A Project

On

Hostel Management Portal

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Documentation

★ System Requirement Specification (SRS)->

O Software Configuration

- This Library Management System is developed using MySQL 8.0 by Oracle Corporation, as the backend to store the database.
- Operating System: Linux, Solaris macOS, Windows
- Database: MySQL

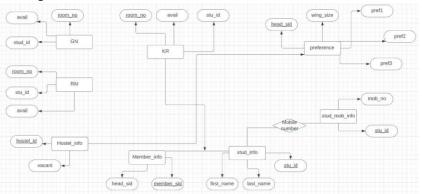
O Hardware Configuration

Processor: Pentium(R)Dual-Core CPU and above

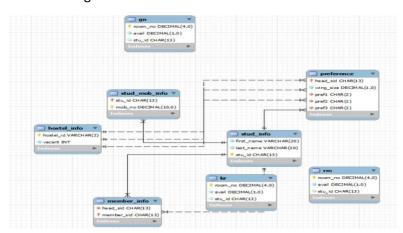
Hard Disk: 40GB or moreRAM: 256 MB or more

★ System Modelling

o ER Diagram:



Schema Design:



Data Normalisation:

First, the basic idea was taken and then the decomposition was done from 1-NF to 2-NF to 3-NF to BCNF.

Mobile number was a multi-attribute entity, hence we divided it into 2 tables namely, stud_info and stud_mob_info for better efficiency. We have included 3 hostels – Ram(RM), Krishna(KR) and Gandhi(GN).

- List of Tables Required:
 - 1. GN (room no, avail, stu_id)
 - 2. KR (<u>room_no</u>, avail, stu_id)
 - 3. RM (<u>room no</u>, avail, stu_id)
 - 4. Preference (<u>head_sid</u>, wing_size, pref1, pref2, pref3)
 - 5. Stud_info (<u>stu_id</u>, first_name, last_name)
 - 6. Stud_mob_info (stu_id, mob_no)
 - 7. Member_info (head_sid, member_sid)
 - 8. Hostel_info (hostel_id, vacant)

★ Triggers:

1. Pref – It is the main trigger which contains all the if-else-if statements