**Database Project Assignment 3: Entity Relationship Diagram & Documentation**

Table

Description automatically generated with medium confidenceThe “trade” table is the main table the brokers will be dealing with when trading options. It consists of all the information in an options trade like the ticker, the strike price, whether it is a call or put, the expiration, and whether they bought or sold the contracts. Other important information like the opening and closing notes are included to give the broker data to work with and learn from. This table consists of one primary key and three foreign keys, the primary key is the “trade\_id” and the foreign keys are the “ticker”, “broker\_id”, and “customer\_id”. The “trade\_id” is just a unique id for each trade, the “ticker” is the company being traded, the “broker\_id” is who executed the trade, and the “customer\_id” is who the trade was for.

Diagram

Description automatically generated

The “company\_info” table consists of common data for a company. Things like what exchange the company is listed under are included. The CEO and headquarters are listed as well. This table is connected through its primary key, the “ticker” and it has no foreign keys. This is a common theme you will see with all the tables; everything will be connected to the “trade” table and there will be no foreign keys with the rest of the tables.

Table

Description automatically generated

The “company\_data” table will consist of statistics as the name of the table suggests. The current price, the previous close, open, high, and low will all be listed for the company. This information is all data you can find when looking at a ticker in an online brokerage. It’s important to list this information because when the broker goes back and looks at a trade, seeing how the ticker was trading at the time the trade was executed is key to understand the reasoning behind the trade. This table like the rest consists of one primary key and no foreign keys. The primary key is the “ticker”.

Table

Description automatically generated with medium confidence

The “company\_financials” table consist of financial data for the quarter. These attributes like with the “company\_data” table, are meant to help the broker understand reasoning behind a trade. Sometimes trades are done when earnings for a company are coming up and the attributes in this table will help the broker know how to approach similar trades in the future. This table like the rest consists of one primary key and no foreign keys. The primary key is the “ticker”.

Table

Description automatically generatedThe “broker” table is a simple table consisting of three attributes, the name and last name of the broker, and their id. This table is meant to identify who executed a trade. Like the rest of the tables, this table only has one primary key and no foreign keys. The primary key is the “broker\_id”.

The “customer” table is a simple table consisting of three attributes, the name and last name of the customer, and their id. This table is meant to identify who a trade was executed for. Like the rest of the tables, this table only has one primary key and no foreign keys. The primary key is the “customer\_id”.Diagram, table

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