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0. Introduction

0.1 Purpose

Hostel management system is an application for managing hostel records. This system helps hostel admin in managing records of the hostel in an efficient manner. This project manage records of the students, hostel rooms and other things related to the hostel.

0.2 Intended audience and reading suggestions

The SRS (Software specification specification) is intended for the follows:

Project manager	To manage the processes in the project
Software Developer	To help him/her in developing software according to the requirements
Software Designer	To design software according to given requirements
Software Tester	To test system by using dummy data
Database Administrator	To perform database operations
Software Analyst	To analyze the software according to the specifications
Client	To get the idea of what is to be expected from the software

0.3 Product scope

The system will make managing data and resources easy. It is user-friendly and does not require specially trained person to handle the software.

. It works for both hostels type (university/school hostel or private hostels)

. To allot seats on merit.

- Objectives:
    - ❖ Room allocations
    - ❖ Bill Generation
    - ❖ Maintaining Student's Records Provide
    - ❖ Student's Complaints
    - ❖ Maintaining Employee Records
- Goals:

    The goals of the system are to accept these problems in an effective and optimal manner
    - ❖ Centralizing the database and thus providing consistent data to all the employees in the Hostel.
    - ❖ Make the system more user friendly by providing an intensive user interface.
    - ❖ Easy access through reports.
    - ❖ Restricted data access to employees thus providing additional security to data

1. Overall Description

1.1 Product Perspective

The hostel management system is fully independent system by Thunder software.

It is divided into three interfaces.
- ❖ Administrator interface

    Users of this module would have total control over the details and the hostellers' accounts. They would be able to monitor all the activities of hostellers such as their in and out timings and mess attendance.

❖ User Interface

Users of this module would be able to log in and see their entry and exit timings in and from the hostel.

❖ Staff Interface

Users of the staff module would be able to update the timings of hostellers, mark their mess attendance.

1.2 Product Functions

"Hostel Management system" is an attempt to simulate the basic management system. The system

- ❖ enables to perform the following functions
- ❖ Maintaining the resident information.
- ❖ Maintaining room information.
- ❖ Maintaining fee information.
- ❖ Maintaining employee information.
- ❖ Searching, sorting and retrieval of data.

The various other functions covered by the requirement specifications which follows are provided to meet the requirements of database administrator students and administrator with role based updating and viewing rights. The following general features will be included:

- ❖ The student details are filled by as:
- ❖ Student Name
- ❖ Student father's Name
- ❖ Student year
- ❖ Room No

  Following information given by the administrator:
- ❖ Student details
- ❖ Room details
- ❖ Attendance details
- ❖ Mess details
- ❖ Mess details per month

Updates by database administrator:

- ❖ Student details
- ❖ Mess item expenditure
- ❖ Attendance details

1.3 User classes and characteristics

User Characteristics:

- ➢ Educational Level:

❖ At least user of the system should be comfortable with English language.
➢ Technical Expertise:
  ❖ User should be comfortable using general purpose applications on the system.

User Classes with Functionality:

➢ Administrator:

The administrator can

  ❖ Allot different student to different hostels.
  ❖ Vacate the Students for the hostels.
  ❖ Control the status of the fee payment.
  ❖ Edit the details of the students and modify the student record.
➢ Students:

Every student who have room in hostel have a database and a student account to access his/her data. These permition shall be showed after administrator approval. Student can check his or her data weather its true or need to some changes. Also he or she can check the monthly reports of their fines, mess bills other stufis.

➢ Staff:

Users of the staff module would be able to update the timings of hostellers, mark their mess attendance.

1.4 Operating Environment
The user will use this software to maintain the database of students in an productive way. The user will be able to do it fastly due to our latest software design which is speedy and also user friendly. It will update the present manual system to an more advanced digitalized system.

