**CHAPTER 1**

**INTRODUCTION**

**1.1 Overview**

The Restaurant Management System facilitates the customers to order items available on the menu card. The main aim of this project is to design and develop a database maintaining the records of different orders received and attendance of the employees working in the restaurant.

Our project is a computerized system of reserving the seats for customers in advance. It is mainly used for arranging the orders and assigning them a table. There are additional features of storing the profit the restaurant earned in a month. The system uses a trigger to calculate the number of days the staff members of the restaurant were on leave or working.

**1.2 Modules**

**Manager Panel**:

* Can customize the menu.
* Can create accounts of staff.
* Can approve or reject an application for leave
* Can generate reports.

**Cashier:**

* Receives payment for an order.

**Cooking Staff:**

* Can receive an order and update it’s status.

**Customer:**

* Can place an order.

**Staff:**

* Can mark their attendance and apply for leaves.

**1.3 Database Management System**

A database management system (DBMS) is system software for creating and managing databases. The DBMS provides users and programmers with a systematic way to create, retrieve, update and manage data. The DBMS essentially serves as an interface between the database and end users application programs, ensuring that data is consistently organized and remains easily accessible.

The DBMS manages three important things: the data, the database engine that allows data to be accessed, locked and modified, and the database schema, which defines the database’s logical structure. These three foundational elements help to provide concurrency, security, data integrity and uniform administration procedures. Typical database administration tasks supported by the DBMS include change management, performance monitoring/tuning and backup and recovery. Many database management systems are also responsible for automated rollbacks, restarts and recovery as well as the logging and auditing of activity.

**1.3.1 Characteristics of Database Management Systems**

* Self-describing nature
* Keeps a tight control on data redundancy
* Enforces user defined rules to ensure that integrity of table data
* Provides insulation between Programs and data, Data abstraction
* Supports multiple views of the data
* Helps sharing of data and Multi-user transaction processing.

**1.3.2 Advantages of using the DBMS approach**

* Controlling the redundancy
* Restricting unauthorized access
* Providing persistent storage for program objects
* Providing storage structures for efficient query processing
* Providing backup and recovery
* Providing multiple users interfaces
* Enforcing Integrity Constraints