Chapter 1

INTRODUCTION

1.1 Background

A database represents some aspect of the real world, sometimes called the miniworld or the universe of discourse (UoD). Changes to the miniworld are reflected in the database. A database is a logically coherent collection of data with some inherent meaning. A random assortment of data cannot correctly be referred to as a database. A database is designed, built and populated with data for a specific purpose. It has an intended group of users and some preconceived applications in which these users are interested.

A database management system (DBMS) is a collection of programs that enables users to create and maintain a database. The DBMS is a general-purpose software system that facilitates the processes of defining, constructing, manipulating, and sharing databases among various users and applications. Defining a database involves specifying the data types, structures, and constraints of the data to be stored in the database. The database definition or descriptive information is also stored by the DBMS in the form of a database catalog or dictionary; it is called meta-data. Constructing the database is the process of storing the data on some storage medium that is controlled by the DBMS. Manipulating a database includes functions such as querying the database to retrieve specific data, updating the database to reflect changes in the miniworld, and generating reports from the data. Sharing a database allows multiple users and programs to access the database simultaneously.

1.2 Introduction about the project

Gym Management System is a web based project which act as a bridge between gym managers and clients. It is required to enhance and upgrade the existing system by increasing its efficiency and effectiveness. The software improves the working methods by replacing the existing manual system with the computer based system. This system is for those who run a gym business. We basically did a decent research on major difficulties for the gym owners. We examined carefully about how to make a huge registration system without failure as well as different functions for different kinds of user

depending on their privilege. This project is designed to facilitate a gymming and fitness center to automate its operations for keeping records and store them in the form of large and user friendly database further facilitating easy access to the personnel.

Objective of the Project

- The main objective of the project is to develop software that facilitates the data storage, data maintenance and its retrieval for the gym in an igneous way.

- To store the record of the customers, the staff that has the privileges to access, modify and delete any record and finally the services that the gym provides to its customers.

- Also, only the admin has the privilege to access any database and make the required changes, if necessary.

- To develop easy-to-use software which handles the customer-staff relationship in an effective manner.

- To develop a user friendly system that requires minimal user training. Most of features and functions are similar to those on any window platform.

Purpose of the project

The Project was made in order to effectively and efficiently cater to requirements of the fitness center. Very frequently the person who generally holds the tasks to manage the center needs to keep the records of all the transactions as well as data manually. Generally, in order to structure these tasks Separate Registers are maintained. This whole process thus becomes quite cumbersome for them to control manually.

Searching a particular data specific to particular requirements is also very tedious in such system. In order to retrieve records, the responsible person needs to manually locate the appropriate register and locate the appropriate placement of that particular record which may be very time consuming.