

Ahsanullah University of Science and Technology

Department of Computer Science & Engineering

DATABASE LAB
CSE – 3104

Introductory Project Report

House Rent Management System

Submitted by

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1. Introduction:

This is a house rental management system. We will collect the information of the renters and at the end of the month we will give them a slip which will show how much rent a renter should pay the owner.

There will be personal information of every renter such as renter name, phone number, permanent address, renter's occupation, number of vehicles for bike and car(if any), number of family members. We will also keep the record of their entry time and exit time during their stay.

The rent cost of each renter will include some rents such as house rent, electricity bill, water & gas bill, parking charge, and the cost of utilities. The utilities will include the cost of garbage bill, security charge and lift charge.

We also need to keep the record of the number of floors and the number of units in each floor. We also need to keep the record of the renters who are renting which floor and which unit. If any renter leaves/exits their floor-unit then we need to see the vacancy of that floor-unit for the future renter.

2. Objective:

Our main objective is to manage the rent system for each renter of a building and at the end of the month give the renters their total rent cost through a slip or bill.

After a year the cost of house rent can be updated by adding a sum of money for each renter. If a unit of a floor is vacant then it can be rented to a new renter.

We need to draw an Entity-Relationship Diagram of our project and create database for our system and connect the database with GUI.

3. Entity-Relationship Diagram:

i. Entity and its attributes:

a) Entity-01: Renter

- Renter Id – **primary key**
- Unit Id – **foreign key**
- No. of Car/Bike (o)
- Rented Amount

b) Entity-02: Renter's Personal Information

- Renter P.I. Id – **primary key**
- Renter Id – **foreign key**
- Name
- Permanent Address
- Occupation
- Phone no
- Entry Date
- Exit Date

c) Entity-03: Unit

- Unit Id – **primary key**
- Renter Id – **foreign key**
- Gas & Water Bill
- Parking Bill (o)
- Utility (lift & garbage)

d) Entity-04: Electricity Bill

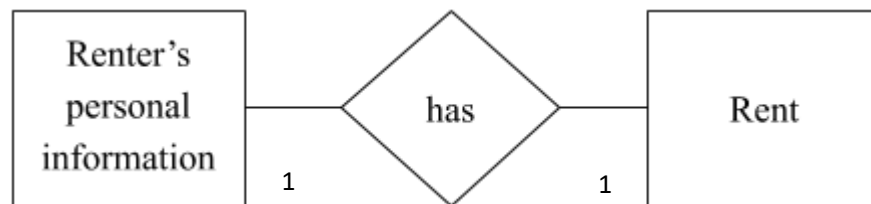
- Electricity Bill Id – **primary key**
- Unit Id – **foreign key**
- Month Year
- Bill Amount

e) Entity-05: Payment Records

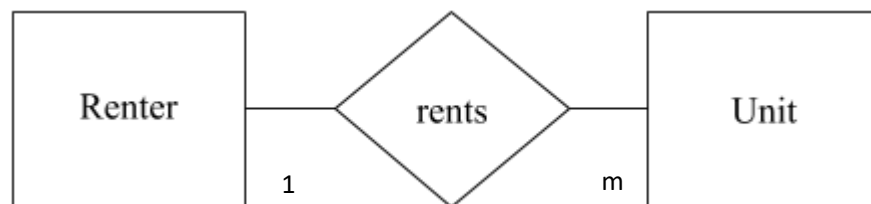
- Payment R. Id – **primary key**
- Renter Id – **foreign key**
- Unit Id – **foreign key**
- Month Year
- Paid Amount
- Due Amount
- Amount to be Paid

ii. Relationship:

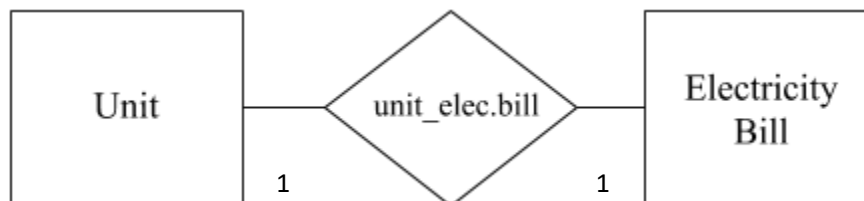
a) Relationship-01: has



b) Relationship-02: rents



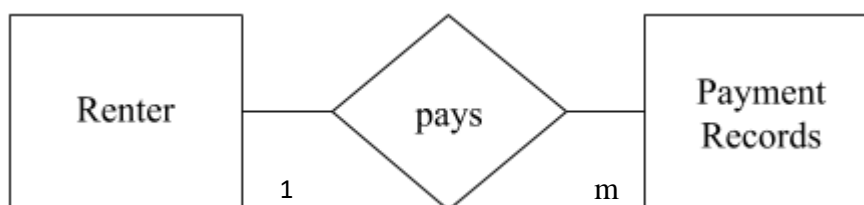
c) Relationship-03: unit_elec.bill



d) Relationship-04: unit_payment



e) Relationship-05: pays



4. Conclusion:

This database management system will hopefully handle all the necessary tasks of digitally storing all relevant data that need to be stored in order to give the renters their total rent cost through a slip or bill.

