**Intuitive Capital – Trader**

**(I will build a logo that will go on every page of the platform)**

**Comments:**

* **Please read ALL of this before bidding**
* **You must have experience and knowledge in AI as well as stock and option trading**
* **If you can’t meet the schedule, let me know and either (a) don’t accept the project, or ( b) let’s chat about a schedule that works**
* **Do not be one of these contractors who will work on it for an hour or two a day and then stop to work on the other projects you’ve bid. Do not move past my timeline without discussing with me**
* **Each payment ONLY occurs after the completion of each Phase.**
* **Use AI as much as possible to do as much of the code to make it go faster; same with dashboard**
* **If there is a platform that you want to use which helps integrate dashboards, LLM, APIs, etc.. just let me know so I can understand costs.**
* **Prior to engaging, I’ll want to know what LLM/AI you want to integrate this into**

**Project Description**

This is a stock and option trading platform that will consist of 3 different types of trading systems:

* **Manual Traders** - Allow the Admin to assign Traders on stocks and options that I designate to make trades to accounts that I establish without having access to my brokerage accounts.
  + This allows Traders to manually trade stocks or options. The Admin will control the size $ per trade and the Trader only tells it when to buy and sell. This is setup for other Traders that I don’t want to give them access to my brokerage accounts to trade directly.
  + Each Trader gets up to 4 Analysts to track and trade on behalf of
  + A Stop Loss % is added with each Trader that automatically executes if hit
  + A Profit % is added with each Trader, for when a trade hits that Profit %, it exits automatically
* **Automated Trading (from Discord groups) -** Allow the platform to scan specific Discords accounts that give our trading options to determine when to buy/sell. It’ll pull messages from all of the assigned Discord channels and use AI to determine when to buy and sell. Each Discord channels has different ways to call out the stocks or options and even the way of buying or selling. The developer will need to determine what is the best way to set this up; built into the software and pull from the Discord App or an extension for a browser that pulls it off and sends (webhook, etc..) to the main application.
* **AI Automated Trading –** A system that uses AI to asses the best ways to trade per different strategies using Technical Analysis (via API), Sentiment of News and other methods to determine when to buy and sell. Prior to trading, it will create a 12 month historical trading assessment using pricing, technical analysis and news from the APIs and then come up with a Theoretical Return showing all trades, and then when turned ON, it will trade real money
* **Other Comments:**
  + **Options and Stocks –** although initially I’ll mostly be doing options
  + **Once you finish each Phase;** each Phase will be usable on my system, meaning.. if you finish the Manual Traders section and it’s operational in X days, then it should be setup and I can use it and continue to test it while we build out the rest of the platformn… then Discord Automation… then AI automated trading.
  + **Developer must help select;** app or website; cloud/host, LLM to use
  + **All Code becomes owned by Client/Buyer**

**This platform consists of the following:**

* Has 2 types of Users
  + Admin (can view all Traders, All strategies, AI Trader, Discord Scraping and all transactions)
  + Traders (can only watch/review their own trades -these accounts are setup by Admin)
* Databases
  + Will require Databases to keep track of historical trades and all data collected to make decisions
* Trades stocks and options with various brokerages via APIs:
  + Tradestation (first)
  + Tradier (second)
  + Tasty Trade
  + Alpaca
  + Lightspeed
* **Smart Trading - Open & Close Trades with Stocks or Options**
  + If the Bid & Ask are within 3% of the midpoint then do Market Order
  + If it is outside of that 3% difference, use a Limit for the Mid-point and keep chasing the Mid-point every 5 seconds until it closes
* **For the AI Trader;** is it possible to have it save/store it’s idea on how to trade each of the stocks in the system?? A different database to store ideas for each TICKER on how to trade it based on news and technical analysis, etc…
* **Types of Trades;** with Options it’ll buy CALLS and PUTS, and with Stocks it’ll go LONG and SHORT

**Developer Tasks:**

* Suggest Cloud site to run on
* Should it be a web application or a Windows based software on a cloud server
* Suggest LLM to use (and provide estimate on costs monthly)
* Python (but open to other languages)
* Must provide all code and allow me to view as it’s being coded; and prior to final payment. I own the code and platform, so you aren’t allowed to sell or give to anyone else
* Must install on computers or cloud and get operational
* Must test to make sure every feature and function works
* Must follow the schedule that we agree on
* If you have trading experience, any type of collaborations and suggestions would be great.

**Development Process Timeline:**

**Phase 1 – 15 days from start**

**Phase 2 – 23 days from start**

**Phase 3 – 40 days from start**

**The AI Discord Bot will:**

* Look at all messages to determine when to buy(enter) and sell(exit) trades
* Each Discord Channel is different and each time they post it’s not consistent on what they are wanting to do; so AI will need to watch/understand/learn

Examples:

