

# Binance Futures Trading Bot – Report

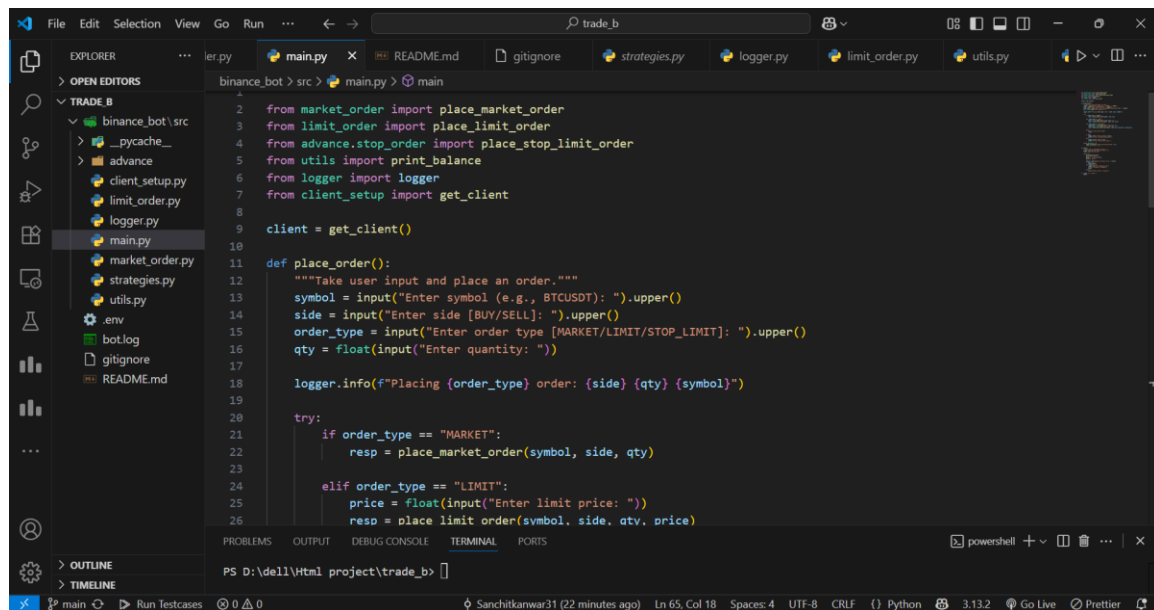
## 1. Introduction

• This project is a CLI-based trading bot designed for Binance USDT-M Futures. It allows users to execute trades directly from the command line, making it lightweight and efficient. The bot supports multiple order types, including Market, Limit, and Stop-Limit orders, giving traders flexibility in how they enter and exit positions. It is built using the official Binance API and is connected to the Binance Testnet, ensuring that trades can be safely tested without risking real funds.

## 2. Screenshots & Logs

Insert your screenshots here.

### 1)Main.py



```
1 from market_order import place_market_order
2 from limit_order import place_limit_order
3 from advance.stop_order import place_stop_limit_order
4 from utils import print_balance
5 from logger import logger
6 from client_setup import get_client
7
8 client = get_client()
9
10 def place_order():
11     """Take user input and place an order."""
12     symbol = input("Enter symbol (e.g., BTCUSD): ").upper()
13     side = input("Enter side [BUY/SELL]: ").upper()
14     order_type = input("Enter order type [MARKET/LIMIT/STOP_LIMIT]: ").upper()
15     qty = float(input("Enter quantity: "))
16
17     logger.info(f"Placing {order_type} order: {side} {qty} {symbol}")
18
19     try:
20         if order_type == "MARKET":
21             resp = place_market_order(symbol, side, qty)
22
23         elif order_type == "LIMIT":
24             price = float(input("Enter limit price: "))
25             resp = place_limit_order(symbol, side, qty, price)
26
27     except Exception as e:
28         logger.error(f"Error: {e}")
```

PS D:\dell\html project\trade\_b>

## 2)CLI Screenshot

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
=== Binance Futures CLI Bot ===
2025-09-09 21:01:44,574 - INFO - Bot started
INFO:binance_bot:Bot started

Balance Summary (USDT):
  Total Balance: 13915.18621902
  Available Balance: 10210.16557735
  Withdrawable: N/A

