

Databases

Peter M. Dahlgren, JMG

2016-11-19

Databases

A database is an organized collection of data or documents.

Software-wise, there are at least two different kinds of databases: server- and file-based.

File-based databases is simply a self-containing database that consist of a single file. You can send the file via email if you want, just like an image.

Server-based databases is running by a server program that spreads out the data over multiple files that requires you to run the server program in order to access the data.

Tables, rows and columns

A database consist of one or more tables. A table looks exactly like a spreadsheet in Excel, and also has rows and columns.

SQL

SQL is a standardized language to manage databases and SQL stands for structured query language. It is simple to learn, but takes som practice to get used to. SQL looks like this:

This means that it will select everything (*) from a database table named `customers`.

This means that it will update a row that has a `customerid` of 1, and replace the `name` field in this row with the name `University of Gothenburg`.

That's basically the logic behind SQL.