



# SOFTWARE REQUIREMENTS SPECIFICATIONS

HOSTEL MANAGEMENT SYSTEM

# CS331: SOFTWARE ENGINEERING LAB

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- Purpose

This system is designed in favor of the hostel management which helps them to book hostel room according to their preferences and 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 of about the those ones who had left the hostel . This system stores records of all the bills . It also stores details of all student according to course opted by them like B.tech, M.tech, Phd etc.



- Project Scope

The proposed system for "HOSTEL MANAGEMENT SYSTEM" is computerized.

In today's era where each and everything is done by computers, this software project aims to solve all the problems discussed above in the present system. The main objective of developing this project is to save time and money. The proposed system provides the following features on different tasks.

All the details related to a hosteller could be found in one place like the admission details, fees details, room details, attendance ,mess details etc.

Will make the monitoring of students easy.

The same application could be used by students staying in hostel too to have any changes in room like reallocation or they want to check out etc.



- PRODUCT PERSPECTIVE

Our Hotel management software is fully independent product. Our product is not a part of any other system. We have user interfaces. Users will be categorized as:

- ❖ Admin panel

- ❖ Student panel

1. Interfaces for Admin

- Register Students
- View Student Details
- Book Hostel
- Student Activity
- Manage Rooms
- Manage Courses

2. Interface for Students

- Book Hostel
- Room Details
- Log Activity



- **PRODUCT FEATURES**

The various functions covered by the 'REQUIREMENT SPECIFICATION', which follows, are to be provided to meet the requirements of database manager, admin and students with role-based updating and viewing rights.

The following general features shall be included:

Student Details are filled by as:

- Student Name
- Student Father's Name
- Student Branch
- Student Year
- Student Course
- Student Personal Details such as address, mobile number etc.



Following information will be given by Administrator:

- ☐ Students details
- ☐ Room Details
- ☐ Attendance Details
- ☐ Mess Details per month
- ☐ Update the student details.
- ☐ Update mess item expenditure.
- ☐ Update the attendance details.



- USER CLASS

- Administrator

- ❖ The admin can allot different students to different hostels
    - ❖ Vacate students from the hostels
    - ❖ Control the status of fee payment
    - ❖ Edit the details of the students and modify the student record.

- Students

- ❖ Every student who have a room in hostel have a database and a student account to access his/her data. He/She can even edit his or her data as per need. Also he or she can check monthly mess bill and other stuff etc.



- OPERATING ENVIRONMENT AND TECH STACK

The user will use this application to maintain database of students and the rooms mess.

The application has a very friendly interface.

Operating System: Windows xp, vista, 7, 8, 10, 11, Linux, MacOS etc.

Tech Stack: JavaScript, MySql and PHP.



- DESIGN AND IMPLEMENTATION CONSTRAINTS

- ❖ The developed application should run under any platform i.e. Unix, Linux, Windows etc.
- ❖ There can be any security risk involved.
- ❖ Details provided by an individual student should be stored in database.
- ❖ Students details can be changed or updated by only administrator.



- ASSUMPTION AND DEPENDENCIES

- ❖ The details related to the students, room and mess.
- ❖ Administrator is already created in the database already.
- ❖ Roles and tasks are predefined for each type of users.



- PERFORMANCE REQUIREMENTS

- ❖ the application shall take initial load time depending on performance of Operating system and it should be as low as possible.
- ❖ The performance shall depend upon hardware & software components of the computer.



- SECURITY REQUIREMENTS

- ❖ This project provide a genuine security to all those individuals who are having their account on the database as they are password protected.

- ❖ This is very important aspect of the design and should cover areas of hardware reliability, fall

back procedures, physical security of data and provision for detection of fraud and abuse.

- MAINTAINABILITY

- ❖ Hostel Management System will be maintainable as long as there are no Hardware & software problems. Also databases should be updated.



- OBJECTIVES

- ❖ Students no longer need to apply for hostels manually.
- ❖ Admin can keep record to students activity, and their personal information.
- ❖ Assures violation of limits, fee payments, etc.
- ❖ Admin's ease of work to allot and manage rooms according to strength of students.
- ❖ Would allow students to update issues faced in hostel.



- FUTURE OF PROJECT

Many additional features can be incorporated during the enhancement of this project after completion of basic amenities. Few can be :

- ❖ Centralized database for multiple hostels of same college
- ❖ Can be extended to College management which would provide hassle free registration of students .
- ❖ Improved version of functionality to serve a general purpose to hotels as well.