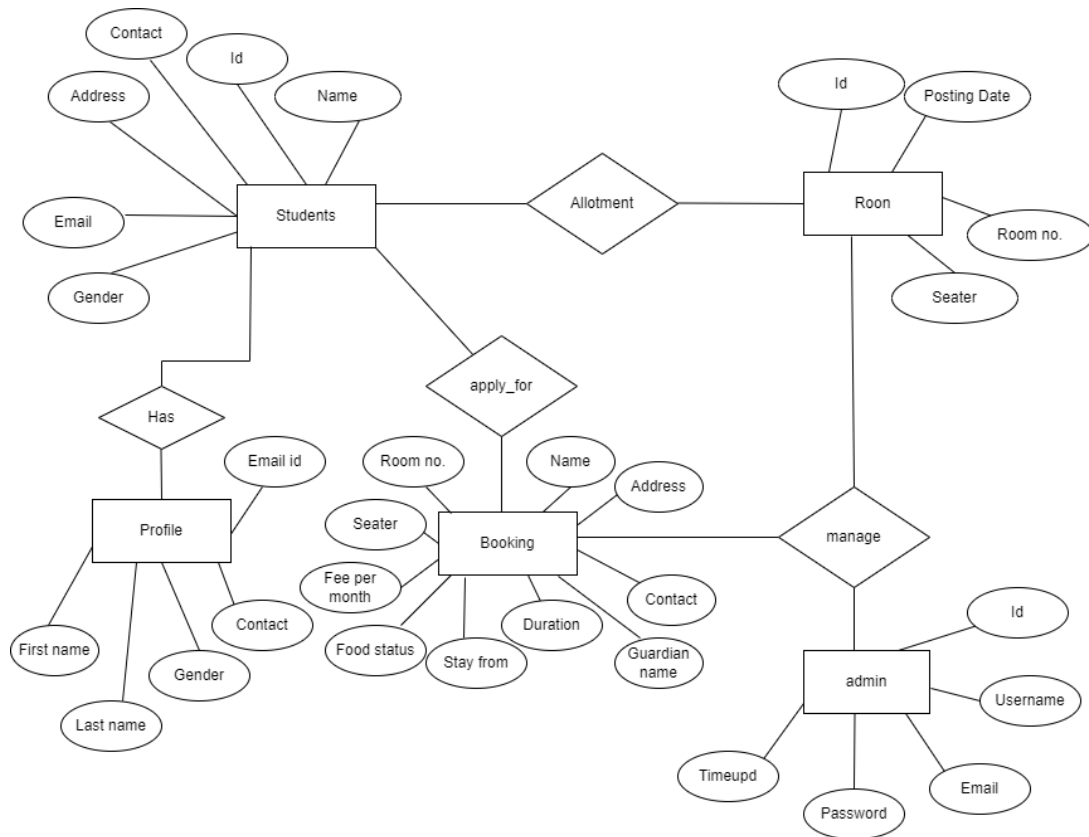


Figure 3:ER-DIAGRAM of HMS

This model shows entities, relationships between entities, mapping and the entity relationship models. User provides all the required information. When registered as users, he/she can logs into students profile. When registered as users he/she is assigned into students portal.

### 3.1.4 Process Modeling using DFD

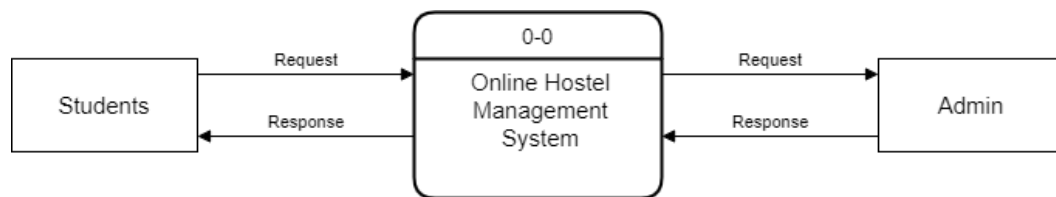


Figure 4:Context Level Diagram of Hostel Management System

The "Students" entity represents individuals who want to login to register and log into student protol.

The "Admin" entity represents individuals who want to register as users and cast their login as users. The "Admin" entity represents the system administrator responsible for verifying registrations, managing users, and viewing record of students. The system interacts with "Students" and "Admin" for registration and login purposes. The "Admin" interacts with the system to verify registrations, manage users, and view record of students. The system automatically sends users IDs and passwords to users after admin verification, allowing users to change their passwords later.

This context diagram provides a high-level view of the interactions and entities within the students system, showcasing the system's relationships with students, users, and the admin.

