SQL
&
RDBMS

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SQL and RDBMS

In order to understand SQL and RDBMS, we first have to make sure everyone is on the same page about the definition of the relational database.

A database is a systematic collection of information, or data.

A relational database is a database that stores data in a table form, containing columns and rows. It has one or more data categories in columns. Each row, or record, contains a set of data defined by the category, or column.

A relational database typically has more than one table and they might have interrelation and this relationship will be set via the use of the foreign key.

In plain term, you can imagine a spreadsheet where each column is a data field and each row are a record, and this spreadsheet can link to another one using a column with unique row values.

Some advantages of the relational database:

- Easy to categorize and store structured data for faster querying and filtering.
- Easy to scale and aren't reliant on physical organization
- Mature and well-understood database model.
- High level of security

A database management system (DBMS) is a system software for creating and managing databases. The DBMS provides users and programmers with a systematic way to create, retrieve, update and manage data. **RDBMS** stands for **Relational Database Management System**. It's a database management system that is based on the relational model, storing data in relational databases.

RDBMS is a database management system.

And **SQL** is the language used for communicating with data in an **RDBMS**.

Or in the plain term, RDBMS is a book and SQL is the language being used in the book. You want to read or write to the book? Use SQL.

Although almost every relational database management system uses SQL as the standard language, most of them also have their own additional proprietary extensions that are usually only used on their system, thus the syntax and function might be a little bit different from each other.

THE END