

# DBMS Term Paper

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## 1 Introduction

In the era of technology we can't imagine a single day without using apps or websites for our needs. From paying fee on college website, booking online ticket, online tax payment, applying for exam all these require a good management of users data and here Database Management system comes into picture. A database management system (or DBMS) is essentially nothing more than a computerized data-keeping system. Users of the system are given facilities to perform several kinds of operations on such a system for either manipulation of the data in the database or the management of the database structure itself.

Data models define how the logical structure of a database is modeled. Data Models are fundamental entities to introduce abstraction in a DBMS. Data models define how data is connected to each other and how they are processed and stored inside the system.

The very first data model could be flat data-models, where all the data used are to be kept in the same plane. Earlier data models were not so scientific, hence they were prone to introduce lots of duplication and update anomalies. It provides the conceptual tools for describing the design of a database at each level of data abstraction. Therefore, there are following four data models used for understanding the structure of the database:

Relational Data

Entity-Relationship Data Model

Object-based Data Model

Semi structured Data Model