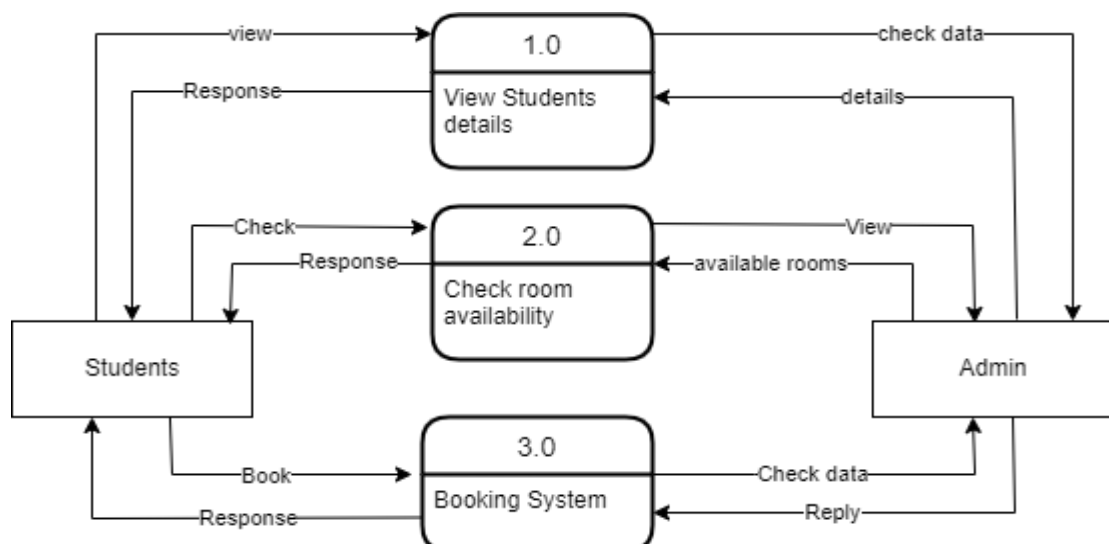


Figure 5:Level-1 DFD Hostel Management System

DFD is an abstract description of the system. DFD are in levels which represent increasing information flow and functional detail. User can fill logins form to be users. All the information and login details are stored in the database. As admin verify users, manages hostel, he/she manages students and logins information too. Admin enables student's protol by enabling student's logins and students system is displayed in dashboard and emailed to the respective email of users. Also, users receives the OTP in their Email account and results are displayed in the dashboard. Users can have five minutes to change their information. Also, user receives OTP before and after the update to system with authenticate OTP. After students is verified by admin, then they receive an email of verification or declination. Users can view result only after admin publishes the information.

