

RV College of Engineering® , Bengaluru – 59
Department of Computer Science and Engineering
Database Design Laboratory (18CS53)

Requirement specification

TITLE	INTEGRATED MANAGEMENT SYSTEM FOR RVCE HOSTEL		
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1. Hardware Specification

Personal computer with the following specifications:

- 1 GB RAM minimum, 2GB recommended
- 20GB hard disk space + at least 1GB for caches
- 1024x768 minimum screen resolution

2. Software Specification

A software requirements specification (SRS) is a comprehensive description of the intended purpose and environment for the software under development. An SRS minimizes the time and effort required by developers to achieve desired goals and also minimizes the development cost.

- OS: Microsoft Windows 10/8/7/Vista/2003/XP (incl. 64-bit)
- Django framework – HTML, CSS
- SQLite relational database
- Google Firebase NoSQL database

3. Functional Requirements

The system should support management of academic, administrative and other activities associated with the college hostel. These are as follows:

1. Create user account

The hostel management system shall allow both hostel authorities and students to create their user accounts.

2. Login to access the integrated database

The system will enable registered users to login using their respective user IDs and interact with the database.

3. Generate user profile

The hostel management system shall generate the user's profile. The profile shall include details like USN, name, year, branch, CGPA, address and email for student users while it shall contain ID, name and email address for hostel administration users.

4. Add hostel information

The system shall store basic information regarding hostel i.e. hostel ID, block name, warden name and contact number.

5. Request room allotment

The system shall enable the student users to request for desired rooms to the hostel authority based on their grades and time stamp.

6. Allocate rooms

It shall enable hostel authorities to receive student requests for rooms and allocate rooms while keeping track of the number of rooms allocated with room details like room no, wing and resident names.

7. Track visitors to rooms

The system shall enable the authorities to add visitor attendance to particular rooms with visitor names and date and time.

8. Maintain mess reduction bill

The hostel management system will let mess authorities maintain mess reduction amount for students in hostels based on their leave application and mess card submission dates.

9. Provide fee payment status

The system shall compute the fee details for room allotment and maintain payment status based on receipt number by cross verifying the payment details.

10. View and add amenities

The system will facilitate users to view details of amenities provided by different hostels and the cost and provider name for each. It shall also let authorities add new amenities to update the database.

11. Grievance handling

The hostel management system shall permit student users to post their grievances with respect to different issues which can be effectively handled by hostel authorities.

12. Integrate additional features

The system shall enable database designers and administrators to easily integrate additional features with the existing system in the future as per new requirements.