



Hibernate & Spring Data JPA

Beginner to Guru

History and Overview of MySQL



Origins of SQL

- 1970 Dr Codd published a paper about the Relational Data Model.
- Initially developed in the early 70s by Donald Chamberlin and Raymond Boyce.
- In 1973 Chamberlin and Boyce started working on SEQUEL.
- Acronym meaning “Structured English Query Language”.
- Changed later to “SQL” due to a trademark conflict with a UK aircraft company.
- Seeing the promise of the relational database model, in the late 1970s, a company called Relational Software, Inc. started working on a SQL based RDBMS and sold it to US government agencies.





SQL History

- 1979, Relational Software, Inc. released the first commercially available Relational Database Management System.
- Relational Software, Inc. later changed its name to Oracle.
- 1995 - The Swedish company MySQL AB released MySQL for Internal use.
 - Original MySQL developers included: Michael (Monty) Widenius, David Axmark, Allan Larsson.
 - MySQL named after Monty's daughter 'My'
- In 2006, MySQL had 8 Million installations, 320 employees, across 25 countries.
- 2008 - Sun Microsystems purchases MySQL





SQL History (Cont)

- 2010 - Oracle buys Sun Microsystems (with MySQL and Java)
- 2012 - Michael (Monty) Widenius left Sun Microsystems and developed a fork of MySQL called MariaDB.
 - Largely out of concern about the future of MySQL.
 - The MariaDB API remains 100% compatible with MySQL.





About MySQL

- With over 100 million downloads, MySQL is the most popular database in history
- MySQL is a Relational Database System (aka RDMS)
- MySQL is owned by Oracle, but MySQL is open source and free to use
- Officially pronounced 'My Ess Que Ell'





MySQL Features

- MySQL is a Relational Database Management System
- “SQL” stands for Structured Query Language
 - MySQL supports the ANSI/ISO SQL standard
- MySQL is developed in C and C++, making it portable across many different platforms
- MySQL is very fast, stable and scalable.
- There are MySQL clients for all popular languages.
 - C, C++, Eiffel, Java, Perl, PHP, Python, Ruby, Tcl, and ODBC, JDBC, [ADO.NET](#)





MySQL Features

- Stored Procedures
- Triggers
- Cursors
- Updated Views
- Query Cache
- Subselects





MySQL Editions

- MySQL Community Edition - free!
 - Open Source under GPL, free to use.
 - This is the edition we will use in the course.
 - Community support only
- MySQL Standard Edition - Annual subscription (\$2,000/year, per ~ server)
 - 24x7 Support from Oracle
 - Technically the same as Community Edition, but with support from Oracle





MySQL Editions (Cont.)

- MySQL Enterprise Edition - (\$5,000/year per ~server)
 - Provides features for cluster routing and partitioning.
 - Includes Enterprise tooling for monitoring, backups, and security
 - Thread pooling for significant increase in performance under large loads
- MySQL Cluster CGE - (\$10,000/year per ~server)
 - Designed for near linear scalability through clustering.
 - High volume, highly available.