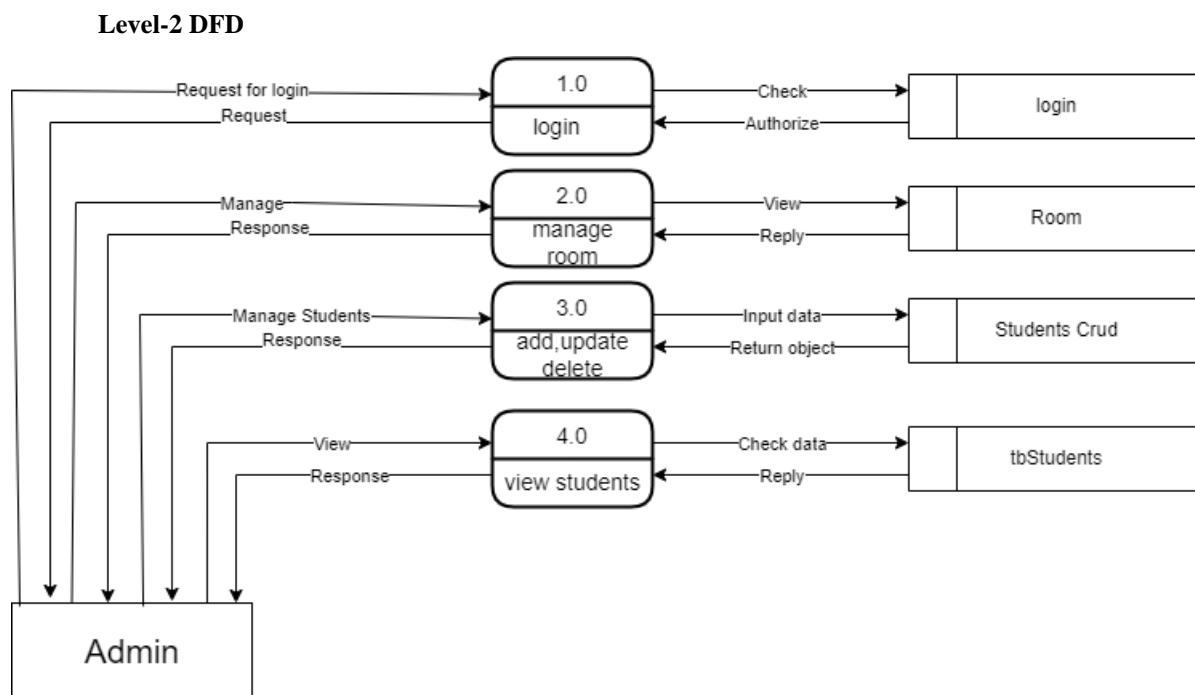


Figure 6:Level 2 DFD of Hostel Management System

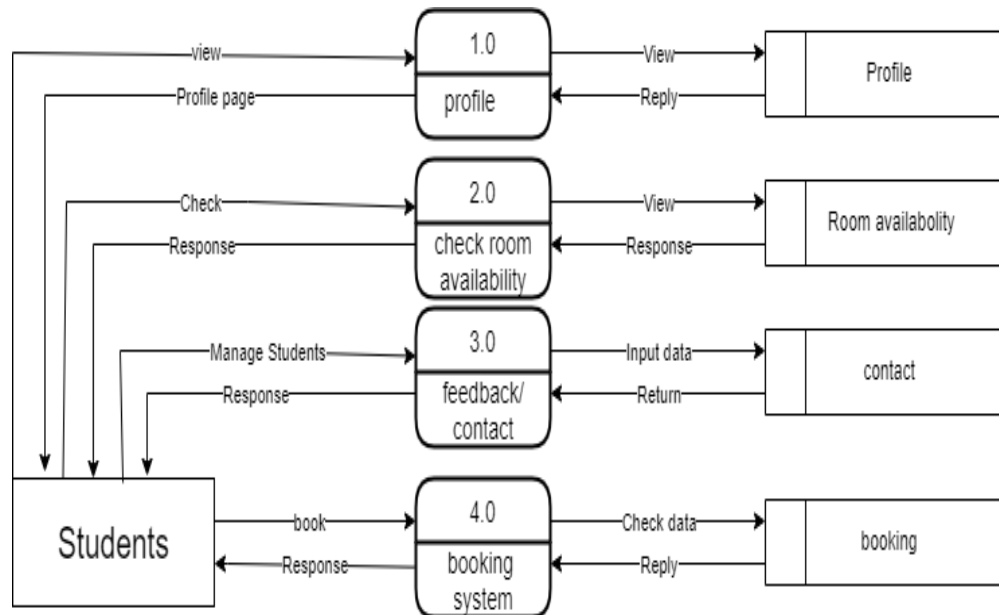


Figure 7:Level 3 DFD of Hostel Management System

### 3.2 System Design

System design is the process of defining the components, modules, interfaces, and data for a system to satisfy specified requirements. System development is the process of creating or altering systems, along with the processes, practices, models, and methodologies used to develop them. Here, components required for fulfillment of functional and non-functional requirements are processed thoroughly to ensure the system is as per requirements and specification.

#### 3.2.1 Database Schema Design

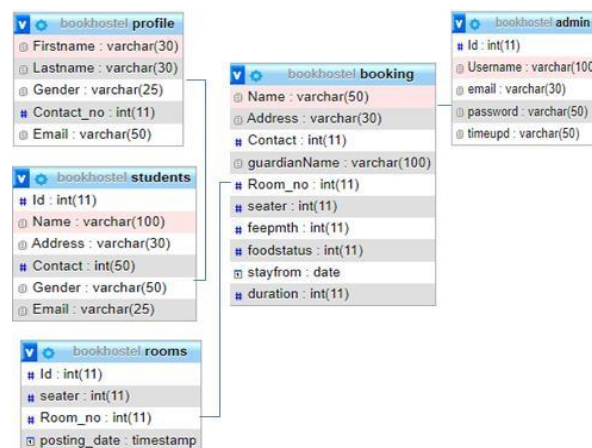


Figure 8:Database Schema Design of Hostel Management System

The database of hostel management system is well maintained. Id of students is assigned as primary key whereas other id in other tables is reference to it. In this system we consist of two databases named login where users data are stored whereas students database where users and admin database are stored. After the users login to students profile, it is stored in table book students of candidate database.

### 3.2.2 Interface Design (UI Interface / Interface Structure Diagrams)

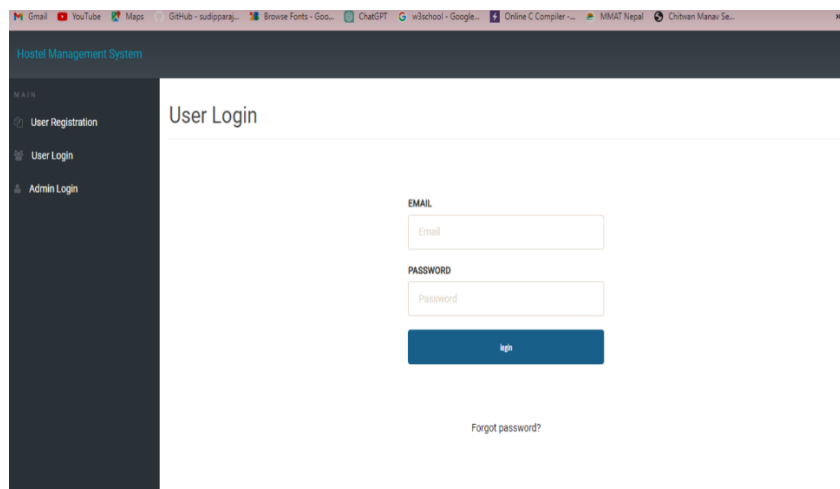


Figure 10:Students login UI

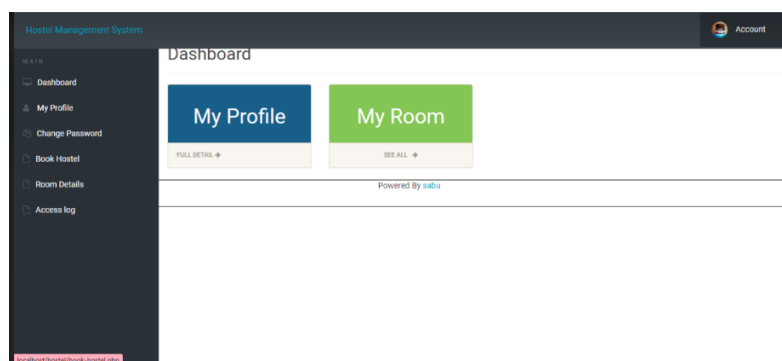


Figure 9:Users Dashboard UI

The screenshot shows the 'Student Registration' page of the Hostel Management System. The page has a dark sidebar with navigation links: User Registration, User Login, and Admin Login. The main content area is titled 'Student Registration' and contains a form with the following fields: Registration No., First Name, Middle Name, Last Name, Gender (a dropdown menu), Contact No., and Email Id. The form is set against a light blue background with a dark blue header bar that says 'FILL ALL INFO'.

