

**S.R.R GOVERNMENT ARTS & SCIENCE COLLEGE(A)
KARIMNAGAR**



**JIGNASA
2023-2024**

**DEMONSTRATION OF DORM HOUSE FOR
IMPLEMENTATION TO ALL STUDENTS**

**DEPARTMENT OF DATA SCIENCE
SRR-GASC (A), KARIMNAGAR**

**DORM HOUSE FOR IMPLEMENTATION TO ALL STUDENTS.
STUDENT STUDY PROJECT SUBMITTED TO THE COMMISSIONER OF
COLLEGIATE EDUCATION, HYDERABAD TELANGANA**

Department of Data Science, SRR GASC(A) Karimnagar

JIGNASA 2023-2024**Submitted by**

1. S.Soujanya	HT.No.210771724641036	III B.Sc MStDs
2. A.Jayasri	HT.No.210771724641003	III B.Sc MStDs
3. N.Abhishek	HT.No.210771724641030	III B.Sc MStDs
4.A. Sainath	HT.No.210771724641002	III B.Sc MStDs
5. Shaik Asad	HT.No.2271724641034	II B.Sc MStDs
6. G.Vamshika	HT.No.2371724641016	I B.Sc MStDs

Under the supervision of**G.Venkatesh, Lecturer in Data Science****SRR Government Arts & Science College (A), Karimnagar**

DECLARATION

We hereby declare that the work presented in this study project entitled **‘DEMONSTRATION OF DORM HOUSE – EASY ACCESS TO ALL THE HOSTEL STUDENTS’** is an original and the best of our demonstration. The project work has been carried out by us under the Department of Data Science, SRR Government Arts and Science College(A), Karimnagar and we make sure that the above project has been neither submitted in full nor part for the award of degree or diploma of any university earlier.

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Date: 20-03-2024

Place: Karimnagar.

C E R T I F I C A T E

This is to certify that the JIGNASA (2023-2024) student study project entitled **‘DEMONSTRATION OF DORM HOUSE – EASY ACCESS TO ALL THE HOSTEL STUDENTS’** is an original project work done by the students of Data Science under my supervision and guidance, a confide research work done by students under my guidance to be submitted to **JIGNASA-2023** student study project competition being conducted by Commissioner of Collegiate Education, Hyderabad Telangana.

Gangula Venkatesh
Lecturer in Data Science

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Department of Data Science, SRR GASC(A) Karimnagar

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**DEMONSTRATION OF
DORM HOUSE – EASY
ACCESS TO ALL THE
HOSTEL STUDENTS**

HYPOTHESIS

- ❖ Dorm House is the best solution for online hostel Management System for the students, users and Hostel Managers.
- ❖ As we know now a day's increase in institutions and hostels students are strain to find hostels and Hostels managers to manage their hostels.
- ❖ The existing system and application are less capable to handle data, not available in all places, no security, no proper details, full of manual work and many other issues.
- ❖ So, we made an application to overcome all these problems we created a central based communication system for both Hostellers and Hostel Managers
- ❖ Also we provide strong security of data, Room Booking, Allotment, Food Menu, Maintenance, Facilities and Transactions with high scalability to available for every single hostel in India Digitally.
- ❖ Our Application of “**DORM HOUSE**” helps to find and manage hostels at your finger tips.

List of Abbreviations

GUI : Graphical User Interface

SURF : Speed up Robust Feature

SIFT : Scale Invariant Feature Transform

PID : Proportional Integral Derivative

SSIM : Standard Schedule Information Manual

INTRODUCTION:-

In our current era of automated systems, whether software or hardware, it is not advisable to use a manual system. Hostels without a management system are usually managed manually. Process from registration forms verification to other data-saving process are done manually, most often on paper. Consequently, a lot of repetitions can be avoided with an automated system. The drawbacks of existing systems lead to the design of a computerized system that will help reduce a lot of manual inputs. With this system in place, we can improve the efficiency of the system, thus overcoming the drawbacks of the existing manual system.

This system is designed in favor of hostel management, helping them save records of students, including details about their rooms and other relevant information. It eliminates the need for manual work, making it easier to retrieve student records, mess bills, and information about those who left the hostel years before.

