

Trading Plan

Element	Details
Trading Goals	Earn 10% or more monthly return, max 2% risk per trade.
Markets Traded	Forex (Majors), Gold, S&P 500, US30, NAS100, GER40,
Trading Style	Scalping Trading and Day Trading
Risk-Reward Ratio	Minimum 1:5 on all trades.
Indicators Used	RSI, Fibonacci Retracements, Moving Averages, MACD, EMA, ADX, Bollinger Bands, Stochastic Oscillator, Bollinger Bands, Parabolic SAR, Ichimoku Cloud,
Stop-Loss Strategy	1.5x ATR below support/resistance or Above Resistance (for short trades)
Take-Profit Strategy	Based on previous high/low and Fibonacci targets.
Position Size	10% of capital per trade.
Maximum Drawdown	Stop trading if 10% drawdown occurs.
Review Schedule	Daily and Weekly performance review with journal analysis.

Use logging tools like Telegram for live notifications

Deploy the bot on AWS or Google Cloud for continuous operation

Integrate cloud deployment instructions for 24/7 operation

Trading Bot Code

I want a software/Bot for Metatrader 5 that can give me 100% accurate trading signals on the financial market for majors, minors and metals

Build as both a rule-based system using technical indicators and a machine learning-based prediction model

Plan

1. Data Collection:

Use a trading API like metatrader5, Binance, Alpha Vantage, or Yahoo Finance to fetch live and historical market data for forex majors, minors, and metals.

2. Signal Generation:

Implement technical indicators (RSI, MACD, EMA, Fibonacci Retracement, Pivot Points, ADX (Average Directional Index), On-Balance Volume (OBV), Volume Oscillator, Average True Range (ATR), Bollinger Bands (also trend indicator), Stochastic Oscillator, Bollinger Bands, Parabolic SAR, Ichimoku Cloud, Moving Averages (MA),) to generate buy/sell signals.

Integrate machine learning for predictive capabilities

Incorporate AI/ML models to predict market trends and refine strategies

3. Visualization

Display signals on charts using libraries like Matplotlib or Plotly

4. Execution & Alerts

Allow users to execute trades via API integration via telegram.

5. Risk Management:

Include stop-loss, take-profit levels, and risk-adjusted position sizing.

Add advanced strategies (combining MACD and RSI) to improve the accuracy

Integrate with trading platforms like MetaTrader 5 for executing trades

Add a backtesting module for testing both historical and live data

Add performance metric calculations like Sharpe Ratio and drawdown

Add live trade monitoring and error handling for MetaTrader5 API integration

add portfolio management for multiple assets

add advanced risk management such as trailing stops

Optimize asset weights for risk-adjusted returns

Integrate AI models for predictive analytics

Integrate deep learning models (e.g., LSTM/GRU) for time series forecasting

Dockerize the bot for easier cloud deployment

Integrate real-time monitoring with Telegram alerts for predictions and trades

Add more features and hyperparameter tuning for the LSTM/GRU model.

Generate daily reports with metrics like Sharpe Ratio and drawdown.

Add hyperparameter optimization for LSTM (e.g., GridSearchCV)

Add advanced cloud monitoring with logging and alerting tools

Integrate notifications via Telegram, or Email.

Send alerts for trade signals, errors, or unexpected behavior

include a Streamlit-based dashboard for monitoring trades and predictions

host the bot as a web service with REST APIs

add user authentication (e.g., OAuth or JWT) to secure the APIs

WebSocket-based live updates for the dashboard

add RBAC to manage access to sensitive endpoints like /trade

integrate live portfolio updates into the WebSocket stream

Send real-time alerts for margin calls, large drawdowns, or trade executions

add real-time notifications for margin calls or drawdowns

add detailed trade analytics in the dashboard (e.g., win rate, average PnL)

Plan for Trade Analytics (B):

1. Trade Metrics:

Calculate:

Win rate (% of profitable trades).

Average P&L (profit or loss per trade).

Maximum consecutive losses or wins.

Risk/Reward ratio.

2. Visualization:

Show these metrics and summary statistics in the dashboard.

Add charts for P&L distributions and cumulative profits.

Real-Time Notifications:

Alerts via Telegram and email for margin calls and high drawdowns.

Trade Analytics:

Metrics like win rate, average PnL, max consecutive wins/losses, and risk/reward ratio.

PnL distribution visualized as a bar chart.

add interactive trade management to the dashboard

add dedicated backtesting analytics section in the dashboard

Analyze backtesting results:

Metrics: Total returns, win rate, Sharpe ratio, and max drawdown.

Visualizations: Equity curve, P&L distribution, and trade statistics.

• Implementation:

Add a new section in the Streamlit dashboard.

Use analytics functions to calculate metrics and generate charts.

add trade filtering options to the dashboard

position sizing recommendations integrated with risk management

add trade size validation to flag risky trades in real-time

integrate position sizing calculations into live trade execution

add dynamic pip value calculations based on the trading pair

dedicated risk management section in the dashboard

add risk alerts to notify users when cumulative risk exceeds limits

integrate risk management into backtesting analytics

add portfolio-level risk analysis to evaluate cross-asset risks

interactive simulation tool for adjusting risk/reward parameters

include scenario analysis to simulate portfolio performance under different conditions

integrate portfolio optimization tools to suggest ideal asset weights

add scenario-based trade recommendations to align strategies with expected outcomes

integrate advanced optimization techniques like Black-Litterman for more flexible portfolio construction

add advanced risk/reward metrics to evaluate portfolio performance

trade execution integration to implement portfolio adjustments automatically

add multi-objective optimization to balance multiple risk/reward factors

automated performance tracking for real-time portfolio evaluation

add historical performance comparison against benchmarks like S&P 500

integrate real-time market data for live portfolio tracking

add multi-benchmark comparisons to evaluate portfolio performance against multiple indices

add heatmaps for visualizing portfolio risk and returns

add dynamic benchmark selection for user-defined comparisons

add customizable heatmaps for different time periods or asset groups

add overlap analysis to show common assets between benchmarks and portfolios

enable user-uploaded benchmark data for flexible comparisons

add asset-level contribution analysis to break down portfolio returns by asset

enable benchmark weight adjustments for user-defined benchmarks

add asset attribution analysis to understand what drives asset performance

add dynamic allocation recommendations based on performance metrics

(you have my permission to add and subtract anything relevant and irrelevant to enhance the bot's performance and accuracy)