Figure 11::Hostel Booking UI

The screenshot shows the 'Dashboard' page of the Hostel Management System. The page has a dark sidebar with navigation links: Dashboard, Courses, Rooms, Student Registration, Manage Students, and User Access logs. The main content area is titled 'Dashboard' and features three large, colorful cards: a blue card for '3 STUDENTS' with a 'FULL DETAIL' link, a green card for '13 TOTAL ROOMS' with a 'SEE ALL' link, and a blue card for '5 TOTAL COURSES' with a 'SEE ALL' link. The top right corner of the page shows an 'Account' dropdown menu.

Figure 12:Admin Dashboard UI

The screenshot shows the 'Add a Room' page of the Hostel Management System. The page has a dark sidebar with navigation links: Dashboard, Courses, Rooms, Student Registration, Manage Students, and User Access logs. The main content area is titled 'Add a Room' and contains a form with the following fields: Select Seater (a dropdown menu), Room No., and Fee(Per Student). A 'Create Room' button is located at the bottom of the form. The form is set against a light blue background with a dark blue header bar that says 'ADD A ROOM'.

Figure 13:Add Hostel Room UI



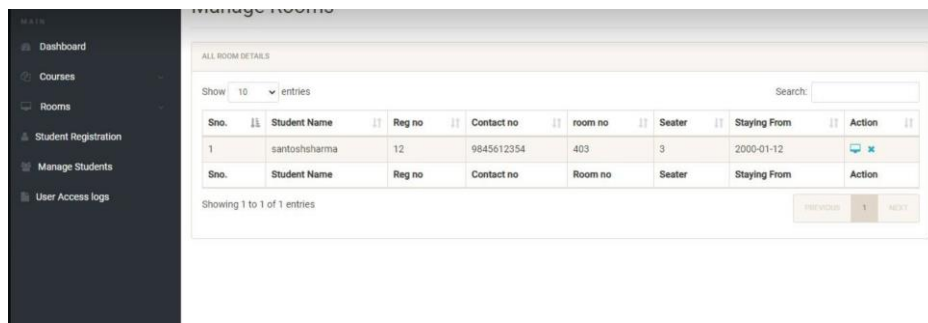


Figure 14:Hostel booking details of Students UI

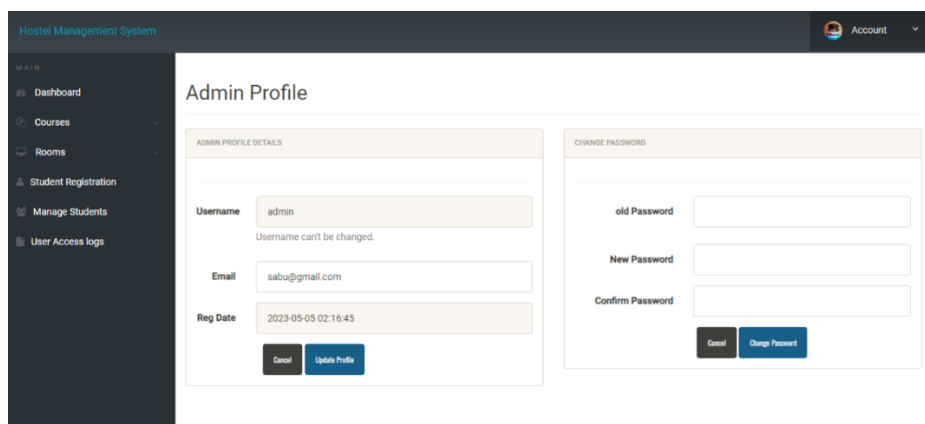


Figure 15::Admin Profile UI

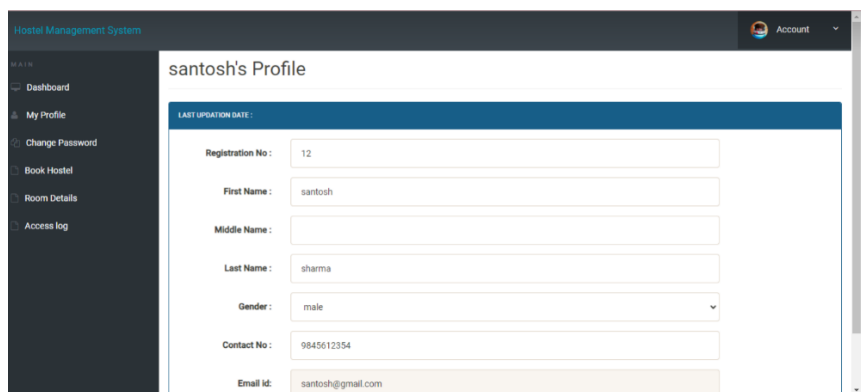


Figure 16:Students Profile UI

ALL ROOM DETAILS					
Room Related Info					<a href="#">Print Data</a>
Reg no.: 2023-10-27 18:31:55					
Room no.:	403	Seater:	3	Fees PM:	1500
Food Status:	Without Food	Stay From:	2000-01-12	Duration:	12 Months
Total Fee: 18000					
Personal Info info					
Reg No.:	12	Full Name:	santosharma	Email:	santosh@gmail.com
Contact No.:	9845612354	Gender:	male	Course:	Dot Net Technology
Emergency Contact No.:	9742931915	Guardian Name:	anish	Guardian Relation:	dad
Guardian Contact No.:	9843356398				