Our target will be to fully complete all the tasks we described above within given time.

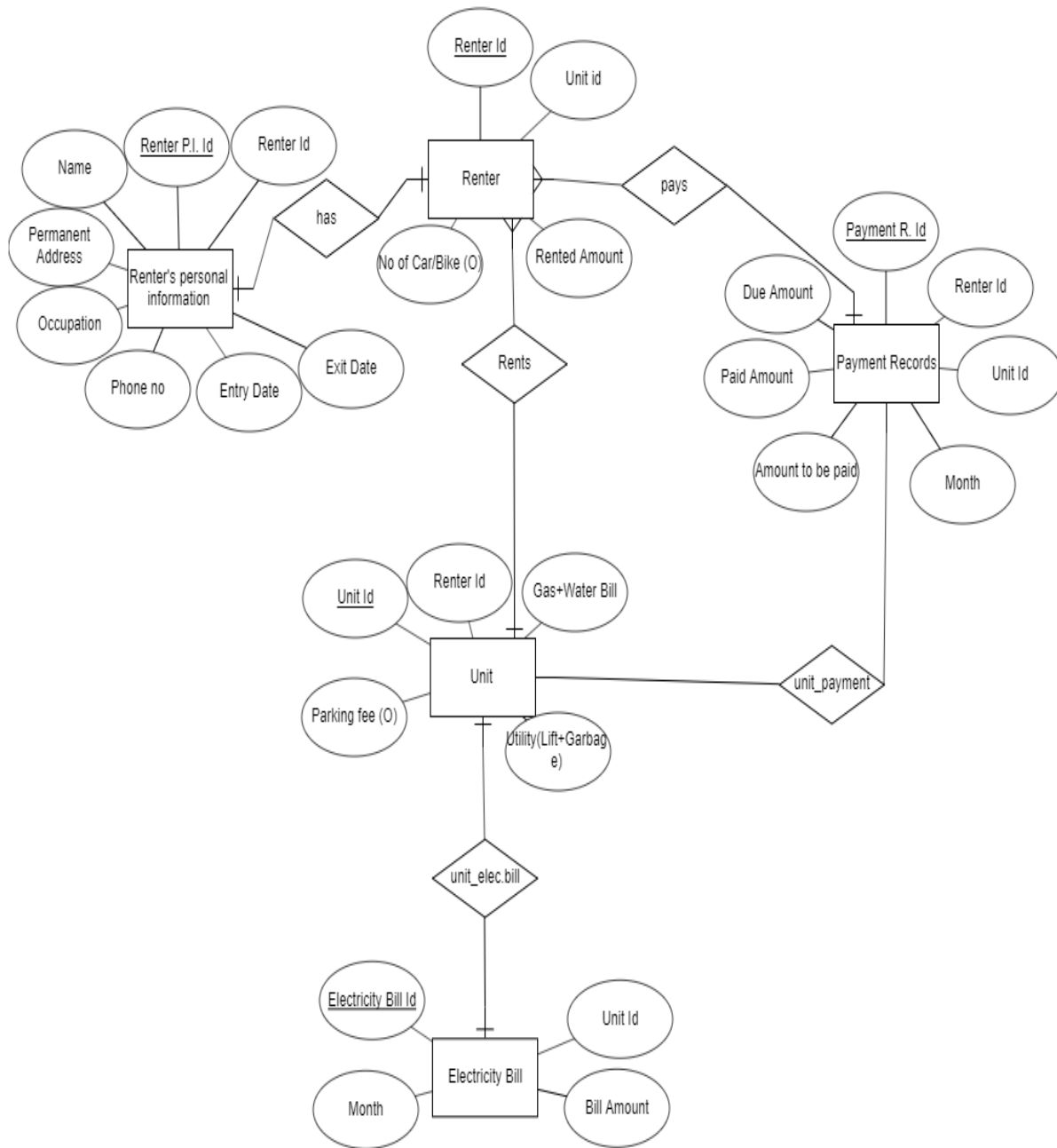


Figure 1: E-R diagram of a House Rent Management System