

# Multi-Agent Crypto Investment Analyst

## Overview

Build a **multi-agent AI system** that analyzes cryptocurrency data and generates investment reports with actionable recommendations.

The system should feature specialized agents working together to reach investment decisions, with **human-in-the-loop design** enabling users to provide input, and maintain oversight throughout the analysis process.

## Technical Focus Areas

We're looking for your ability to demonstrate the following capabilities. You have complete flexibility in how you implement these:

### 1. Multi-Agent Architecture

- Consider using multiple specialized agents (e.g., data analyst, risk assessor, report writer)
- Show how agents collaborate to reach investment decisions
- Demonstrate clear separation of concerns

### 2. Tool Calling & Integration

- Implement tool calling for data retrieval and analysis
- Consider MCP servers, function calling, or custom tool implementations
- Show effective orchestration of multiple tools

### 3. Planning & Reasoning

- Demonstrate the agent's ability to plan its analysis approach
- Show clear reasoning chains for investment decisions
- Include self-reflection or validation steps

### 4. Human-in-the-Loop Design

- Allow for human input or oversight at critical decision points
- Enable users to adjust parameters or provide additional context
- Consider how users would interact with the system

## Data Sources(Example)

*Use ANY data sources you find valuable. Here are some ideas to get started:*

- Price data, technical indicators, volume analysis
- News, social sentiment, market narratives
- On-chain metrics, whale movements, network activity
- Macro factors, correlation analysis, market structure
- Any creative data sources that enhance analysis quality

## What We're Looking For

- **Architecture Design:** How you structure multi-agent collaboration
- **Tool Integration:** Effective use of external data and APIs
- **Reasoning Quality:** Clear, logical decision-making process
- **User Experience:** How humans can interact with and trust the system
- **Code Quality:** Clean, maintainable, well-documented code

## Constraints

- **Time Limit:** 1-week from receipt
- **Scope:** Focus on 1-2 cryptocurrencies for demonstration
- **Dependencies:** Clearly list all required packages and external services

## Submission Guidelines

1. **Code Repository:**
  - a. GitHub repository
    - i. Add [@sungjinoh\(sungjin.oh@pluang.com\)](mailto:sungjin.oh@pluang.com) as a collaborator
    - ii. Repository should be well-organized and include all necessary files
  - b. *Readme.md* with
    - i. Setup instructions
    - ii. Architecture diagram
    - iii. API keys required
    - iv. How to run the system
2. **Sample Reports:** Include 1-2 generated reports as PDF/Markdown

## Additional Notes

- **Flexibility:** We value creative solutions over following a specific template
- **Focus:** Demonstrate deep understanding of agent architectures rather than broad feature coverage
- **Practical:** Consider how this would be used in a real trading environment

Good luck! We're excited to see your unique approach to this challenge.