



# **KHULNA UNIVERSITY OF ENGINEERING & TECHNOLOGY**

Department of Computer Science and Engineering (CSE)

## **PROJECT REPORT ON**

Hall Dining Management System

**Course Code:**CSE 3110

**Course Title:** Database Systems Laboratory

### ***Submitted by:***

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## **Objectives:**

- 1) To know about data definition language (DDL) and data manipulation language (DML).
- 2) To learn about Oracle SQL Commands.
- 3) To learn about implementations of Oracle SQL Commands.
- 4) To learn about PL/SQL commands.
- 5) To Organize SQL Commands in a particular project.
- 6) To learn about ER Diagram and to follow the whole project according to the Schema Diagram.

## **Introduction:**

Hall dining management system is the system where the hall provost nominates a dining manager and the manager can manage all the systems which are related to the dining. Here the system is developed by using multiple entity and their interconnections. There are some attributes under the each entity which are used for establishing the connection.

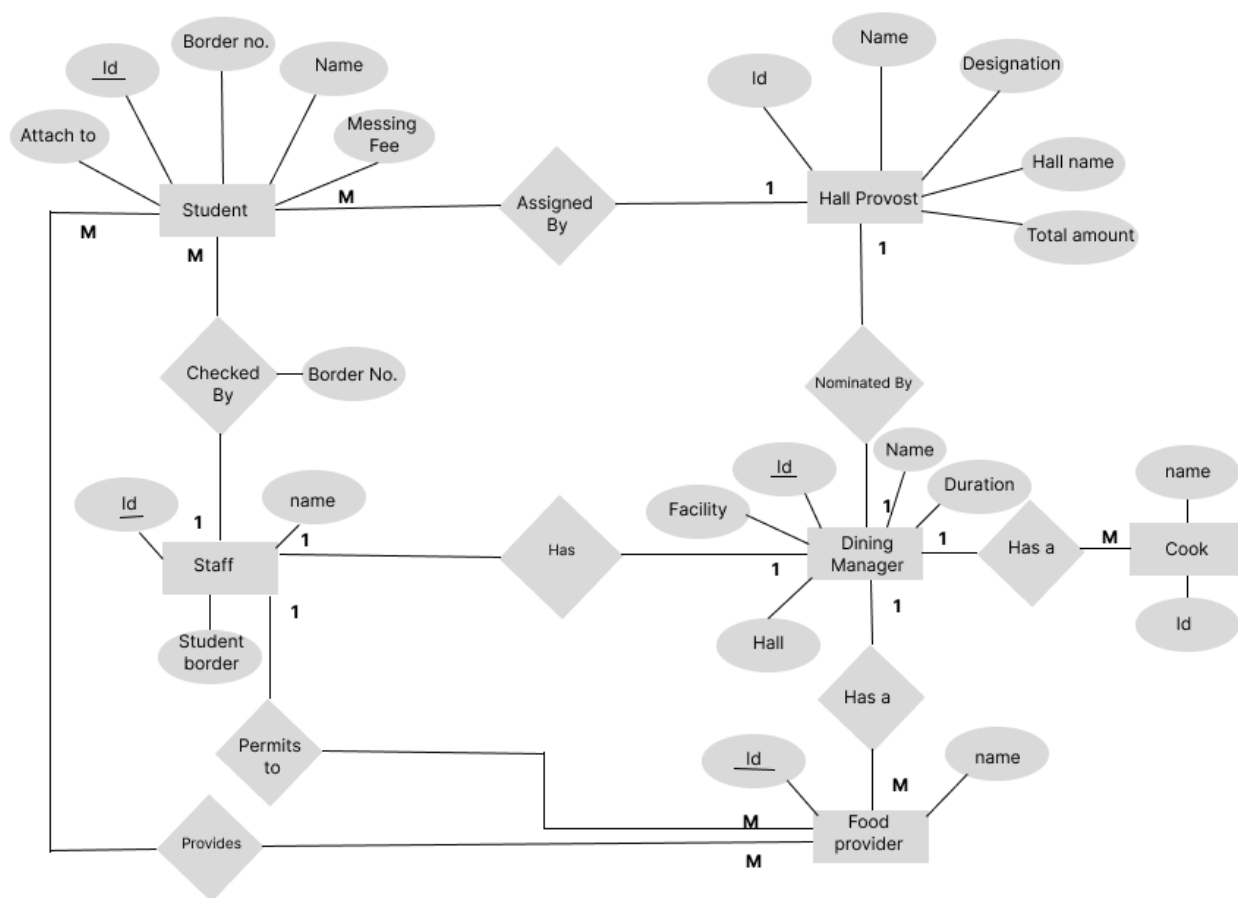
In my project I used six tables named student, hall provost, staff, dining manager, cook and food providers. Each of the entity has their specific tasks. The dining manager can control staff, food provider and cook to maintain the flow of system properly. There are multiple types of relations. Like one to one relation and one to many relation. To define these relation an entity relationship model must be required.

In entity relationship model we can make the relation among the entity with their relationship which can be one to one, one to many or many to many.

### **Project Structure:**

1. There are six tables are created initially which are student table, hall provost, staff, dining manager, cook and food provider.
2. Each of the table had unique entity with a primary key.
3. In student table ,there are six attributes are set from where the id is the primary key.
4. In the table of hall provost ,he can nominated a dining manager who has his personal id ,name and designation.
5. The cook,food provider and staff table is created with containing a unique key to main the dining flow system.
6. Here the table between student and foodprovider has many to many relationship.
7. The table between staff - dining manager and hall provost-dining manager has one to one relations and the other tables have one to many relationships.

