DATABASE MANAGEMENT SYSTEMS (DBMS)

What is a DBMS?

A Database Management System is a digital system used to organize and manage information. The information is stored in a logical and structured way which allows users to add, receive, update and delete information easily. Database Management Systems allow us to do all of the above while keeping our information secure and consistent.

What are the components of a DBMS?

HARDWARE: Hardware refers to the actual hardware, such as servers, storage units, and networking components, that houses the database.

SOFTWARE: The apps and programs that oversee the database, including any extra software used to communicate with the database in addition to the database management system (DBMS).

DATA: Where all the information is stored in the form of tables with rows and columns.

PROCEDURES: These are the policies and procedures that control how information is handled inside databases.

USERS: People who will be interacting with the database management system.

How are the components useful to me?

The relevant hardware would include the servers and storage devices needed to host the course marketplace's database system. The hardware will need to be powerful enough to be able to handle the number of expected users, courses and transactions with minimal downtime. You will be required to choose a software to interact and manage your databases such as MySQL and MongoDB. The data that will be stored within the course market database will be information about the courses, instructors, users and transactions. By sorting this information in tables, it will allow you to easily store, find and manipulate the data to your needs. Procedures should be used in the course marketplace to include the rules and guidelines regarding registration, listing of courses, processing payments and privacy protection. Examples of users that will be interacting with the course marketplace database system will be administrators, instructors and students.