

Relational Diagram:

Users(email:string, name:string, password:string)

Portfolios(portfolio_id:string, name:string, cashAmount: float)

Holdings(totalQuantity: integer, stock_ticker:string, portfolio_id:string)

Stock(ticker:string, name:string)

DailyStockRecord(timeStamp:integer, high:integer, low:integer, open:integer, close:integer, volume:integer, symbol:string)

Functional dependencies:

Email -> name, password

Portfolio_id -> name, cashAmount

Stock_ticker, portfolio_id -> total_quantity

Ticker -> name

timeStamp, symbol -> high, low, open, close, volume