Project_phase1 Schema

ER Diagram

Historical data

Time
High
Low
Open
Close
Volume
Adj Close

Realtime Data

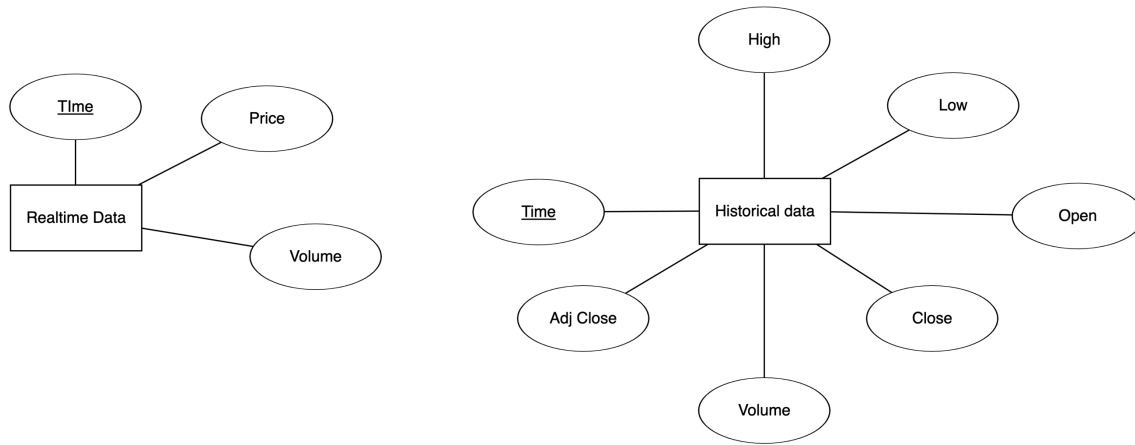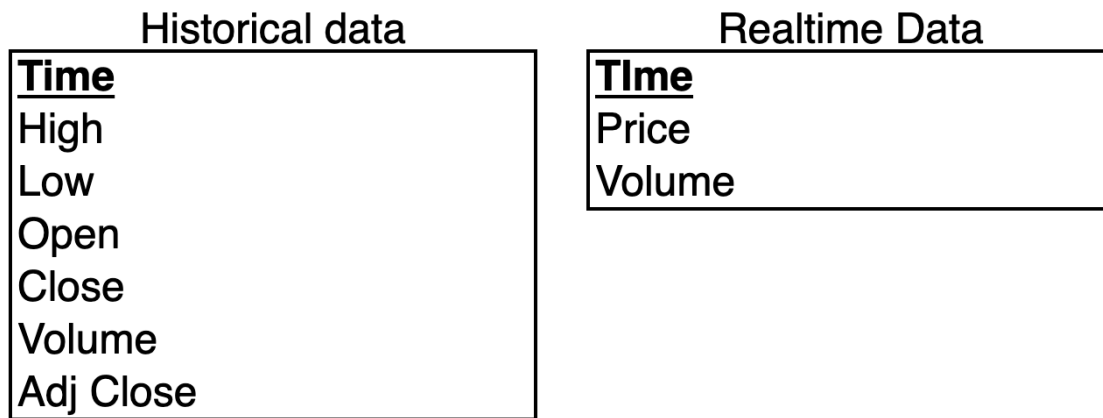| **TIme** |
| --- |
| Price |
| Volume |

Schema

In our database, we have 10 stocks which include: GOOG (Google), MSFT (Microsoft), AAPL (Apple), NVDA(NVDIA), BTC-USD (Bitcoin), AMZN (Amazon), OVTZ (Oclus Vison Tech.), IBM (IBM), AMD (AMD), INTC (Intel).

For each stock, we store the information into two collections, the realtime_data collection and the historical_data collections. Because the MongoDB we use is a kind of none-relation database, so there doesn't have any relation between 2 collections. Also, for each stock, it could only have one data during a single time stamp, so we use time to be the primary key of these collections.

The diagram shows the 2 collections of one stock. There are 20 collections in total in our database.