Time Series Database

In this lesson, we will get to know the Time Series database and when to choose it for our projects.

What Is A Time Series Database?

Time-Series databases are optimized for tracking & persisting time series data.

What Is Time Series Data?

It is the data containing data points associated with the occurrence of an event with respect to time. These data points are tracked, monitored and then finally aggregated based on certain business logic.

Time-Series data is generally ingested from IoT devices, self-driving vehicles, industry sensors, social networks, stock market financial data etc.

Okay!! But, what is the need for storing such a massive amount of time-series data?

Why Store Time Series Data?

Studying data, streaming-in from applications helps us track the behaviour of the system. It helps us study user patterns, anomalies & how things change over time.

Time-series data is primarily used for running analytics, deducing conclusions and making future business decisions looking at the results of the analytics. Running analytics also helps the product evolve continually.

General databases are not built to handle *time-series* data. With the advent of IoT, these databases are getting pretty popular and are being adopted by the big guns in the industry.

Popular Time Series Databases

Some of the popular *time-series* databases used in the industry are *Influx DB*, *Timescale DB*, *Prometheus* etc.

When To Pick A Time Series Database?

If you have a use case where you need to manage data in real-time & continually over a long period of time, then a *time-series* database is what you need.

As we know that the *time-series* databases are built to deal with data, streaming in real-time. The typical use cases of it are fetching data from IoT devices. Managing data for running analytics & monitoring. Writing an autonomous trading platform which deals with changing stock prices in real-time etc.

Real Life Implementations

Here are some of the real-life implementations of the tech -

- IBM uses Influx DB to run analytics for real-time cognitive fraud detection

- Spiio uses Influx DB to remotely monitor vertical lining green walls & plant installations.