

A Project
On
Hostel Management Portal

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Documentation

★ System Requirement Specification (SRS)->

○ Software Configuration

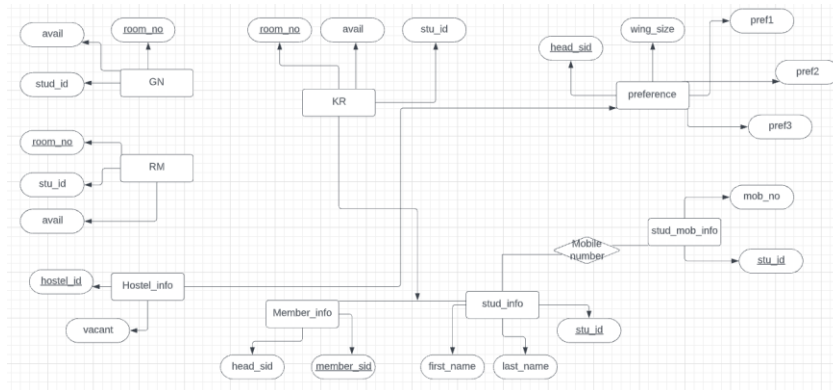
- This Library Management System is developed using MySQL 8.0 by Oracle Corporation, as the backend to store the database.
- Operating System: Linux, Solaris macOS, Windows
- Database: MySQL

○ Hardware Configuration

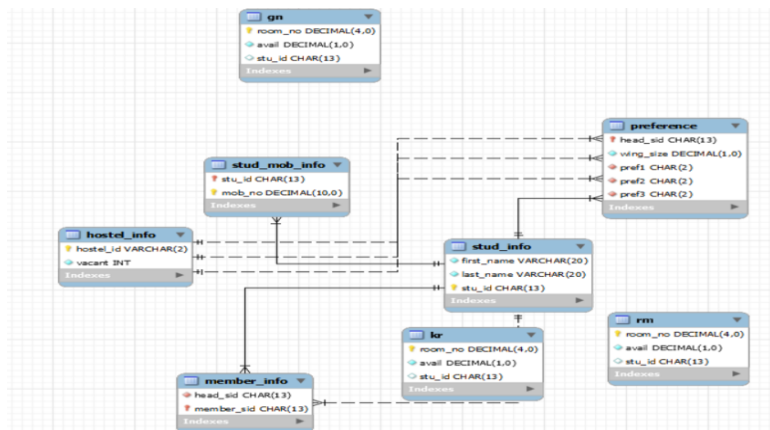
- Processor: Pentium(R)Dual-Core CPU and above
- Hard Disk: 40GB or more
- RAM: 256 MB or more

★ System Modelling

○ 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 (room_no, avail, stu_id)
 3. RM (room_no, avail, stu_id)
 4. Preference (head_sid, wing_size, pref1, pref2, pref3)
 5. Stud_info (stu_id, 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