The system provides insights into student and fee details, room allocation, and mess expenditure in a more efficient manner. The hostel management system also includes special features such as information about the number of students in a room, student IDs, and available free rooms or space. Each member of the administration and students has a unique identity within the system.

PROJECT OVERVIEW:-

The hostel management system is web-based software designed to efficiently provide college students with accommodation in the university hostel. This project also maintains details of the hostellers and applied students, and it is overseen by the Warden who acts as the administrator.

The intention of this document is to minimize human work and simplify hostel allocation for students and hostel authorities by offering an online application process. The system automatically selects students from the waiting list, handles mess calculations, facilitates complaint registration, and manages the notice board, among other functions. Students receive approval notifications in their emails, and hostellers can access the notice board, hostel fee information, and mess menu by logging into the online system.

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 is 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 be 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 multiple storey's, and it would be very tedious to go through all storeys 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.

Hence to know the complete picture of a hostel in online mode this project has been initiated.

ABSTRACT:-

Why we choose dorm house as our project.

- On the basis of problems faced by students and hostel managers in real life.
- This project idea is based on real incidence happen among us.
- As we known increase in institutions, Hostels and Students are confused too much of time consumed to get an admission in to Hostels.
- Students have no idea about the quality of food, maintenance, water facilities, rules of hostels,etc...
- We got to know all these problems by our field survey done among students and hostel managers.

FIELD SURVEY:-

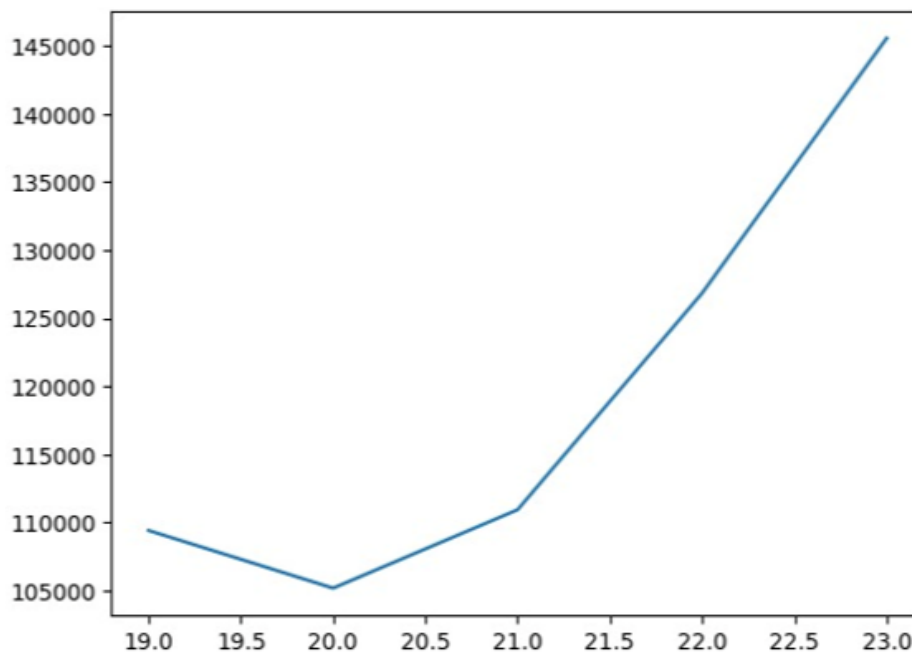


- ❖ We have been to some hostels in karimnagar city and enquiry about hostel manager's problems and students problems they face in hostels.
- ❖ We got much information about hostels and their problems.
- ❖ We have done the analysis of colleges and hostels in karimnagar city and analyzed their data.