--- Menu ---
1. Place new order
2. Exit
Choose an option [1/2]: 1
Enter symbol (e.g., BTCUSDT): BTCUSDT
Enter side [BUY/SELL]: SELL
Enter order type [MARKET/LIMIT/STOP_LIMIT]: MARKET
Enter quantity: 1
2025-09-09 21:02:07,447 - INFO - Placing MARKET order: SELL 1.0 BTCUSDT
INFO:binance_bot:Placing MARKET order: SELL 1.0 BTCUSDT
2025-09-09 21:02:08,797 - INFO - Market Order placed: {'orderId': 5644069070, 'symbol': 'BTCUSDT', 'status': 'NEW', 'clientOrderId': 'x-Cb7ytekJ76cbb94b5b8f04f2d41bb', 'price': '0.00', 'avgPrice': '0.00', 'origQty': '1.000', 'executedQty': '0.000', 'cumQty': '0.000', 'cumQuote': '0.00000', 'timeInForce': 'GTC', 'type': 'MARKET', 'reduceOnly': False, 'closePosition': False, 'side': 'SELL', 'positionSide': 'BOTH', 'stopPrice': '0.00', 'workingType': 'CONTRACT_PRICE', 'priceProtect': False, 'origType': 'MARKET', 'priceMatch': 'NONE', 'selfTradePreventionMode': 'EXPIRE_MAKER', 'goodTillDate': 0, 'updateTime': 1757431928586}
INFO:binance_bot:Market Order placed: {'orderId': 5644069070, 'symbol': 'BTCUSDT', 'status': 'NEW', 'clientOrderId': 'x-Cb7ytekJ76cbb94b5b8f04f2d41bb', 'price': '0.00', 'avgPrice': '0.00', 'origQty': '1.000', 'executedQty': '0.000', 'cumQty': '0.000', 'cumQuote': '0.00000', 'timeInForce': 'GTC', 'type': 'MARKET', 'reduceOnly': False, 'closePosition': False, 'side': 'SELL', 'positionSide': 'BOTH', 'stopPrice': '0.00', 'workingType': 'CONTRACT_PRICE', 'priceProtect': False, 'origType': 'MARKET', 'priceMatch': 'NONE', 'selfTradePreventionMode': 'EXPIRE_MAKER', 'goodTillDate': 0, 'updateTime': 1757431928586}
```

## 3)Logs file

```
botlog
4  aceback (most recent call last):
24  nance.exceptions.BinanceAPIException: APIError(code=-2019): Margin is insufficient.
25  25-09-09 19:28:51,109 - WARNING - Invalid menu choice: python -u "d:\dell\Htm1 project\trade_b\binance_bot\src\main.p
26  25-09-09 19:28:51,327 - WARNING - Invalid menu choice: python -u "d:\dell\Htm1 project\trade_b\binance_bot\src\main.p
27  25-09-09 19:28:56,984 - INFO - Bot stopped by user
28  25-09-09 19:29:31,393 - INFO - Bot started
29  25-09-09 19:34:43,401 - INFO - Bot started
30  25-09-09 19:35:50,212 - INFO - Bot started
31  25-09-09 19:36:25,862 - INFO - Placing MARKET order: SELL 1.0 BTCUSDT @ MARKET
32  25-09-09 19:36:26,424 - INFO - Order executed successfully: {'orderId': 5643912227, 'symbol': 'BTCUSDT', 'status': '
33  25-09-09 19:37:16,602 - INFO - Bot stopped by user
34  25-09-09 19:46:49,215 - INFO - Bot started
35  25-09-09 19:47:21,115 - INFO - Placing STOP_LIMIT order: SELL 1.0 BTCUSDT
36  25-09-09 19:51:29,261 - INFO - Placing MARKET order: BUT 1.0 USDT
37  25-09-09 19:52:03,372 - INFO - Bot stopped by user
38  25-09-09 19:52:57,859 - INFO - Bot started
39  25-09-09 19:53:21,757 - INFO - Placing MARKET order: SELL 1.0 BTCUSDT
40  25-09-09 19:53:22,329 - INFO - Market Order placed: {'orderId': 5643953624, 'symbol': 'BTCUSDT', 'status': 'NEW', 'c
41  25-09-09 19:53:22,330 - INFO - Order executed: {'orderId': 5643953624, 'symbol': 'BTCUSDT', 'status': 'NEW', 'client
42  25-09-09 21:01:44,574 - INFO - Bot started
43  25-09-09 21:02:07,447 - INFO - Placing MARKET order: SELL 1.0 BTCUSDT
44  25-09-09 21:02:08,797 - INFO - Market Order placed: {'orderId': 5644069070, 'symbol': 'BTCUSDT', 'status': 'NEW', 'c
45  25-09-09 21:02:08,798 - INFO - Order executed: {'orderId': 5644069070, 'symbol': 'BTCUSDT', 'status': 'NEW', 'client
46
```

## 3. Analysis

• This project showcases a CLI-driven trading bot designed for Binance USDT-M Futures, leveraging the official Binance Testnet API. It allows traders to experiment with Market, Limit, and Stop-Limit orders directly through the command line. In testing, Market and Limit orders executed without issues, though some attempts triggered margin errors due to low balance and API key failures when the necessary permissions were missing. To aid debugging and monitoring, the bot incorporates a comprehensive logging system that records all actions and errors. In essence, this work highlights how automated futures trading can be safely prototyped in a sandboxed environment before being deployed on live markets.

