

Chapter 1

INTRODUCTION

1.1 Background

A database represents some aspect of the real world, sometimes called the mini-world or the universe of discourse (UoD). Changes to the mini-world 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 mini-world, 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

Result Management System is a DBMS project which acts as a bridge between the University and the students. This project enhances and upgrades the existing system by increasing its efficiency and effectiveness. The software improves the working methods by replacing the existing manual systems with the modern system. This application is useful for those who want to view their result as well as those who have the job of uploading the result. This system is better than older result management systems like Spreadsheets or T-sheets in terms of data fetching speed and data manipulation. The project runs from a web browser interface for both the admin and the students. It is designed to facilitate

insertion and display of results along with semwise SGPA and perform operations like keeping student details and store them in form of a 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 result storage, result maintenance and its retrieval in an efficient way.
- To store the result of the students, the responsible person who has the login access, can modify and delete any record or the final result which university provides to the students.
- 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 student-result relationship in an effective manner.
- To develop a user friendly system that shows SGPA along with the semester marks for the students.

Purpose of the project

The Project was made in order to effectively and efficiently cater to requirements of the result system. Very frequently the person who generally holds the tasks to manage to keep records of all the transactions as well as data manually. Generally, In order to structure these tasks Separate Spreadsheets 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 row and locate the appropriate column of that particular student which may be very time consuming.