# History of MySQL

MySQL is an open source SQL (structured query language) database management system. It is a system that helps store and manage data efficiently. Database generally stores data in a structured fashion.

## Timeline of MySQL

- Unireg, which is the code base of MySQL, was started in 1981.
- MySQL was founded in 1995 in Sweden.
- In 2000, MySQL went open source, so it could be accessed and used by all.
- In the year 2001, Marten Mickos was elected as the CEO of MySQL.
- In the year 2002, MySQL launched its headquarters in USA, in addition to Sweden headquarters.
- In 2003, MySQL entered into a partnership with SAP, and many features were developed in MySQL keeping SAP in mind.
- In 2005, MySQL launched MySQL Network. Oracle purchased Innobase, which is the backend of MySQL's InnoDB storage.
- In 2008, MySQL was acquired by Sun Microsystems.
- In 2009, Sun Microsystems and Oracle entered intoa definitive agreement under which Oracle acquired Sun Microsystems.

Let us now understand the history of MySQL:

- The mSQL database system was designed to connect the data that is stored in tables using customized fast low level (ISAM) routines.
- ISAM refers to indexed sequential access method, which is a file management system. It is a technique that helps access records in the tables sequentially, i.e in the same order in which the records were entered into the table, or randomly with the help of an index. Every index can be used to define a different order for the records in the table.
- ISAM was originally developed by IBM before the development of VSAM (Virtual Storage Access Method) and relational databases.
- When mSQL was tested to see its efficiency, it was observed that mSQL was not quick enough or flexible enough for the requirements in hand.

- MySQL was initially created for personal usage from mSQL based on the low-level language ISAM.
- MySQL has been named after co-founder Monty Widenius's daughter- My. The logo, a dolphin is known as 'Sakila'.

# MySQL Features

MySQL is a relational database management system (RDBMS) based on the SQL (Structured Query Language) queries. It is one of the most popular languages for accessing and managing the records in the table. MySQL is open-source and free software under the GNU license. Oracle Company supports it.

The following are the most important features of MySQL:

### Relational Database ` System (RDBMS)

MySQL

Is a relational database management system. This database language is based on the SQL
Queries to access and manage the records of the table.

### Easy to use

MySQL is easy to use. We have to get only the basic knowledge of SQL. We can build and interact with MySQL by using only a few simple SQL statements.

### It is secure

MySQL consists of a solid data security layer that protects sensitive data from intruders. Also, passwords are encrypted in MySQL.

### Client/ Server Architecture

MySQL follows the working of a client/server architecture. There is a database server (MySQL) and arbitrarily many clients (application programs), which communicate with the server; that is, they can query data, save changes, etc.

### Free to download

MySQL is free to use so that we can download it from MySQL official website without any cost.

### It is scalable

MySQL supports multi-threading that makes it easily scalable. It can handle almost any amount of data, up to as much as 50 million rows or more. The default file size limit is about 4 GB. However, we can increase this number to a theoretical limit of 8 TB of data.

### Speed

MySQL is considered one of the very fast database languages, backed by a large number of the benchmark test.

### High Flexibility

MySQL supports a large number of embedded applications, which makes MySQL very flexible.

### Compatible on many operating systems

MySQL is compatible to run on many operating systems, like Novell NetWare, Windows* Linux*, many varieties of UNIX* (such as Sun* Solaris*, AIX, and DEC* UNIX), OS/2, FreeBSD*, and others. MySQL also provides a facility that the clients can run on the same computer as the server or on another computer (communication via a local network or the Internet).

### Allows roll-back

MySQL allows transactions to be rolled back, commit, and crash recovery.

### Memory efficiency

Its efficiency is high because it has a very low memory leakage problem.

### High Performance

MySQL is faster, more reliable, and cheaper because of its unique storage engine architecture. It provides very high-performance results in comparison to other databases without losing an essential functionality of the software. It has fast loading utilities because of the different cache memory.

### High Productivity

MySQL uses Triggers, Stored procedures, and views that allow the developer to give higher productivity.

### Platform Independent

It can download, install, and execute on most of the available operating systems.

### Partitioning

This feature improves the performance and provides fast management of the large database.

### GUI Support

MySQL provides a unified visual database graphical user interface tool named **"MySQL Workbench"** to work with database architects, developers, and Database Administrators. MySQL Workbench

provides SQL development, data modeling, data migration, and comprehensive administration tools for server configuration, user administration, backup, and many more. MySQL has a fully GUI supports from MySQL Server version 5.6 and higher.

### Dual Password Support

MySQL version 8.0 provides support for dual passwords: one is the current password, and another is a secondary password, which allows us to transition to the new password.

### *Storage Engines*

Storage engines are software used by MySQL to create, update and access data from databases. MySQL provides an interface between user and storage engine. MySQL's storage engine provides both transactional as well as non-transactional storage engines. Transactional means rollback of all executed statements of one transaction is applied, if the transaction does not complete. On the other hand, in Non-transactional, there is no rollback/commit. This engine is useful for executing queries with higher productivity.

## Installing MySQL on Unix/Linux Using Generic Binaries

1. Installation on Linux

To Download the MySQL Server version 5.7.21, copy and paste in the ubuntu command promptu and enter

wget https://dev.mysql.com/get/Downloads/MySQL-5.7/mysql-5.7.21-linux-glibc2.12-x86_64.tar.gz

2. Installation on Windows (Cover in SQL Training)