Figure 17::Hostel Room Details UI

Hostel Management System

Account

Change Password

LAST UPDATION DATE:

old Password

New Password

Confirm Password

Cancel Change Password

Figure 18:Change Password UI

### 3.2.4 Physical DFD

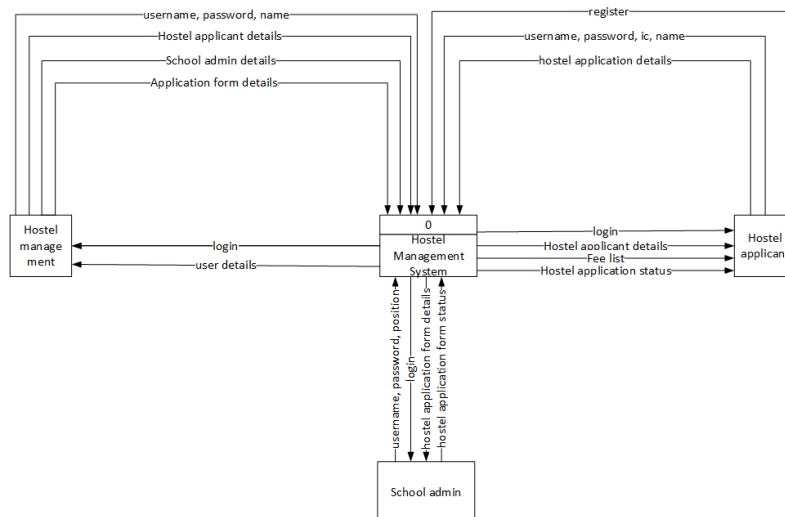


Figure 19:Physical DFD Hostel Management System

The registration is implemented by making a register form in PHP designed using HTML and CSS which accepts user's information and stores it to respective database table. If the user doesn't fill all the required fields, then the registration is not submitted. Admin fills the log in form with their login credentials, if matches with credentials stored in admins database then admin can manage the system.

## Chapter 4: Implementation and Testing

### 4.1. Implementation

The implementation phase encompasses the practical execution of the previously established design specifications. This phase involves coding the system based on the project's requirements, conducting comprehensive systems testing, and finally, launching the system into live operation.

#### 4.1.1 Tools Used (CASE tools, Programming languages, Database platforms)

During the implementation process, a range of tools and technologies were employed to ensure the successful realization of the project objectives:

**Diagramming Tools:** To create graphical representations of data and system components, we utilized diagramming tools such as draw.io, Lucid-chart. These platforms facilitated the development of flowcharts, Data Flow Diagrams (DFD), Entity-Relationship (ER) diagrams, Gantt charts, and more.

**Documentation:** MS Word was employed for comprehensive documentation, aiding in the clear communication of project requirements, progress, and outcomes.

**Development Environment:** Visual Studio Code provided an efficient environment for writing, editing, and compiling the system's code.

**Programming Languages:** The web application was constructed using a combination of PHP, JavaScript, CSS, and HTML. These languages ensured the creation of dynamic and responsive interfaces.

**Database Platform:** MySQL was chosen as the database platform for efficient and structured data storage.

**Web Hosting:** The XAMPP web server solution was utilized to host and serve the web application, making it accessible to users.

#### 4.1.2 Implementation Details of Modules

##### **Modules User Registration:**

The user registration module involves two distinct roles: to register as users and admin. Users are required to complete a registration form, including text boxes, radio buttons registration, file

uploads and drop down lists. They choose the respective registration form as per choice and one must be a user to be a student.

#### **i. Users Registration:**

Users opting to register as students complete a designated form. Upon submission, the form is sent to the administrator for verification. Once verified, users receive a confirmation email and gain access to the system for casting their information.

Users receive email and are forced to change their passwords using OTP then only they can access to the system. Also, at starting of some change in system they receive mail about the update. And had to use the OTP mailed after they logged in the system to see their information or to change something.

#### **ii. Room Registration:**

Users registering as the “students” are granted the opportunity to choose a room and provide relevant details. After class selection, students can proceed with their registration, subject to administrator verification.

#### **User Login:**

Users must log in with their registered username and password to access the system's features and functionalities.

#### **Add Students:**

Both users and students, upon successful login as users, have the ability to cast their information in the system. The students adding process is facilitated through an intuitive dashboard which is done by admin.

#### **Admin Dashboard Panel:**

Administrators possess a dedicated dashboard panel that empowers them to verify or delete user accounts and their associated details. Additionally, administrators can assist users experiencing technical difficulties by registering users on their behalf. Also they are responsible for enabling and disabling any change on the system.

#### **View Result:**

All authenticated users can view the student profile of their students from the system's dashboard.

#### **User Logout:**

Upon completing the users process or interacting with the system, users have the option to securely log out. This mechanism prevents the casting of multiple information by the same user, thereby ensuring the integrity of the users process.

## 4.2Testing

### 4.2.1 Test Cases for Unit Testing

The system comprises of registration form, login form, admin dashboard, voter/candidate dashboard and for each case unit testing is done.

