

Absolutely! Here's a detailed breakdown of your **schema structure**, covering all the tables you've designed so far. This schema is tailored for a financial trading system with support for stock prices, customer positions, algorithm subscriptions, trading orders, and job automation.

✳️ 1. stock_prices

Tracks the latest market price for each stock on a given exchange.

Column	Type	Description
timestamp	TIMESTAMP	Time of price capture
stock_name	SYMBOL	Stock ticker (e.g., 'AAPL')
exchange_name	SYMBOL	Exchange name (e.g., 'NASDAQ')
price	DOUBLE	Latest market price

- **Primary Use:** Real-time price tracking
 - **Query Focus:** Latest price per stock
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✳️ 2. customer_positions

Stores customer holdings in various stocks.

Column	Type	Description
timestamp	TIMESTAMP	Time of position entry
customer_id	SYMBOL	Unique customer identifier
stock_name	SYMBOL	Stock ticker
exchange_name	SYMBOL	Exchange name
position_type	SYMBOL	'BUY' or 'SELL'
quantity	LONG	Number of shares
price	DOUBLE	Price per share
notes	STRING	Optional remarks

- **Primary Use:** Portfolio tracking

- **Query Focus:** Positions by customer or customer + stock
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3. **customer_orders**

Captures trading orders placed by customers.

Column	Type	Description
timestamp	TIMESTAMP	Time of order placement
order_id	SYMBOL	Unique order identifier
customer_id	SYMBOL	Customer placing the order
stock_name	SYMBOL	Stock involved
exchange_name	SYMBOL	Exchange
order_type	SYMBOL	'BUY' or 'SELL'
execution_type	SYMBOL	'MARKET' or 'LIMIT'
position_type	SYMBOL	'INTRADAY' or 'POSITIONAL'
order_status	SYMBOL	'PENDING', 'COMPLETED', 'REJECTED'
price	DOUBLE	Order price
quantity	LONG	Number of shares
notes	STRING	Optional remarks

- **Primary Use:** Order management
 - **Query Focus:** Orders by customer or order ID
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4. **customer_algo_subscriptions**

Tracks which algorithms a customer has subscribed to.

Column	Type	Description
timestamp	TIMESTAMP	Time of subscription entry
customer_id	SYMBOL	Customer identifier

Column	Type	Description
algo_name	SYMBOL	Name of the algorithm
subscription_date	DATE	Date of subscription
status	SYMBOL	'ACTIVE', 'CANCELLED', 'EXPIRED'
notes	STRING	Optional metadata
		<ul style="list-style-type: none"> • Primary Use: Subscription tracking • Query Focus: Subscriptions by customer, active status

5. jobber_jobs

Defines automated trading jobs for clients.

Column	Type	Description
timestamp	TIMESTAMP	Time of job setup
jobber_id	SYMBOL	Unique job identifier
customer_id	SYMBOL	Associated customer
security	SYMBOL	Stock symbol
start_price	DOUBLE	Initial price
step_size_buy	DOUBLE	Buy step size
direction	SYMBOL	'LONG' or 'SHORT'
step_size_sell	DOUBLE	Sell step size
lot_multiplier	SYMBOL	'FLAT', 'LINEAR', 'BINARY'
no_of_steps	LONG	Number of steps
re_enter	BOOLEAN	Re-entry flag
end_date	DATE	Job end date
auto_rollover	BOOLEAN	Auto rollover flag
active	BOOLEAN	Job active status

Column	Type	Description
deleted	BOOLEAN	Logical deletion flag
notes	STRING	Optional metadata

- **Primary Use:** Job automation
 - **Query Focus:** Job details by ID, active/deleted status
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Schema Design Highlights

- All tables use **timestamp** as the designated time column for efficient time series indexing.
 - **SYMBOL** types are used for repeated string values to optimize storage and query performance.
 - Logical deletion is handled via **deleted** flags instead of physical row removal.
 - The schema is **modular**, allowing you to extend it with analytics, alerts, or dashboards.
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If you'd like, I can help you visualize relationships between these tables or generate SQL scripts to create them all in QuestDB. Ready to take this schema into production?