Report: Changes Made Based on genAI Suggestions

Introduction

In response to genAI's feedback on the team's pseudocode, several adjustments have been made to
address the identified weaknesses and further improve the clarity, completeness, and robustness of the system design. This report highlights the specific changes implemented in the pseudocode to align the design with the project requirements.

1. Domain Error Definitions

Based on the feedback to define and handle domain errors explicitly, the following changes were made:
- Added 'InvalidPairs-Ignored' as a domain error in the cross-traded pair identification workflow.
- Defined the 'InvalidOrderError' in the real-time trading workflow, which triggers if the orders
do not meet the trading strategy's criteria.

2. Stop Condition Monitoring

To improve clarity on how the system monitors stop conditions, the following updates were made:
- Added a continuous check for 'PnLTargetReached' and 'ManualStop' within the real-time trading workflow.
- Introduced an event-driven monitoring mechanism to trigger stop conditions after each trade execution.

3. Detailed Price Spread Validation

The 'checkPriceSpread' step in the real-time trading algorithm was enhanced as follows:

- Incorporated a comparison of real-time data with stored historical data to validate price spreads.
- Added logic to trigger the trading strategy only if the price spread exceeds a user-defined threshold.

4. Data Reuse in Cross-Traded Pairs

Improvements were made to the handling of cross-traded pairs in the database:

- Added a step to refresh the cross-traded pair data before each new real-time trading session.
- Introduced logic to ensure that outdated pairs are flagged and updated to maintain consistency in trading.

5. P&L Threshold Reset Workflow

A new workflow was created for resetting the P&L threshold based on user input:

- Added steps for validating the new threshold and updating the system before resuming trading.
- Included a condition where the user can set the threshold to '0' to cancel it and continue trading without limits.

Conclusion

These changes ensure that the pseudocode is more aligned with the project's functional requirements
and enhances the overall robustness of the system. By addressing genAI's suggestions, the team has
strengthened the error handling, stop conditions, and trading logic in the system design.