Bold Bets - Designing a Low Code/No Code Crypto-Trading Bot

By: Arnav Dixit

Arnav Dixit

- Senior at Lynbrook High School
- My interests: Web Development, AI, Systems Design
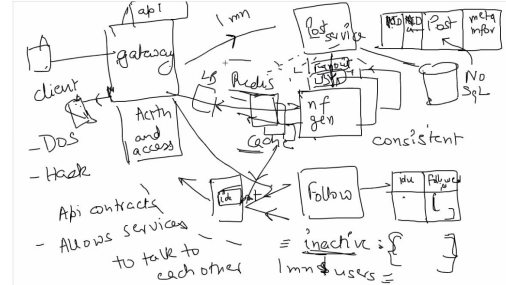- Favorite Subject: Statistics

Sarthak Sharma

- Software Engineer at Cisco
- Experience working with ML, Cybersecurity, Cloud-Based Development, and more!

System Design

- System Design - identifying constraints and scaling abilities
    - Stateful Architecture
        - Set of requests routed to one server
        - Downside: If one server goes down, no other server to transport requests to, cannot expand server capacity
    - Stateless Architecture
        - Requests are routed to multiple different servers - all stored in one larger database
        - Operation: Number of requests modulo number of servers available - directs what servers request will be routed to (Consistent Hashing)
        - Gateway server - documents statuses of other servers
        - Pros: Applications can be scaled more easily, less costly and prone to flaws
    - Applications: Scaling Applications/Microservice Architecture
    - Web Crawling - navigating through embedded links through individual websites

Our Project - Bold Bets

- Project which allows for Cisco to enter markets it is not yet involved in
- Project: **Low Code/No Code Solution for a Crypto-Trading Bot** - maximum room for development + demand in market
    - Analyzes market data, keeping risks in mind, to buy and sell cryptocurrency assets
    - Instead of using code, allow users to create flow diagrams for their enter and exit strategies in stock trading
    - Have a start structure, gateway structures, and conclusion structures (entering particular position)
    - Backtester Feature
        - Simulation can be run on a fixed timeframe to see how strategy would perform
        - AUTOMATIC: Have a runner which runs your strategy regularly based on how often you want it to run and test
    - Performance Analytics
        - Log file - computations and processes that happen behind the scenes are recorded here
        - Tickers placed on a graph (money - y axis, time period - x axis) - representative of strategy performance over a set period of time
    - Benefits:
        - More efficient for salespersons to use - limits technical operations
        - No biases
        - Efficient
        - Accurate - simulation feature