

What Is MySQL

Summary: this tutorial helps you answer the question: what is MySQL? And give you the reasons why MySQL is the world's most popular open-source database.

To understand MySQL, you first need to understand the database and SQL. If you already know database and SQL, you can jump to the *What is MySQL* section.

Introduction to database

You deal with data every day...

When you want to listen to your favorite songs, you open your playlist from your smartphone. In this case, the playlist is a database.

When you take a photo and upload it to your account on a social network like Facebook, your photo gallery is a database.

When you browse an e-commerce website to buy shoes, clothes, etc., you use the shopping cart database.

Databases are everywhere. So what is a database? By definition, a database is merely a structured collection of data.

The data relating to each other by nature, e.g., a product belonged to a product category and associated with multiple tags. Therefore, we use the term **relational database**.

In the relational database, we model data like products, categories, tags, etc., using tables. A table contains columns and rows. It is like a spreadsheet.

A table may relate to another table using a relationship, e.g., one-to-one and one-to-many relationships.

Because we deal with a significant amount of data, we need a way to define the databases, tables, etc., and process data more efficiently. Besides, we want to turn the data into information.

And this is where SQL comes to play.

SQL – the language of the relational database

SQL stands for the structured query language.

SQL is the standardized language used to access the database.

ANSI/SQL defines the SQL standard. The current version of SQL is SQL:2016. Whenever we refer to the SQL standard, we mean the current SQL version.

SQL contains three parts:

- 1. Data definition language includes statements that help you define the database and its objects, e.g., tables, views (https://www.mysqltutorial.org/mysql-views-tutorial.aspx), triggers (https://www.mysqltutorial.org/mysql-triggers.aspx), stored procedures (https://www.mysqltutorial.org/mysql-stored-procedure-tutorial.aspx), etc.
- 2. Data manipulation language contains statements that allow you to update (https://www.mysqltutorial.org/mysql-update-data.aspx) and query data (https://www.mysqltutorial.org/mysql-select-statement-query-data.aspx) .
- 3. Data control language allows you to grant the permissions (https://www.mysqltutorial.org/mysql-grant.aspx) to a user to access specific data in the database.

Now, you understand database and SQL, and it's time to answer the next question...

What is MySQL

MySQL? What?

My is the daughter's name of the MySQL's co-founder, Monty Widenius (https://en.wikipedia.org/wiki/Michael_Widenius).

The name of MySQL is the combination of My and SQL, MySQL.

MySQL is a database management system that allows you to manage relational databases. It is open source software backed by Oracle. It means you can use MySQL without paying a dime. Also, if you want, you can change its source code to suit your needs.

Even though MySQL is open source software, you can buy a commercial license version from Oracle to get premium support services.

MySQL is pretty easy to master in comparison with other database software like Oracle Database, or Microsoft SQL Server.

MySQL can run on various platforms UNIX, Linux, Windows, etc. You can install it on a server or even in a desktop. Besides, MySQL is reliable, scalable, and fast.

The official way to pronounce MySQL is *My Ess Que Ell, not My Sequel.* However, you can pronounce it whatever you like, who cares?

If you develop websites or web applications, MySQL is a good choice. MySQL is an essential component of the LAMP stack, which includes Linux, Apache, MySQL, and PHP.