



CODECELL-CMPN,VESIT

# SYRUS HACKATHON 2025

**Category Code:** C5

**Problem Statement Title:** AI-Powered Investment & Trading Assistant

**Team Name:** T-bits

**Institute Name:** Vivekanand Education Society's Institute of Technology



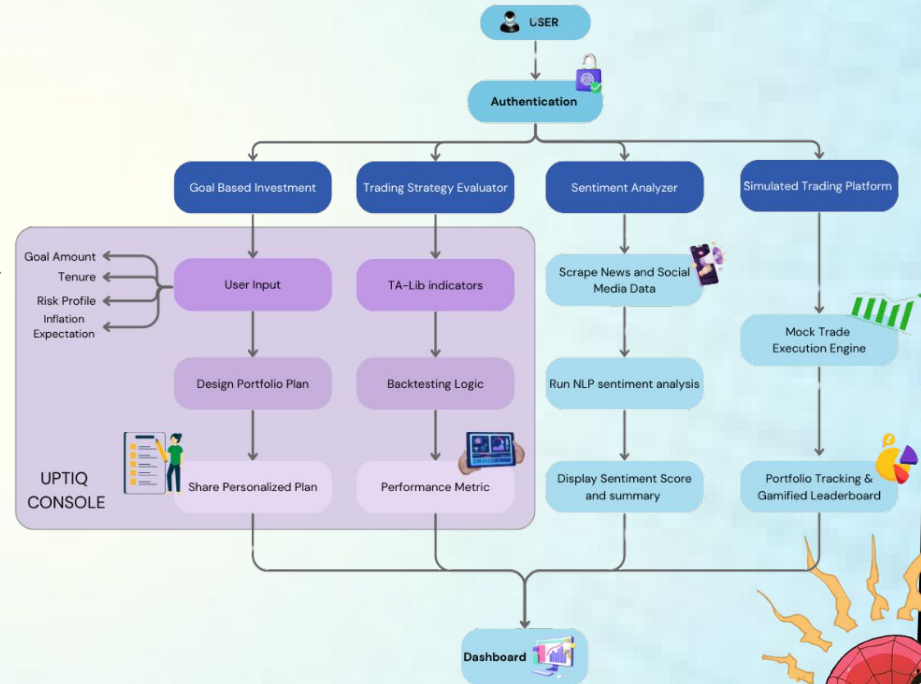
# Idea / Approach details (& implemented features)

## Problem Statement

- Retail investors lack personalized guidance and real-time insights.
- Evaluating strategies and analyzing sentiment requires expertise, leading to poor decisions.

## Solution

- AI-powered assistant integrates goal-based planning, strategy evaluation, sentiment analysis, and simulated trading.
- Uses UPTIQ Console to automate financial decisions and provide personalized recommendations.



# Innovation (Showstopper)/ Use Case Diagram

## Goal-Based Investment Planning

- Recommends portfolios based on goals and risk.
- Uses historical data and growth models.

## Market Sentiment Analyzer

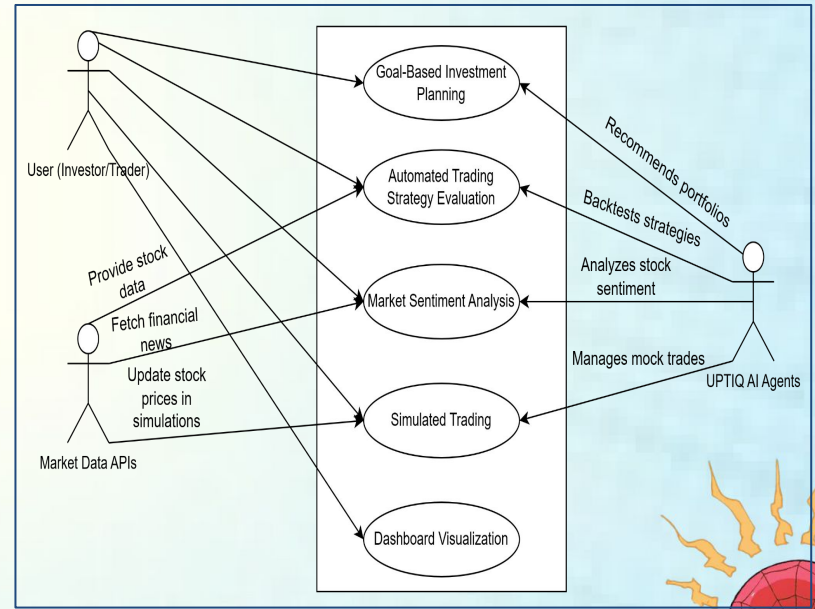
- Analyzes sentiment from news and social media.
- Guides informed investment decisions.