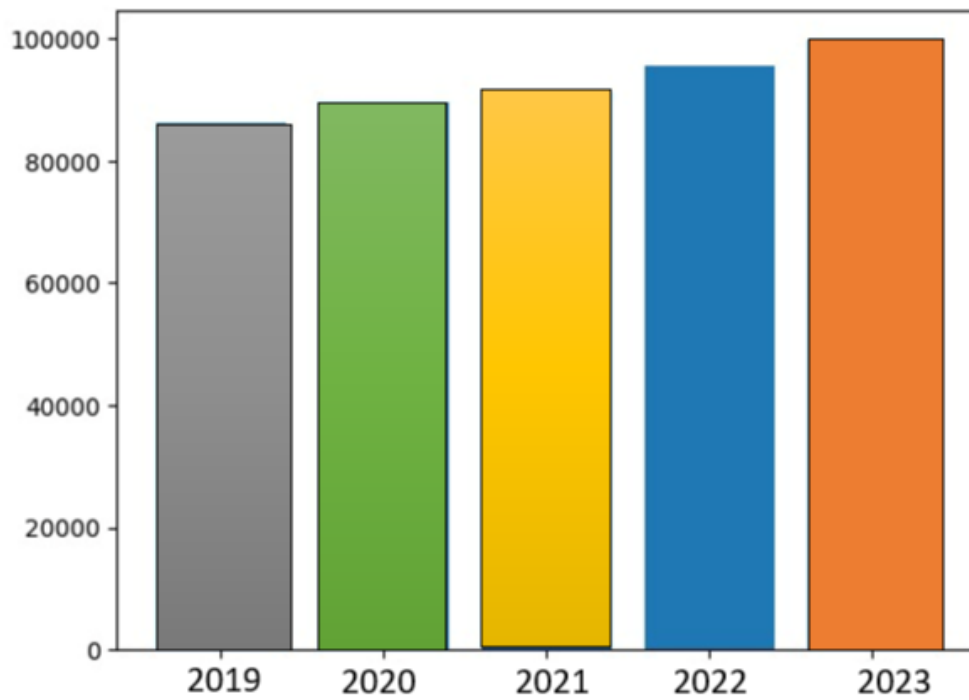
STATISTICAL ANALYSIS:-

College Strength Analysis:-

College Growing Strength representation Through the line Graph



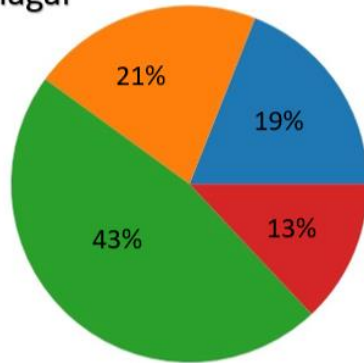
Strength Bar of College Students in Karimnagar



-
- ✚ This we have a data of past five years about college students strength in karimnagar city.
 - ✚ We can see the gradually increase of strength in karimnagar city.
 - ✚ So it requires more hostels capacity for students.

Hostel Data Analysis:-

Capacity of Total Students in Karimnagar



43%

• Non locals and Nearby villages

21%

• Locals

19%

• Hostels

13%

Students stay in rooms and they didn't get admission into hostels.

- ✓ We have the data of college students mode of attending colleges.
- ✓ There are 43% Non Local and Nearby villages.