**Each AI trading bot will be instructed differently, such as>?**

1. Data Feeds: Hook into Polygon.IO (developer package) API for historical and real time data; along with values and technical indicators
2. Use Tickers: S&P 500 & Top 20 ETFs (these will be inputs from user)
3. Test and Trade Option Strategies; Calls, Puts
   1. Preferred Strategies that utilize these strategies:
      1. 0 DTE
      2. 1 to 10 DTE
      3. 11 to 20 DTE
      4. 21 to 30 DTE
   2. Open Interest on Trades over 75
4. Test and Trade Stock Strategies: Long and Short
5. Technical Indicators to Use: SMA, EMA, MACD, RSI
   1. This will use different combinations of these EMA 10 vs 50, EMA 50 vs 200, SMA 10 vs 200, RSI above 60, RSI below 40, etc… AI can figure out which combinations have the highest probabilities of success or do we need to refine this further?
6. Options: Utilize Probability of Profitability formula
7. News: Use News Sources to Evaluate Sentiment to Determine effects on potential trades; when reviewing trades, it would be good to see a list of news articles that helped build the sentiment for upward or downward movement, but haven’t thought about how this would look yet
8. A Total “Per Trade” Budget will be provided along with “Account Balance”, so the AI bot must be able to find the best trades to fit within those budgets; It should be able to save results. The AI Bot will continue to run different strategies simultaneously
9. All trades start at 8:45 am and end at 3pm CST
10. BOTS: Once you Create a BOT Type, which is just defined by Historical Start Date, Tickers, Account Balance, Per Trade Amount – it’ll save theses and run all historical for the last 2 years and then real-time moving forward
11. IT would be good for the AI to scan all Stock Tickers that it should and determine a ranking based on Technical Analysis and News Sentiment and then pick from the top probability of them to determine which stocks or options to enter/buy.
12. Learn to pick the Strategies and the parameters of each strategy that have the highest profitability, lowest risk and lowest drawdown
13. Overnight Gap Ups and Gap Downs and how this affects next time pricing
14. Correlation to Employment Data, Fed News, Fed Data, Interest Rate movements, Quarterly Financials of each stock, Stock value leading up to and After Quarterlys are released
15. Learn how to find news articles and get sentiment that could determine the direction of a stock
16. Understand Technical Analysis (Intraday, 5 day, 10 day, 20 day, 35 day, 50 day, 100 day, 200 day)
    1. EMA
    2. SMA
    3. MACD
    4. VWAP
    5. RSI
    6. (IV) Implied Volatility
17. For Options: Understand how to calculate the find trade strategies and calculate the following ([Calculating Probability | Option Alpha](https://optionalpha.com/help/calculating-probability)):
    1. Probability of Profit
    2. Probability of Max Profit
    3. Probability of Max Loss
18. Use historical data correlated with news and technical analysis to understand how the market works, what affects movements, and the same for each stock in the list specifically
19. Detremine the best time to enter a trade and exit a trade based on all information

**APIs:**

* Technical Analysis: use Polygon.io or <https://www.alphavantage.co/>
  + I will give you ALL data that you need to import in order to have enough data to utilize the AI properly
* For Additional Analysis, Finbrain.Io
* For News: Yahoo or make a suggestion or <https://www.alphavantage.co/> or a better one
* Brokerages for Buying/Selling and Current Pricing

**AI Learning Tasks:**

* Understand each of these trade strategies and how they work to determine which strategies to use for each trade:
  + Calls
  + Puts
* Learn to pick the Strategies and the parameters of each strategy that have the highest profitability, lowest risk and lowest drawdown
* Overnight Gap Ups and Gap Downs and how this affects next time pricing
* Correlation to Employment Data, Fed News, Fed Data, Interest Rate movements, Quarterly Financials of each stock, Stock value leading up to and After Quarterlys are released
* Learn how to find news articles and get sentiment that could determine the direction of a stock
* Understand Technical Analysis (Intraday, 5 day, 10 day, 20 day, 35 day, 50 day, 100 day, 200 day)
  + EMA
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* For Options: Understand how to calculate the find trade strategies and calculate the following ([Calculating Probability | Option Alpha](https://optionalpha.com/help/calculating-probability)):
  + Probability of Profit
  + Probability of Max Profit
  + Probability of Max Loss
* Use historical data correlated with news and technical analysis to understand how the market works, what affects movements, and the same for each stock in the list specifically
* Determine the best time to enter a trade and exit a trade based on all information
* Assign a rating of 1 to 100 to determine the highest probability of each trade to enter based on technical analysis, news sentiment

**Functions of AI:**

* **Saving Historical Trades:** Must be able to save all data and information produced to continue to learn from
  + - * Ticker
      * Date of Entry
      * Date of Exit
      * Entry Price
      * Exit Price
      * P&L
* Looking back (give each one a name to be able to reference and pull up results)
  + Outputs
    - Historical. Based on Parameters show daily and monthly results (click to open and review)
      * Ticker
      * Date of Entry
      * Date of Exit
      * Entry Price
      * Exit Price
      * P&L
      * Days in Trade
    - Real Time Trading (click to open and review)
      * Ticker
      * Date of Entry
      * Date of Exit
      * Entry Price
      * Exit Price
      * P&L
      * Days in Trade

**Tools:**

* News Sentiment and Prediction code already created; could be helpful?? <https://huggingface.co/spaces/QuantumLearner/Space17>
* Discord Scraper: [GitHub - LAION-AI/Discord-Scrapers: Implementation of a discord channel scraper to generate datasets.](https://github.com/LAION-AI/Discord-Scrapers)

**Later Phases:**

* For the AI trading, I’ll definitely want to expand and add several other APIs, other command options and grow it substantially. I am keeping out a lot of options here, because I want to get this started now and collaborate with others to make it better and more advanced