## Trading Strategy Evaluator

- Tests indicators on historical data.
- Provides key performance metrics.

## Simulated Trading Platform

- Allows mock trades and tracks performance.
- Encourages learning through gamification.



# Tech Stack

Database



Frontend



Backend



Agentic Workflow

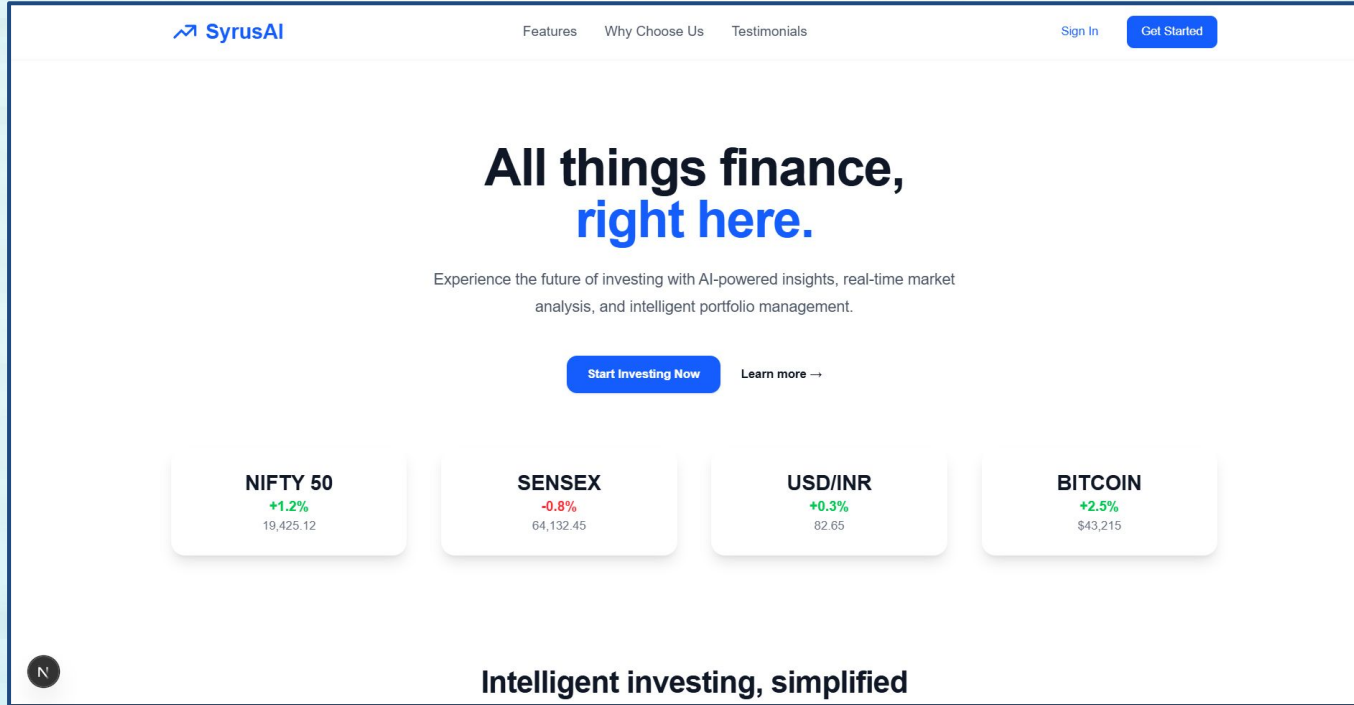


Data resources

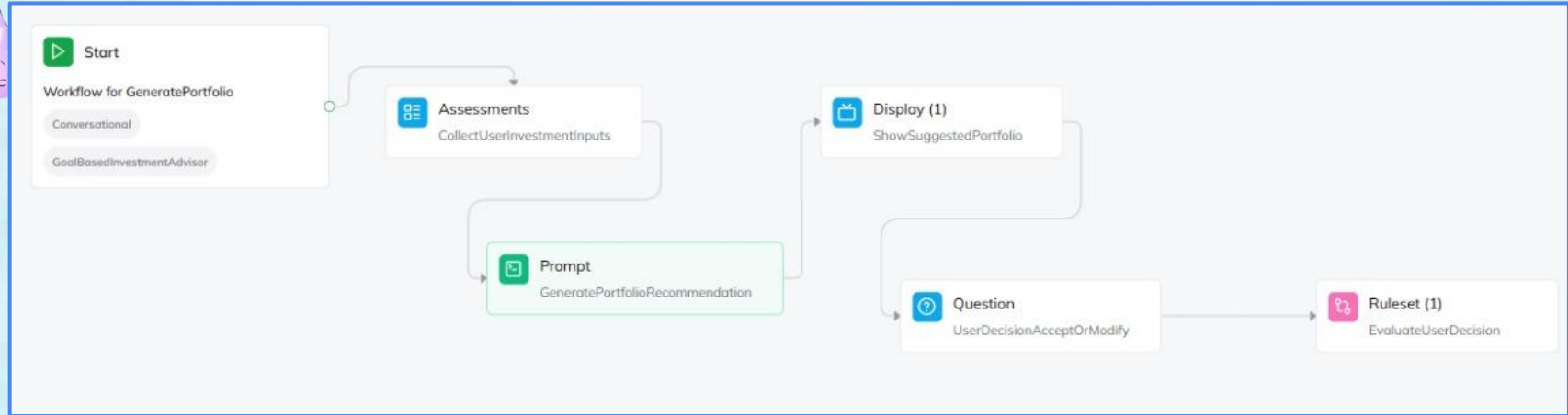




# Implementation/Prototype/Use Case Diagram (screenshots)



# In case of Uptiq category - Your Uptiq Agent (explain in detail)



**User Input:** Goal, amount, duration, and risk.

**AI Recommendation:** Asset allocation with future value.

**User Choice:** Accept or modify.

**Confirmation:** Confirms or stores portfolio.

**Modification:** AI re-evaluates custom allocation.

**Final Confirmation:** Displays and confirms updated portfolio.

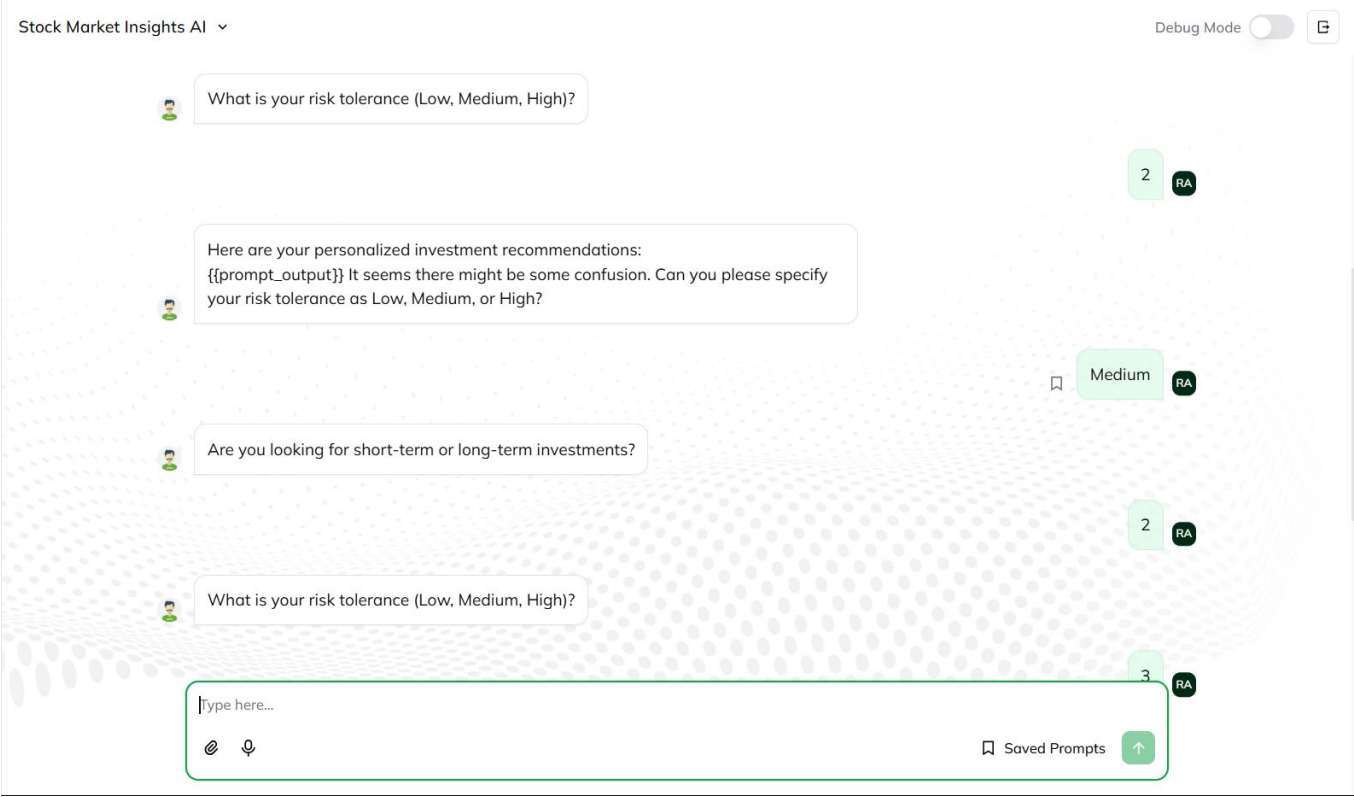


# Future Objectives

- **Improve AI Accuracy** – Integrate deep learning to detect patterns, e.g., **Tesla stock surging after earnings reports**, for better predictions.
