Diagram of the Object Model for the model processing simulator

Tick +instrument +timestamp +bid +ask +

Instrument +name +lot_size

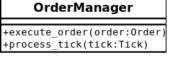
+PNL: float +max_drop_down: float +max_consequtive_wins: int +max_consequtive_loses: int

Model

+account: Account +orders: List<Orders>

+run(instrument)

+process_tick(Tick)



TickFeed +instrument +start(instrument) +stop() +register_listener(listener_callback)

TickFeedManager +get_feed(instrument): TickFeed +start(instrument)

Order +side: BuyOrSell +instrument +model: Model +number_of_lots: int +price: float +stop_loss: float +take_profit: float +is_open: boolean +process_tick(tick:Tick) -reached_stop_loss(): boolean -reached_take_profit(): boolear

Tick

Represents a tick created by a csv file containing historical data

Instrument

Represents an instrument (currency pair) Contains related information like lot size

TickFeed

Opens a tick file creating a stream of ticks Allows listeners to register by providing a callback

TickFeedmanager

Contains and manages a pool of feeds. A client can request a specific feed based in the instrument so it can register with it.

Account

Contains the data of an account and is aggregated by a model

Model

Implements the trading algorithm and is will be used for optimization. Exposes a call-back function that will be called by the tick feed for each new tick.

Based in the outcome of the algorithm it can create an Order and execute it using the Order Manager

Order

Encapsulates all the details of an order. Is created by the model and closed by the OrderManager.

OrderManager

Registers with the tick feed to receive a notification for each new tick. Is responsible for the closing of all the orders