1 . PROBLEM STATEMENT:

Every Year more than 1500+ student take admission at the National Institute of Technology, Karnataka, Surathkal (Herein referred to as NITK in the report) for various Undergraduate, Postgraduate, Management and Doctoral studies. Often times, these students come from various parts of India, or even different countries to study. Such students are classified into the category of 'Hostelers' and are allocated a hostel room in either of the several hostel blocks, upon payment of certain amount of fees. They can also avail mess food from either one of the eight-mess spread across the southern part of the campus, depending on their preference and on first come-first serve basis. Please do note that there are separate hostel blocks, as well as mess for boys and girls.

The responsibility for allocating hostel blocks and mess to the newly admitted student is carried out by the Mess and Hostel Allocation Office (Located in Sahyadri Block 7) for both boys and girls. This office comes under the office of Dean- Student Welfare.

However, due to the ever-increasing number of students, the procedure has become increasingly more hectic and gruesome. Students have to wait in hour long Queues for completing basic Fee payment for Mess and Hostel allocation and then wait their turns to site their hostel block and mess preferences, only after which they are handed over the keys to their room and the mess cards to their respective mess. With the process being mostly carried out with the archaic skill of book-keeping, leads to an increase in error due to human fault.

The project under the course IT252 titles 'IRIS Hostel and Mess Management System' aims to :-

- ·To integrate the Hostel and Mess Allotment process with Integrated Resource and Information Sharing (IRIS), NITK's digital platform for various purposes like fee payment, online resourcing of academics, etc.
- ·To semi-automate the process of Hostel and Mess allotment, so as to reduce human errors to maximum extent
- ·To make the Fee payment procedure for both hostel and Mess available via Online Platform.
- ·Most importantly, to maintain a database of the students with respectively allocated mess and hostel rooms, which can be easily accessed by the actors (mentioned later on in the report)

2 . ACTORS:

People who interact with the database are:-

- Students availing hostel, aka Hostelers
- Employees of The Mess and Hostel Allocation Office
- Dean Student Welfare's Office
- IRIS management
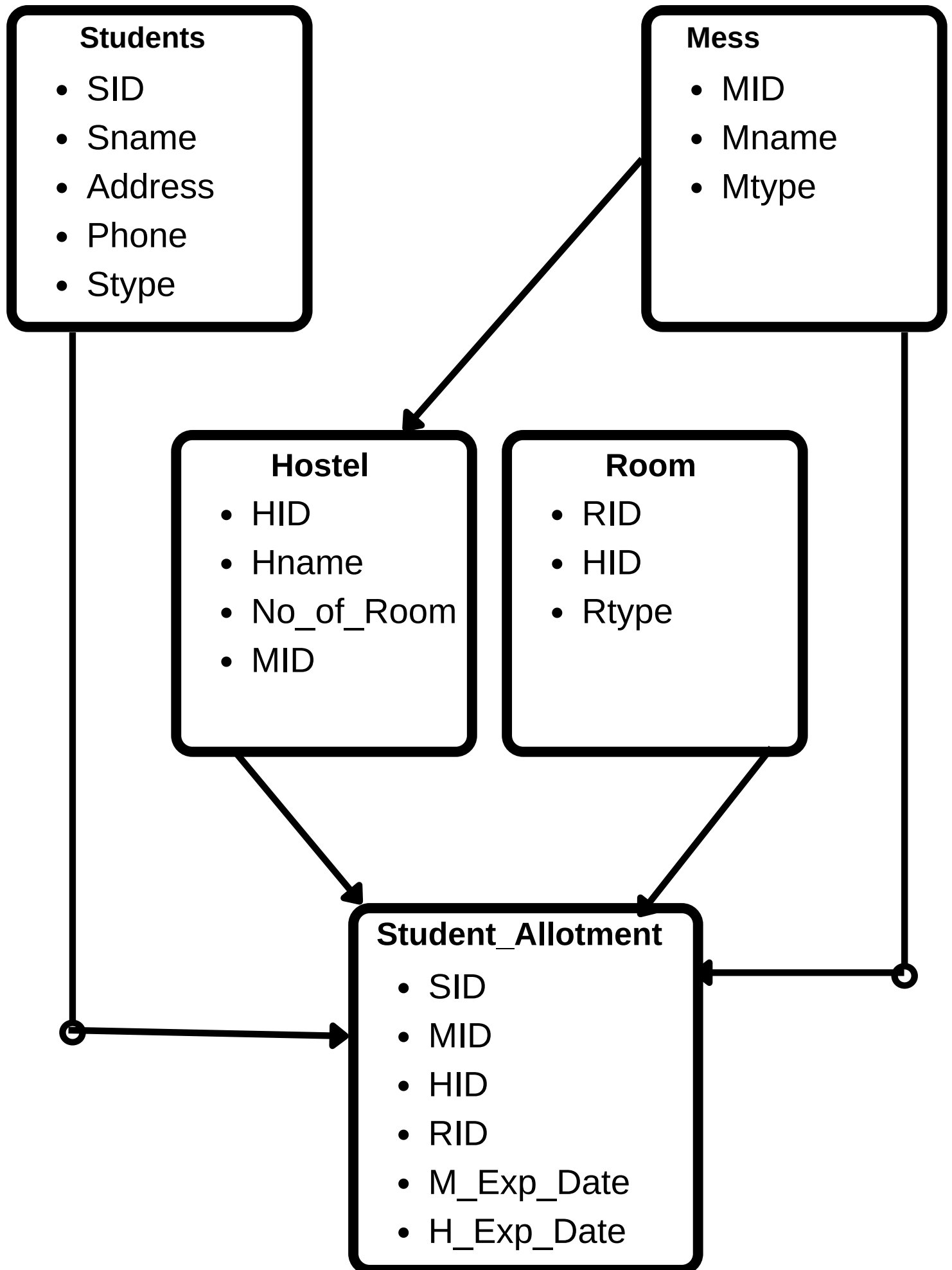
3 . SOME SAMPLE QUERIES:

A student can

- Check the list of total mess in NITK.
- Check list of hostel blocks in NITK.
- Check List of Veg and Non-Veg Mess in NITK..
- Get information about their allotment status.

Mess or Hostel authority can

- Check No of students staying in a hostel.
- Check No of students in a mess.
- Check the expiry status of the mess of a particular student.
- Verify the enrollment process.

4. EER MODEL (CONCEPTUAL MODEL)

Students
- SID
- Sname
- Address
- Phone
- Stype

Mess
- MID
- Mname
- Mtype

Hostel
- HID
- Hname
- No_of_Room
- MID

Room
- RID
- HID
- Rtype

Student_Allotment
- SID
- MID
- HID
- RID
- M_Exp_Date
- H_Exp_Date

5. GLOBAL CONCEPTUAL SCHEMA

Students

SID	Sname	Address	Phone	Stype

Mess

MID	Mname	Mtype

Hostel

HID	Hname	No_of_Room	MID

Room

RID	HID	Rtype

Student_Allotment

SID	MID	HID	RID	M_Exp_Date

H_Exp_Date