**Table 4. 1:**Testing for User Login

Testcase Id	Test case	Scenario	Step	Test Data	Expected Result
1.	Login page	Check users input for login	Go to the site Enter email and password	Email: <a href="mailto:santosh@gmail.com">santosh@gmail.com</a> Password: santosh@123	Successfully login as redirected to dashboard
2.	Login page	Check for usersinput for login with partial data	Go to the site Enter email and password	Email: <a href="mailto:santosh@gmail.com">santosh@gmail.com</a> password: santosh@123	Email: <a href="mailto:santosh@gmail.com">santosh@gmail.com</a> password: santosh@123
3.	Update profile	Check User Profile	Go to the site and update your profile	Name:xxx Email:xxx Contact:xxx Address:xxx Gender:xxx	Successfully Updated user profile
4.	Book Room	Check Book Request of User/Student	Go to the site and Book Room	Room no:XXX Seater: XXX Duration:XXX Name: XXX	Successfully Room booked.

**Table 4. 2: Testing for User Registration**

Test case ID	Scenario	Step	Test data	ExceptedResult
1.	This test case deals with new users who register.	Go to the site Fill all the required forms.	Name: Phone: Email: Gender: Password: Confirm Password:	This checks whether a new user is able to sign up or not. The register form should be added to admin page.
2.	User/Student clicks the sign in button to sign in the page after filling the details with proper way.	Go to the site Fill all the required forms.	Name: Phone: Email: Gender: Password: Confirm: Password:	The file should be stored in the system Dashboard.

**Table 4. 3:Testing for Admin Module**

Test Id	Test Cases	Scenario	Step	Test data	Remark
1.	Login Page	To check login functionality with invalid password and invalid Email.	Go to the site and enter emailand password	Email: XXXX Password: XXXX	Fail to login.
2.	Login Page	To check login functionality with invalid password andinvalid Email	Go to the site and enter emailand password	Email/Username :admin Password: admin	SuccessfulyLogin.
3.	Add Room	To check add room functionality	Go to the site and addroom with filling details.	Room.no:104 Seater:2 Fee per Seater:500	Successfull yadded and redirect to add room page

4.	Update Room	To check update room functionality	Go to site and update room records.	Room.no: Seater: Fee per Seater: Posting date:	Successfully updated and Redirect to manage room page.
5.	Change password	To check password change functionality	Go to site and enter New password and repeat password.	Old password: New password: XXX Repeat Password: XXX	Successfully changed password.
6.	Add Student Registration	To check add Registration functionality	Go to the site and add Student Registration	Name: Phone: Email: Gender: Passwor: Confir Password:	Successfully added new Student Registration.
7.	View Booking details	To check Booking details	Go to the site and view	Name: xxx Contact:xxx Room.no:102 Seater:2	Successfully Viewed
8.	Delete Booked user	Go to the site and delete section	Delete button	Name: xxx Contact:xxx Room.no:102 Seater:2	Successfully Deleted

**Table 4. 4:** Testing for System

S.N	Test Case	Expected Result	Actual Result	Remark
1.	User Registration	Register User	Register User	No Error



2.	User Login	Login User	Logged in	No Error
3.	Room Book	Room Booked	Room Booked	No Error
4.	Add Room	Room Added	Room Added	No Error
5.	Manage Room	Updated Room	Updated Room	No Error
6.	Delete Room	Room deleted	Room deleted	No Error
7.	Update Profile	Profile updated	Profile updated	No Error

## **Chapter 5: Conclusion and Future Recommendations**

### **5.1. Lesson Learnt / Outcome**

After the completion of this project, we learnt to handle or face the existing problems and helped to develop team working and professional/communication skills. We learnt to work in the team with coordination and cooperation to make the good decision. With the help of this system, it helps to save the records of the students about their rooms and other things. This system gives an idea about how a student and fee details, room allocation are maintained in a better way.

### **5.2. Conclusion**

Hostel management System is a user friendly and easy customization software. It is capable of managing the hostel room, students records ,room allocation ,fee payment, etc. This system has been developed to manage and automate the overall processing of any hostels or we can say that it is a user friendly and customized software for providing support for hostel admin. This hostel management software is designed for people who want to manage various activities in the hostel. For the past few years the numbers of educational institutions are increasing rapidly. Thereby the numbers of hostels are also increasing for the accommodation of the students studying in this institution. This hostel management software is designed for people who want to manage various activities in the hostel. For the past few years the numbers of educational institutions are increasing rapidly. Thereby the numbers of hostels are also increasing for the accommodation of the students studying in this institution.

### **5.3. Future Recommendations**

In envisioning the future of the Online Hostel Management System, several potential enhancements and expansions come to light. Firstly, the integration of advanced data analytic and machine learning algorithms could offer predictive insights into occupancy trends, enabling more proactive room allocation and resource planning. Additionally, the incorporation of IOT (Internet of Things) devices could facilitate real-time monitoring of amenities and utilities, leading to more efficient maintenance and energy conservation.

Furthermore, the system could benefit from seamless integration with mobile applications, providing residents with even greater convenience in tasks such as room selection, fee payments, and communication with administrators. An extension to include a visitor management module could enhance security and streamline the process of guest registration

within the hostel premises. Finally, considering the global nature of education and accommodation, multilingual support and localization features could cater to a wider user base, ensuring accessibility for individuals from diverse linguistic backgrounds. These recommendations, if implemented, have the potential to further elevate the efficiency, user-friendliness, and adaptability of the Online Hostel Management System, setting a new standard in hostel administration.