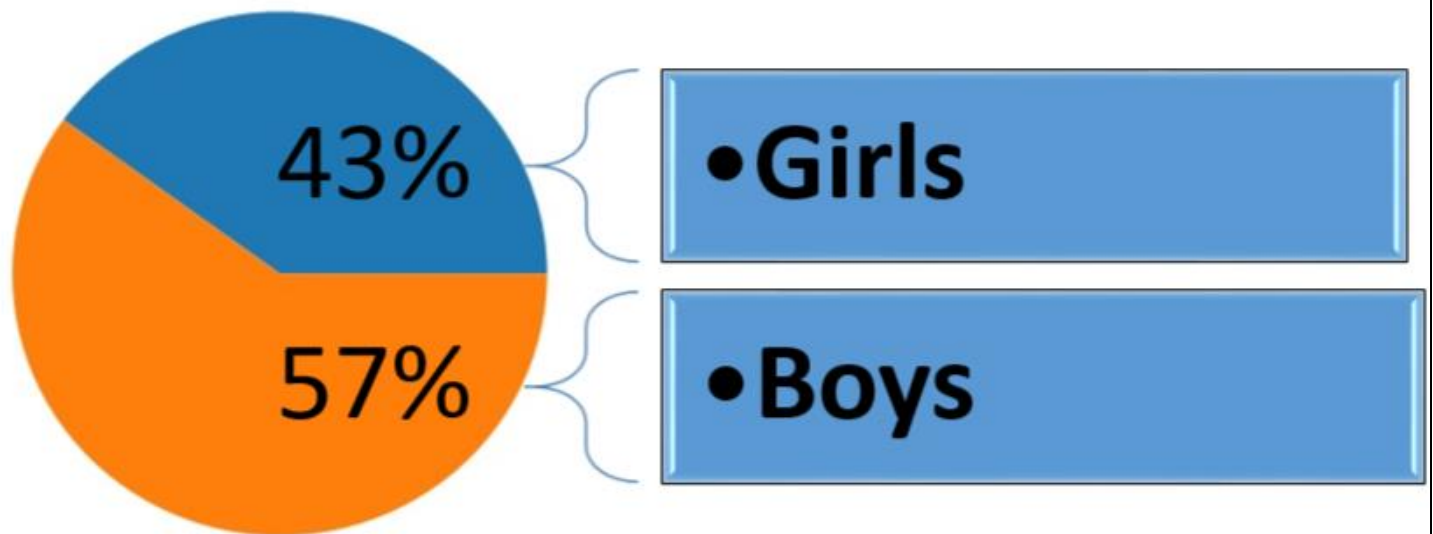
21% Local

19% Hostels

13% Students stay in rooms.

- ✓ Many of the non locals did not get the admission into the hostels because of heavy competition and lack of seats in hostels.
- ✓ They used to go for hostels manually for inquire about vacancy.

Capacity of Boys and Girls hostels



- ✓ Boys hostels are more as compare to girls.
- ✓ So, we need a proper application on to manage the hostel affairs and book hostels through online from their home which eventually saves money

OBJECTIVES:-

- To make it easier for data collection, storage and referencing reliable.
- To maintain the students as hostellers and waiting list students separately.
- To process allotment list.

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 deal with mess calculation and complaint registration.

DISADVANTAGES:-

- More human power.
- More strength and strain of manual labour needed.
- Repetition of same procedure.
- Low security, Data redundancy.
- Difficulty to handle.
- Difficulty to update data.
- Record keeping is difficult.
- Backup data can available.
- Less Scalability.
- Not available for every hostels.
- Buffering.
- No proper details to book hostels.
- No proper projection of facilities, maintenance, security and Staff.

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 manage the affairs of the hostel effectively. The system will provide full information about a student in the hostel, showing the availability of rooms and the number of people in a particular room. Additionally, it will provide information on students who have paid in full or are still owing.

The system will generate a report on the summary details regarding fees and bills that students are owing.

Included in the system is a user module for employees or the hostel officer. There will also be an administrator module that can be easily generated and accessed by the administrator. This module has the ability to delete, add, and edit employee records.

The system will be developed based on the Software Development Life Cycle (SDLC) with PHP and MySQL server. PHP is suitable for the development and design of web-based programs, while MySQL is chosen for its security and advanced features and properties in managing databases.

METHODOLOGY

TECHNICAL FEASIBILITY:-

The technical feasibility in the proposed system deals with the technology used in the system. It deals with the hardware and software used in the system, whether they are of the latest technology or not. If it happens that after a system is prepared, a new technology arises, and the user wants the system based on that technology.

This system uses the Windows platform, Apache server, SQL for the database, PHP as the language, and HTML or XML as the user interface. Thus, HOSTEL MANAGEMENT SYSTEM is technically feasible.

OPERATIONAL FEASIBILITY:-

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.

REQUIREMENT ANALYSIS AND SPECIFICATION

Functions and features delivered to the end users. The end users of the proposed system are: **USER MODULE**. The helps the administrator and user to login to home page only if password and username matches.

CHANGE PASSWORD MODULE:-

Allows the user to change the password.

ROOM ALLOTMENT MODULE:-

This deals with allocation of room to students according to education details, section or course. Rooms will be allocated to students and an ID will be generated for it. It will display details students staying in the room or rooms. When a student leaves the room after the semester, the left date will be also saved.

ROOM FEES MODULE:-

This displays fee records, student dues status and balance amount status. It is also used to renew students rent every semester.

