# Hostel Management System Design

CO527 - Advanced Database Systems Project

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#### 1. Introduction

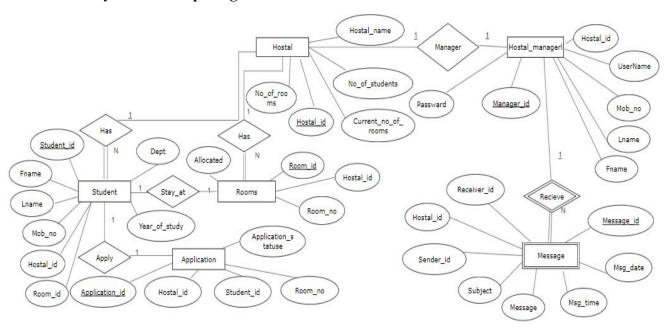
The design document provides documentation which will be used to aid in software development by providing the details for how the software should be built. The document includes narrative and graphical documentation of the software design for the project including ER Diagrams, Conceptual design, Physical design and other supporting requirement information.

## 1.1 Purpose

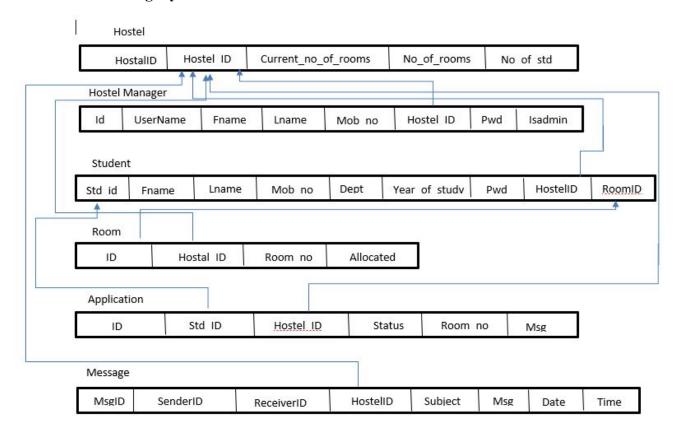
The purpose of this document is to provide a description of the design of a system fully enough to allow for software development to proceed with an understanding of what is to be built and how it is expected to build. It provides information necessary to provide the description of the details for the software and system to be built.

# 2. Data Design

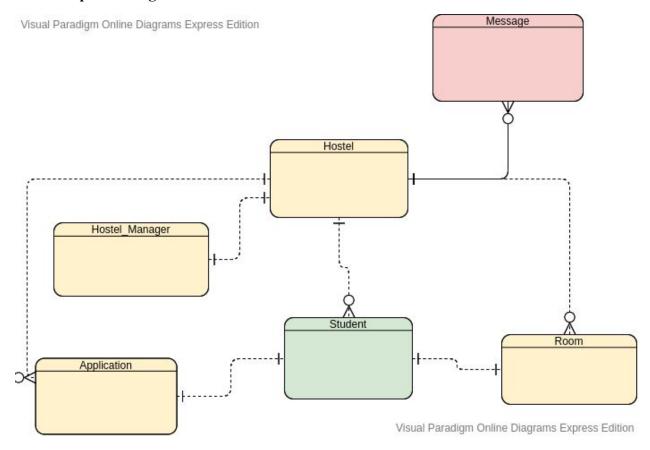
# 2.1 Entity Relationship Diagram



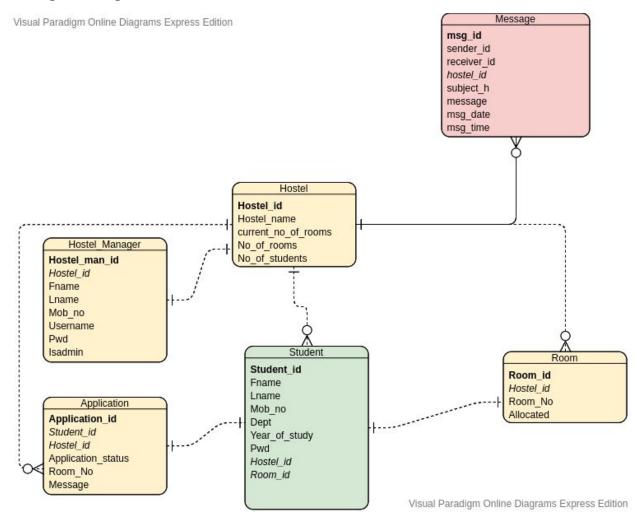
# 2.2 Referential integrity constraints



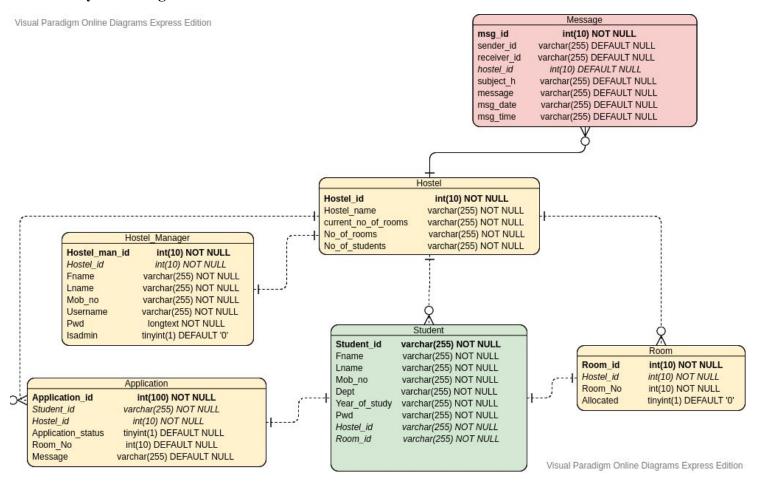
# 2.3 Conceptual Design



# 2.4 Logical Design



### 2.5 Physical Design



## 3. Entities and Attributes

This section of the document explains the entities used in the project, their attributes and how they will work together. Basically, this is intended to make the design more easy and understandable for everyone.

#### Entities

- 1.Hostel
- 2.Hostel\_Manager
- 3.Student
- 4.Room
- 5. Application
- 6.Message

#### 3.1 Hostel

An Institution has many hostels and each hostel is represented using this 'Hostel' entity. Hostel model takes part in the following relationships.

- 1. Hostel Manager manages Hostel.
- 2. Hostel has Students.
- 3. Hostel has Rooms.

## 3.2 Hostel Manager

Every hostel has an administrator and is represented using the 'administrator' entity.

Administrator entity takes part in the following relationships.

1. Hostel Manager manages Hostel.

#### 3.3 Student

Every hostel has students and they are represented by the 'student' entity. Student entity participate in the following relationships.

1. Hostel has Students.

# 2. Students stay at room

#### 3.4 Room

Every Hostel has rooms and they are represented using 'room' entity. Room entity participates in the following relationships.

- 1. Hostel has Rooms.
- 2. Student stays at room.

## 3.5 Application

Student can apply for one hostel. Application entity participates in the following relationships.

- 1. Hostels can have many applications.
- 2.Students send application.

## 3.6 Message

Students can send messages to hostel manager using this form and vice versa. Message entity participates in the following relationships.

1. Hostel Manager has messages.