## References

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- [2] [Online]. Available: <https://www.iitms.co.in/higher-education-erp/hostel-management/>.
- [3] [Online]. Available:  
[https://www.researchgate.net/publication/371280513\\_Hostel\\_Management\\_System\\_Report](https://www.researchgate.net/publication/371280513_Hostel_Management_System_Report).

# APPENDICES

## I.students profile

Hostel Management System

Account

MAIN

Dashboard

My Profile

Change Password

Book Hostel

Room Details

Access log

santosh's Profile

LAST UPDATION DATE :

Registration No :

12

First Name :

santosh

Middle Name :

Last Name :

sharma

Gender :

male

Contact No :

9845612354

Email id:

santosh@gmail.com

## II.Students Login

Hostel Management System

MAIN

User Registration

User Login

Admin Login

Student Registration

FILL ALL INFO

Registration No :

First Name :

Middle Name :

Last Name :

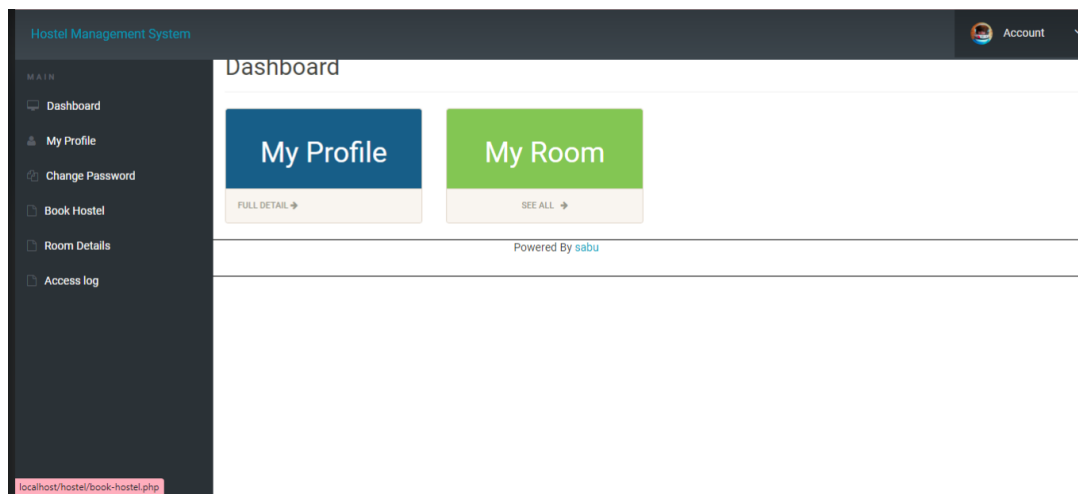
Gender :

Select Gender

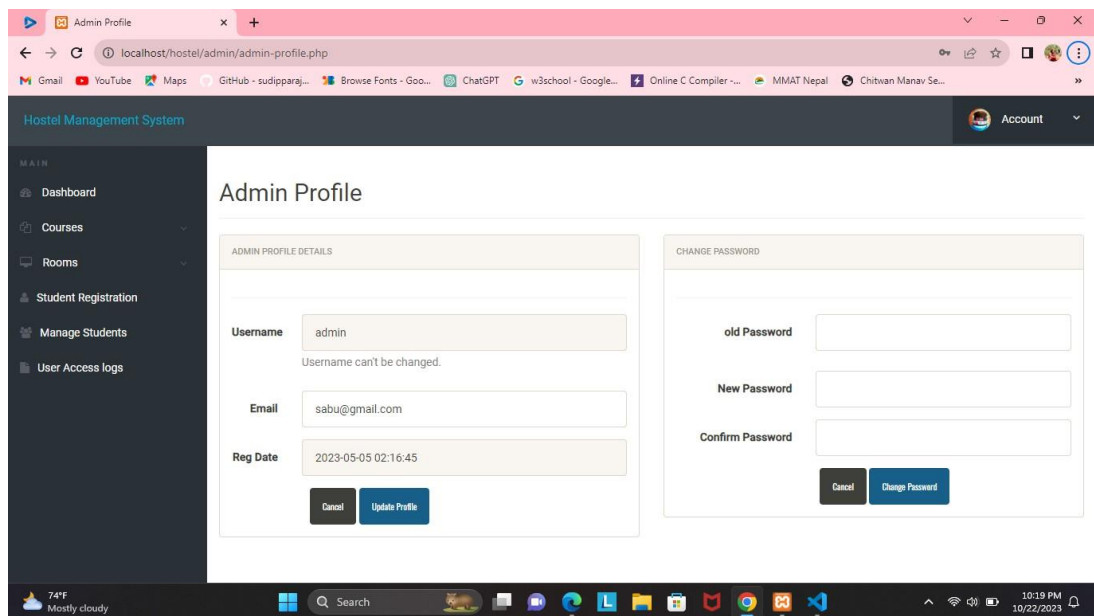
Contact No :

Email id:

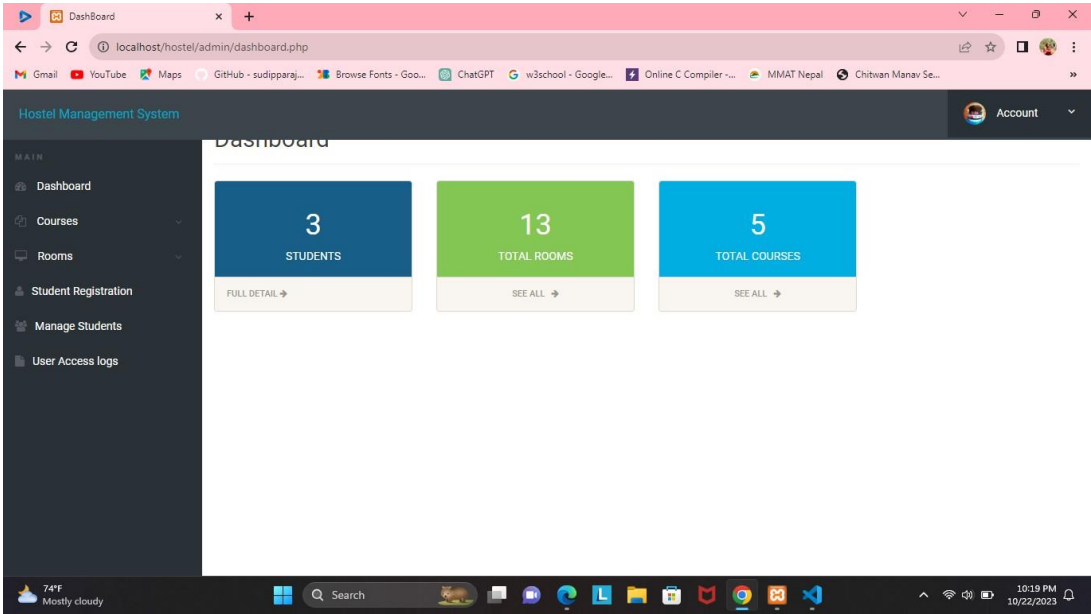
### III. User Dashboard



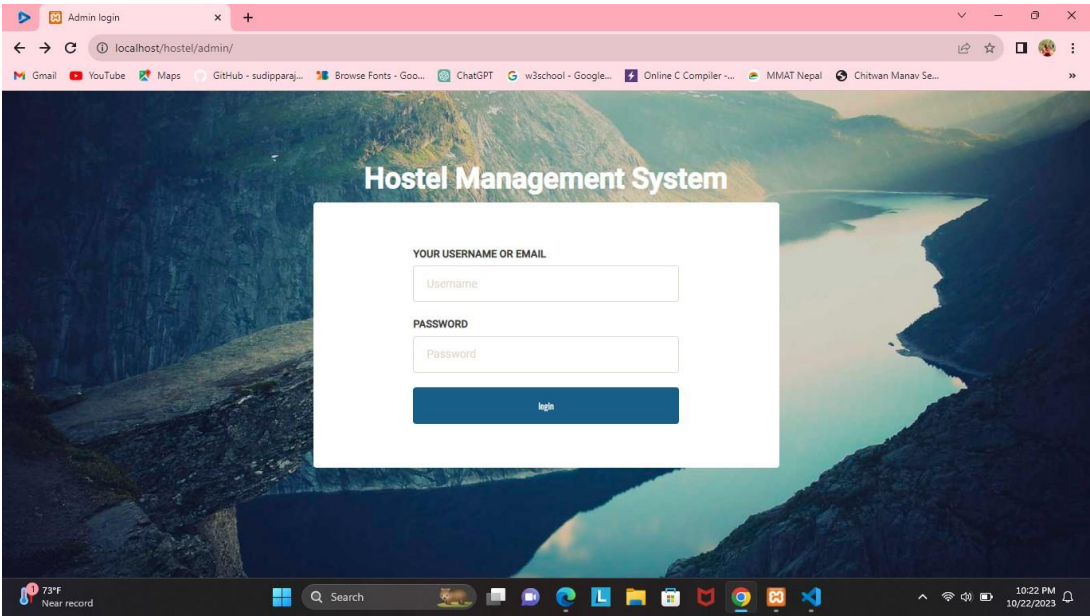
### Iv. Admin profile



V. Admin Dashboard



VI. Admin Login



## VII. Hostel booking Details

MAIN

Dashboard

My Profile

Change Password

Book Hostel

Room Details

Access log

Rooms Details

ALL ROOM DETAILS

Room Realted Info

Print Data

Reg no. :2023-10-27 18:31:55

Room no :	403	Seater :	3	Fees PM :	1500
Food Status:	Without Food	Stay From :	2000-01-12	Duration:	12 Months

Total Fee : 18000

Personal Info Info

Reg No. :	12	Full Name :	santoshsharma	Email :	santosh@gmail.com
Contact No. :	9845612354	Gender :	male	Course :	Dot Net Technology
Emergency Contact No. :	9742931915	Guardian Name :	anish	Guardian Relation :	dad
Guardian Contact No. :	9845356358				

## VIII. Add hostel room

Hostel Management System

Account

MAIN

Dashboard

Courses

Rooms

Student Registration

Manage Students

User Access logs

Add a Room

ADD A ROOM

Select Seater

Select Seater

Room No.

Fee(Per Student)

Create Room

## VII. Change Password

Hostel Management System

Account

MAIN

Dashboard

My Profile

Change Password

Book Hostel

Room Details

Access log

Change Password

LAST UPDATION DATE:

old Password

New Password

Confirm Password

Cancel

Change Password