PrimeTrade.ai - Trading Bot Report

Objective

To design and build a simplified Binance Futures trading bot using Python that simulates order execution and logging, supporting market, limit, and stop-limit orders.

Highlights

- Mocked Binance API to overcome testnet restrictions
- Modular class `BasicBot` with CLI and logging
- Orders logged to CSV and ready for export
- Easily swappable for live API

Order Types Supported

Order Type	Supported |
MARKET	Yes ✅
LIMIT	Yes ✅
STOP	Yes ✅

Technologies

- Binance API
- Python, Pandas, Logging
- Google Colab
- Command Line Interface

Project Summary:

This project involved the development of a simplified algorithmic trading bot using Python, designed to interact with the Binance Futures Testnet environment. The bot supports core trading functionalities including Market, Limit, and Stop-Limit orders for both buy and sell sides, using the official Binance Futures API through the python-binance library. A modular BasicBot class was implemented to ensure clean separation of logic, reusability, and consistent input/output handling. User inputs were accepted via a command-line interface within a Google Colab environment, while all trade executions, parameters, and statuses were logged to structured CSV files. To provide meaningful insights into trading activity, the system includes automated visualization of order types using Matplotlib, with charts saved to the output directory. The project is fully containerized within the Colab workspace and is structured for

easy deployment and extension, making it well-suited for real-world use cases such as integrating with advanced order types (OCO, TWAP) or connecting to a lightweight frontend for user interaction.

Outcome

Simulated trading works as intended and is ready to extend with TWAP, OCO, or real-time price feed support.

Colab link:
https://colab.research.google.com/drive/12rqLGHMAZRwUd8sHaB4hj58zG2I9O3ix?usp=sharing

Drive link of the entire task:

https://drive.google.com/drive/folders/1KfW2mW1qBBTLjJWytneoP_i6WnZMgQEh?usp=sharing

GitHub link:

https://github.com/Samartha21BRS1698/ds_Samartha

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