MESS BILL MODULE:-

This module keeps track of all transactions related to mess. The mess item expenditure for each student is calculated every month and mess bill for each student is calculated and displayed.

VISITORS MODULE:-

This allows the visit or details to view the visitors depending on various search criteria.

REPORT GENERATION MODULE:-

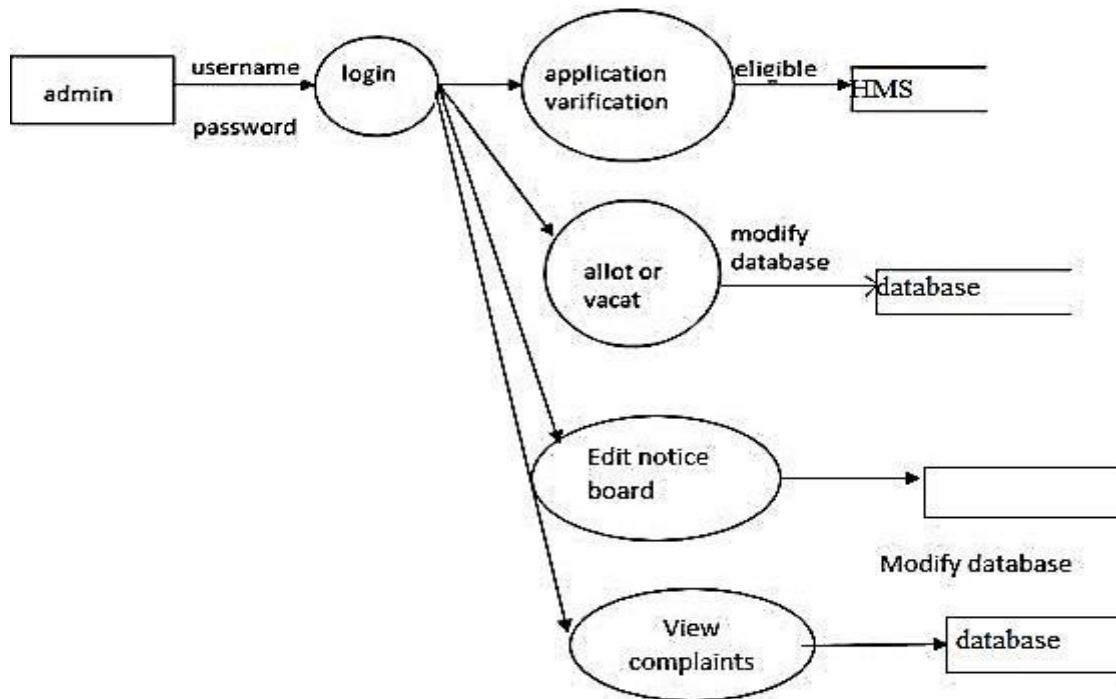
This is provided to view summary detail regarding hostel fees and bills. Students can check hostel fees and bill details by entering the unique hostel ID.

SETTINGS MODULE

In this module, only the administrator can access. Administrator has a unique account with much special access and permissions over normal users. Module allows add, edit, delete

