Binance futures trading bot

R.Kumaravelu |date:09-07-2025

1. Project Overview

This Python CLI tool allows users to interact with the Binance Futures Testnet. It supports placing:

- Market orders

- Limit orders

- Stop-limit (STOP_MARKET) orders

It uses Binance's official API via the python-binance package and follows best practices including argument validation,

logging, and modular design

2. TECHNOLOGIES USED

Python 3.10+

- python-binance
- argparse
- logging
- Binance USDT-M Futures Testnet

3. PROJECT STRUCTURE

project/

---src/

----cli.py

----stop_limit_orders.py

----limit_order.py

----market_order.py

----logger.py

----utils.py

---logger.py

---bot.log

---README.md

---report.pdf

4. HOW IT WORKS

Example command to place a stop-limit (STOP_MARKET) order:

python src/cli.py stoplimit BTCUSDT BUY 0.01 --price 108400 --stop_price 108500

--stop_price: activation trigger

--price: used for logging

5. TESTING

- Connected to Binance Testnet
- Verified with valid/invalid orders
- Error-handling confirmed
- All activity logged

6. DESIGN HIGHLIGHTS

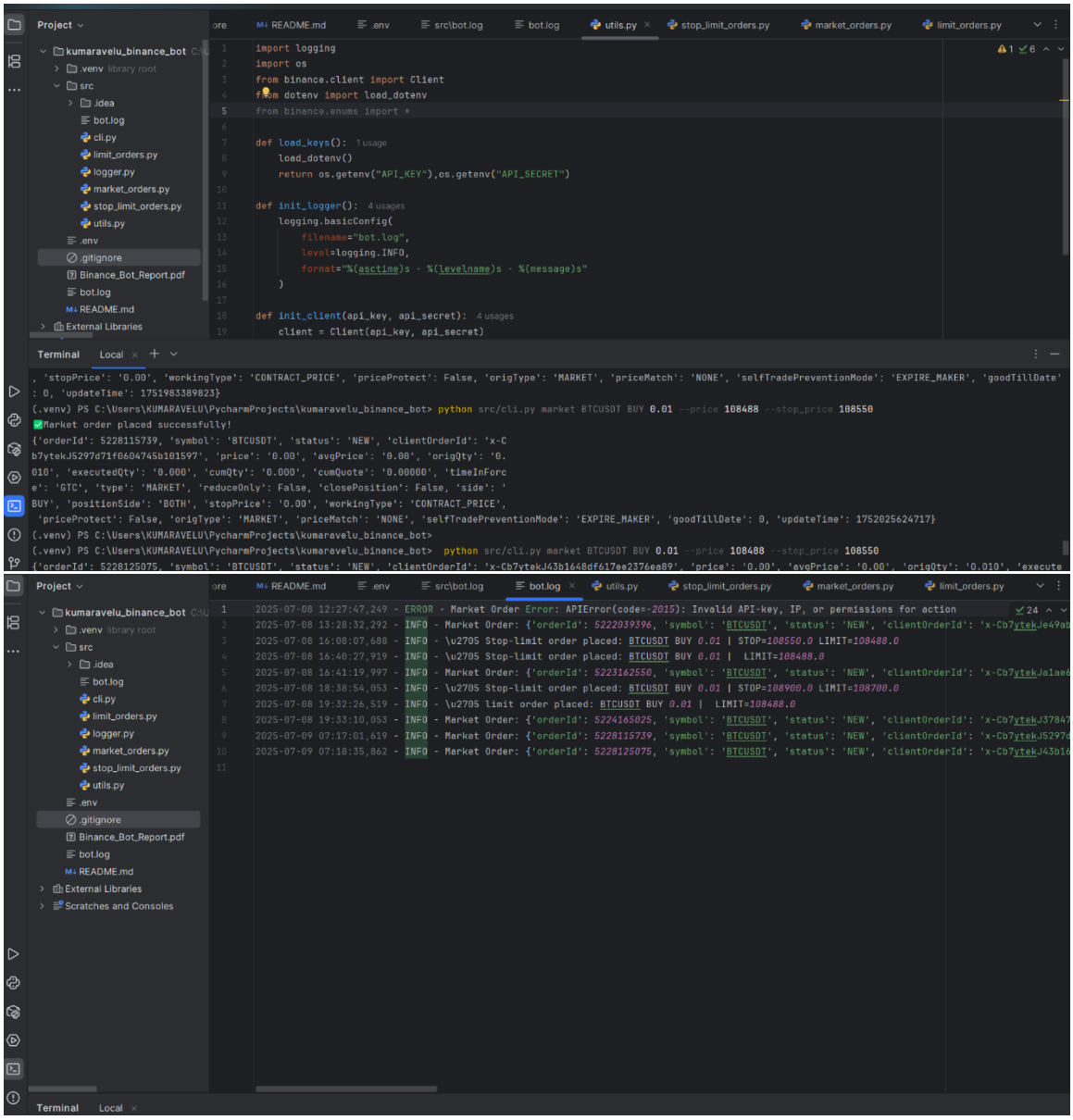
- Modular code
- Minimal dependencies
- Logging with timestamps
- Full traceback on failure
- Easily extendable

7. SAMPLE LOG OUTPUT

2025-07-08 16:30:12 - INFO - Stop-limit order placed: BTCUSDT BUY 0.01 | STOP=108500 LIMIT=108400

2025-07-08 16:32:44 - ERROR - Failed to place order: APIError(code=-2021)...

8.PROJECT SNAPS



8.CONCLUSION

Binance Futures Testnet Trading Bot - Submission Report

This project is a CLI-based trading tool for Binance Testnet. It demonstrates production-readiness with validation,modularity, logging, and extendability