**ER Diagram:**



**Fig1.1:ER diagram of Hall Dining Management System**

## Schema Diagram:

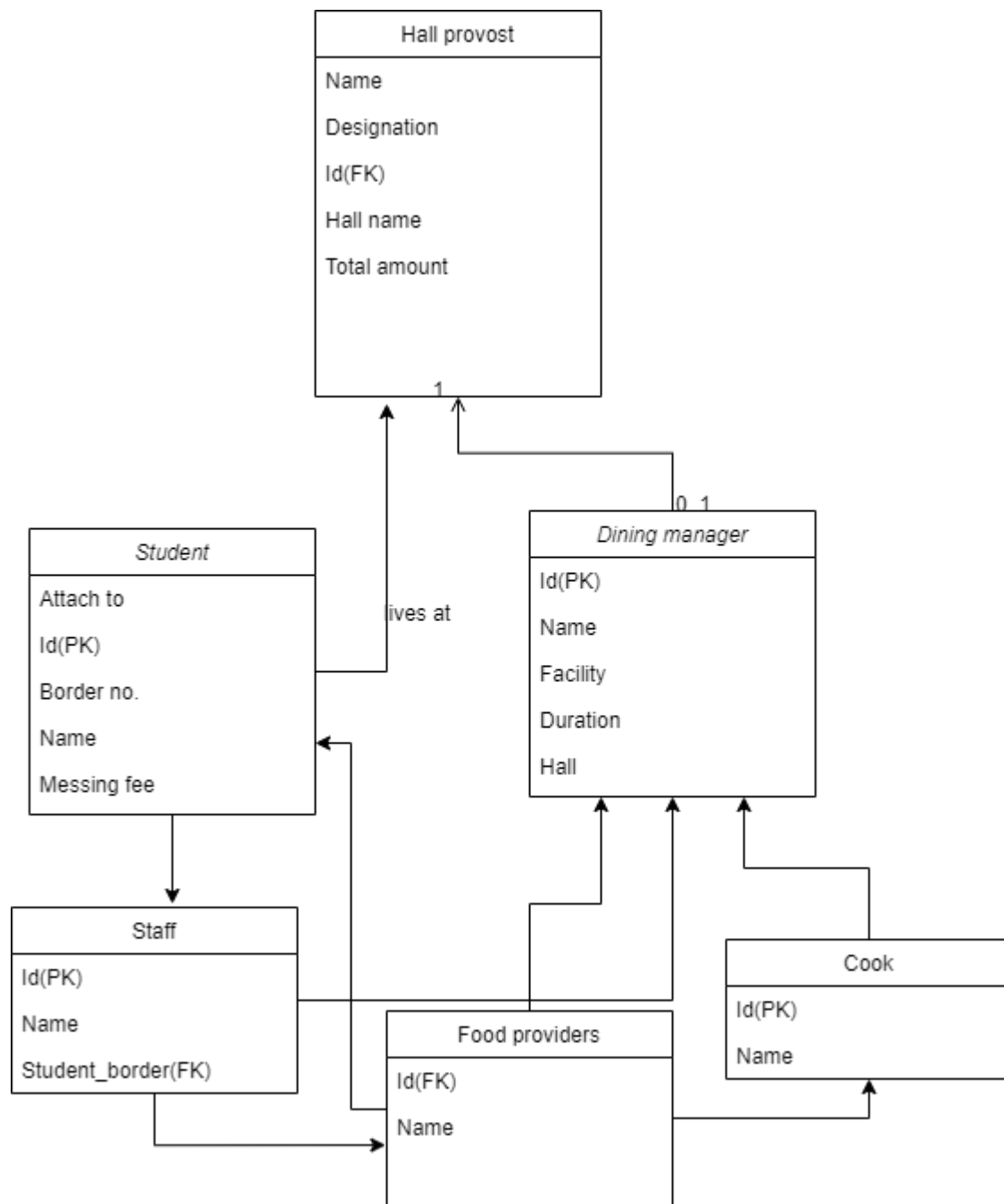


Fig 1.2: Schema diagram of Hall Dining Management System.

## **Project Details:**

In the project ,I used some basic query language on ORACLE database management system.Here, after creating all the table the values are inserted each table individually with considering primary key and foreign key.Before insertion a trigger is created in the project which can accept only the value in between a specific range.

After inserting all the values, then some operations are done over the table.I used all the queries which are learnt from our lab and tried to make the proper use of it.I used joining to join some multiple tables to establish a relationship among the tables.I used to implement all the relations here.Basically PL/SQL is the main purpose use them in my project.Here I used some procedures, functions with single and multiple perameters and more important is the using of cursor to find specific elements in details.The cursor can point all the row elements and then fetch all of them.

Trigger is created in this project to make the limit of some values begore insert or delete any elements.At last I used timestamp from dual library to show time for a specific work.Transaction management is also included in this project by using commit and savepoint with rollbacking.

## **Discussion and Conclusion:**

This project is all about implementing sql and pl/sql commands for oracle database.From the project we learnt about basic query language with multiple implementations.While doing the project I faced some difficulties to run the code because of the syntactical errors.After revision, I would be able to find the error and then fix it without facing any issues.

As my project is hall dining management system,so it consumes a little bit time to design the code through PL/SQL language.

From the project we will be able to know about oracle database management system clearly. I hope these knowledges help me to design another project with efficient way in future.

### **References:**

1. Database System Concepts -Silberschatz Korth Sudarshan.
2. [https://en.wikipedia.org/wiki/Oracle\\_Database](https://en.wikipedia.org/wiki/Oracle_Database)
3. <https://www.javatpoint.com/oracle-tutorial>