RESULT and DISCUSSION

EXPERIMENT SETUP:-



BASIC INFORMATION:-

Bill_id	int
Reg_id	int
Bill_type	varchar
Paid_amt	double
Paid_date	date

BILLING:-

Fee_id	int
Reg_id	int
Fee_str_id	int
Total_fees	double
Status	varchar

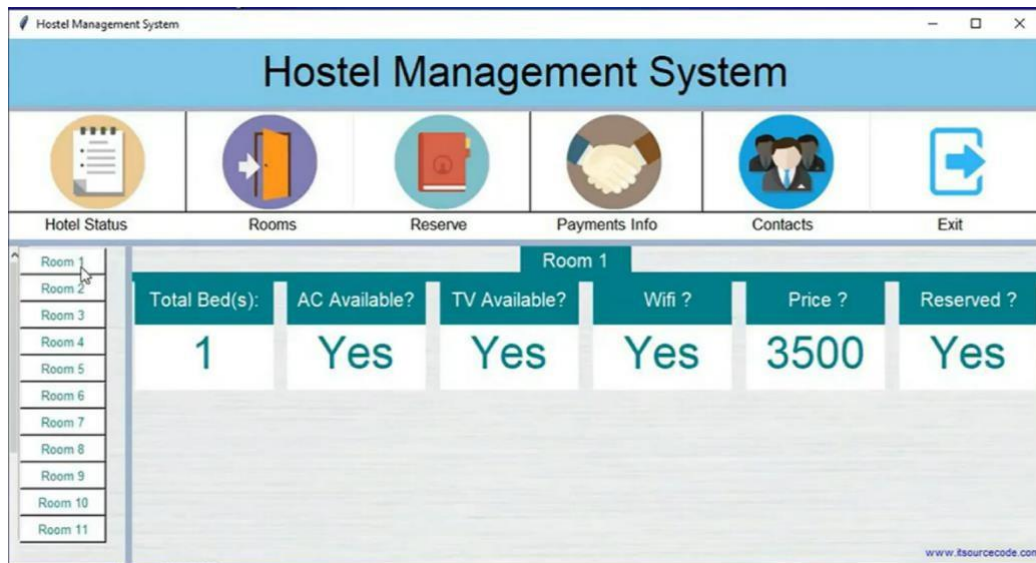
TABLE:-

Stid	int
Courseid	int
Name	varchar
Rollno	varchar
DOB	date
Father_name	varchar
Mother_name	varchar
Gender	varchar
Contact_no	varchar
Parents_no	Varchar
Blood_group	varchar
Status	varchar

OUTPUT:-

Following is the Output of Our Program:-

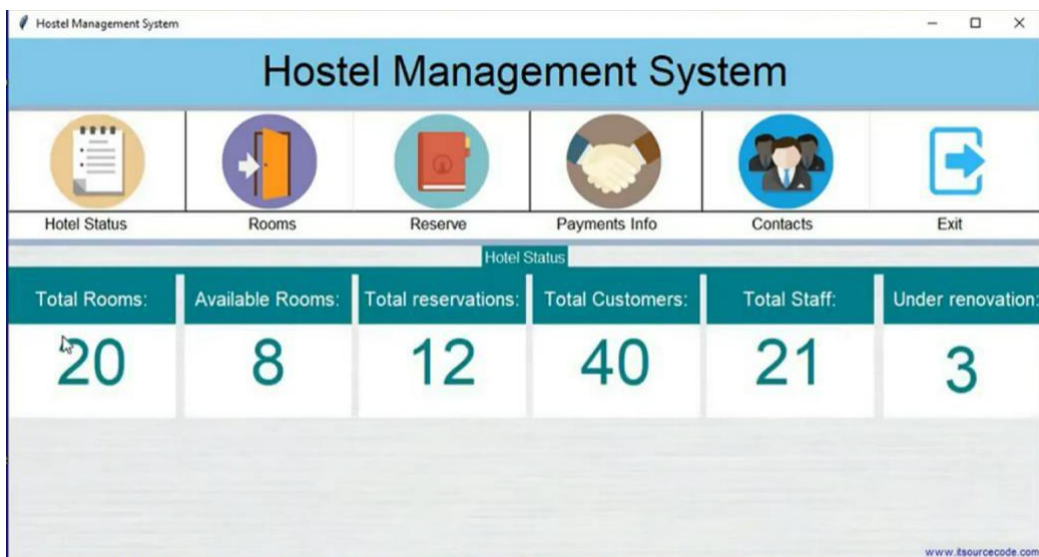
HOSTEL FACILITIES:-



The screenshot displays the 'Hostel Management System' interface. At the top, there is a navigation bar with icons for Hotel Status, Rooms, Reserve, Payments Info, Contacts, and Exit. Below this, a table shows the details for 'Room 1'. The table has columns for Total Bed(s), AC Available?, TV Available?, Wifi?, Price?, and Reserved?. The data for Room 1 is: 1 bed, AC Available (Yes), TV Available (Yes), Wifi (Yes), Price 3500, and Reserved (Yes). A sidebar on the left lists rooms from Room 1 to Room 11. The URL 'www.itsourcecode.com' is visible in the bottom right corner.

