OLTP database requirements and design

OLTP database

OLTP database is generally used to handle every day business transactions of an organization like a bank or a super market chain. OLTP databases can be write heavy or may have a balanced read/write load.

OLTP database requirements:

An OLTP database is expected to handle a huge number of transactions per second. Each transaction usually involves accessing (read/write) a small portion of the database, in other words the payload per transaction is small.

The time taken to execute a transaction usually called latency needs to be very less.

OLTP database design:

The schema of an OLTP database is higly normalized so as to achieve a very low latency. To further improve the latency an OLTP database stores only the recent data like the last few week's data. They are usually run on storage that is very fast like SSD.