1.5 Design and Implementation constraints
  ❖ The developed system will run under any platform i.e. Unix, Linux, windows etc.
  ❖ There can be any security risk involved.
  ❖ Details provided by individual during his sign up should be stored in database.
  ❖ Student details can update or change by only administrator or database manager.
  ❖ The Hostel Id card is necessary to use mess.
  ❖ Time constraint

1.6 Assumptions and Dependencies
  ❖ The details related to the students, room, mess.
  ❖ Administrator is created in the database already.
  ❖ Roles and tasks are predefined.
2. External Interface Requirements
2.1 User Interface :
There are three interfaces in this software.
  ➢ Administrator Interface:

Users of this module would have total control over the details and the hostellers' accounts. They would be able to monitor all the activities of hostellers such as their in and out timings and mess attendance.

> Student Interface:
> Users of this module would be able to log in and see their entry and exit timings in and from the hostel.
> Staff Interface:
  Users of the staff module would be able to update the timings of hostellers, mark their mess attendance.

2.2 Hardware Interface:
Hardware Interfaces exist in computing systems between many of the components Such as various storages devices, other i/o devices these are following for project
 Processor: Intel core 2duo or higher
RAM: 3GB
Monitor: 15 color monitor
Mouse & Keyboard
Storage: Hard disk

2.3 Software Interface:
The software is developed with all the basic controls and class provided in Java and SQL, Windows XP or above installed on the system. Application package must be installed.
Operating system: windows xp, vista ,7.8, Linux, Tec.
Developing tool: Command prompt, SQLyog.

2.4 Communication Interfaces:

The system is a standalone product that does not require any communication interface.

3. System Features
3.1 Use case and scenarios of administrator:
Table 1: Add Students

Name	Add students name
Description	Students desc
Precondition	To add the student in database of hostel
Successful completion	1. The administrator login with databse. 2. If the Login successful then he checks the availability of room in hostel. 3. The administrator add the student in database. 4. The student will recive the room number.
Post Condition	The student has added in database of hostel.

Table 2 : Login with database

Name	Login with database
Description	

Precondition	To login with description
Successful Completion	1. The user boot the system 2. The user enter password. 3. If the password is valid the user login with database.
Post condition	The user has logged with database or system.

Table 3: Room Allocation

Name	Room Allocation
Description	The scenario describes the process of room allocation
Precondition	To allocate the room to students
Successful completion	1. The administrator login with database. 2. If the login successful then check the availability of room 3. If room is available then allocate the room and room number to the student 4. Successfully room has allocated to the student.
Post condition	The room has allocated to the student.

Table 5: Generate student profile

Name	Generate student profile
Description	The scenario of generation of student profile.
Pre-condition	To generate the student profile.
Successful completion	1. The administrator can see the profile in the list. 2. Display profile page. 3. The administrator enter the student name, address , ph #. Room number and account number. 4. The profile has been created.
Post condition	The student profile has successfully created and password / username is sent to student.

Table 6: Delete a student

Name	Delete student profile
Description	The scenario of deleting student profile.
Pre-condition	To delete the student profile.
Successful completion	1. The administrator login with database.

	2. If the login is successful then database administrator searches the student. 3.1f the record of student is appears then checks his/her dues. 4. The database administrator database. delete the student from system database
Post condition	The student has been deleted successfully from the system.

Table 7: Generate Mess Account

Name	Generate Mess Account
Description	The scenario describes the creation of mess account.
Pre-condition	Administrator/Database administrator To create mess account of student.
Successful completion	1. The administrator login with database. 2. 1f the login is successful then generate the mess account of student. 3. If the login not successful then check the system.
Post condition	The mess account has created or not based above procedure.

Table 8: Change the hostel due of student.

Name	Change the hostel dues of student.
Description	The scenario describes the changing of hostel dues of student
Pre-condition	Administrator/Database Administrator To Change the hostel dues of students if the student pay his/her payment.
Successful completion	1. The Administrator login to system or database for changing of Hostel dues of student. 2. 2.If the login is successful then the administrator checks the profile 3. And hostel dues report & dues current status. 4. If the student has paid the bill or payment then the dues will be updated.
Post condition	The mess account has created or not based above procedure.