Room	Total Bed(s):	AC Available?	TV Available?	Wifi ?	Price ?	Reserved ?
Room 1	1	Yes	Yes	Yes	3500	Yes
Room 2						
Room 3						
Room 4						
Room 5						
Room 6						
Room 7						
Room 8						
Room 9						
Room 10						
Room 11						

ROOM'S INFORMATION:-



The screenshot displays the 'Hostel Management System' interface. At the top, there is a navigation bar with icons for Hotel Status, Rooms, Reserve, Payments Info, Contacts, and Exit. Below this, a table shows the overall hotel status. The table has columns for Total Rooms, Available Rooms, Total reservations, Total Customers, Total Staff, and Under renovation. The data is: Total Rooms 20, Available Rooms 8, Total reservations 12, Total Customers 40, Total Staff 21, and Under renovation 3. The URL 'www.itsourcecode.com' is visible in the bottom right corner.

Total Rooms:	Available Rooms:	Total reservations:	Total Customers:	Total Staff:	Under renovation:
20	8	12	40	21	3

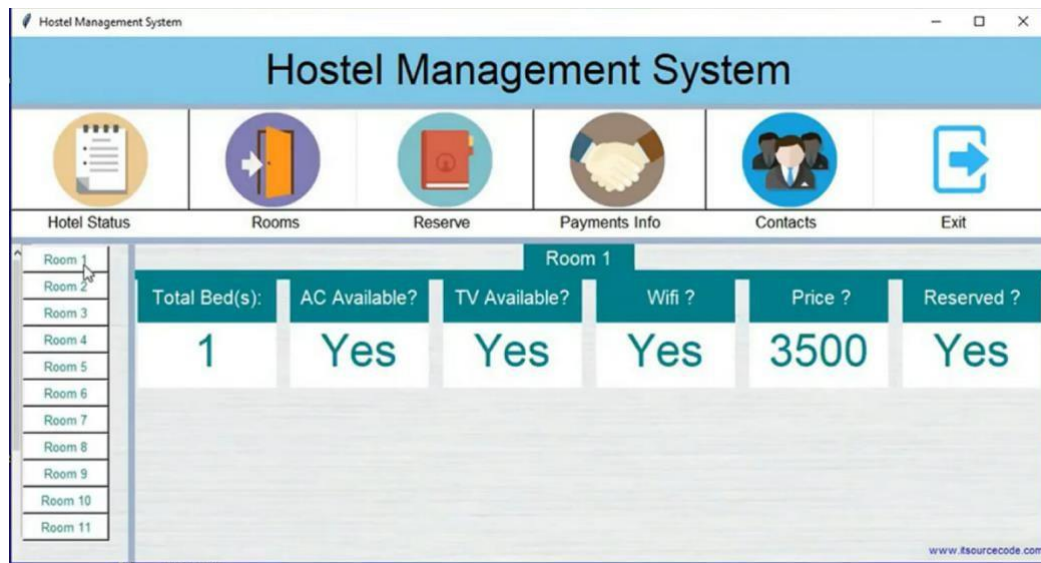
HOSTEL STATUS:-



ADDING INFORMATION:-



Exit from App:-



SUMMARY

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 still owe. 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.

CONCLUSION:-

To conclude the description about the project, the project, developed using PHP with my SQL is based on the requirement specification of the user and the analysis of the existing system, with flexibility for future enhancement.

Hostel management system is very useful for hostel allotment and mess fee calculation. 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. There by the numbers of hostels are also increasing for the accommodation of the students studying in this institution, and hence there is a lot of strain on the person who are running the hostel and software's are not usually used in this context. This particular project deals with the problems on managing a hostel and avoids the problems which occur when carried manually. Identification of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system which is more users friendly and more GUI oriented.

OUTCOMES OF THE PROJECT :-

- Our app is the best communication platform between users and hostel managers
- We provide Room Allocation, Booking, Security, Allotment, Facilities, Maintenance , Transactions and large scalability which available for every single hostel in India through digitally at your finger tips
- Our aim is to **“EMPOWER STUDENTS TO CHOOSE THE RIGHT HOSTEL** “Which is seamless, Secure and smart hostel management at your finger tips.