- **Multi-Asset Support** – Expand analysis to **crypto (Bitcoin trends)**, **ETFs (S&P 500)**, and **commodities (Gold price shifts)** for diversified insights.
- **Real-Time Risk Alerts** – AI detects sudden **Nvidia stock drops (e.g., 5% in pre-market)** and alerts users instantly.
- **Personalized Strategies** – AI adapts; e.g., if a user prefers **low-risk dividend stocks**, it suggests **Coca-Cola over Tesla**.



# Outputs (Uptiq workflow)




**Goal based investment plan**



# Outputs (Uptiq workflow)

Stock Market Insights AI ▾



Debug Mode ☐ 




Here are your personalized investment recommendations:

{{prompt\_output}} Apologies for the confusion earlier. Let's discuss your investment options based on your medium risk tolerance and long-term investment horizon.

- 1. Mutual Funds:** Mutual funds pool money from multiple investors to invest in a diversified portfolio of stocks, bonds, or other assets. They are managed by professionals and are a great way to gain exposure to a wide range of investments without having to manage them yourself. The risk-return profile is medium, aligning with your risk tolerance. It can offer a higher return than lower-risk options but can have periods of volatility.
- 2. Index Funds:** An index fund is a type of mutual fund with a portfolio constructed to match or track the components of a market index, such as the Standard & Poor's 500 Index (S&P 500). An index mutual fund is said to provide broad market exposure, low operating expenses, and low portfolio turnover. These funds follow their benchmark index no matter the state of the markets. Index funds are generally considered ideal core portfolio holdings for retirement accounts, such as individual retirement accounts (IRAs) and 401(k) accounts.
- 3. Real Estate Investment Trusts (REITs):** These are companies that own or finance income-producing real estate across a range of property sectors. Most REITs trade on major stock exchanges, and they offer a number of benefits to investors. A REIT is a company that owns, operates, or finances income-generating real estate. Modeled after mutual funds, REITs pool the capital of numerous investors. This makes it possible for individual investors to earn dividends from real estate investments—without having to buy, manage, or finance any properties themselves.

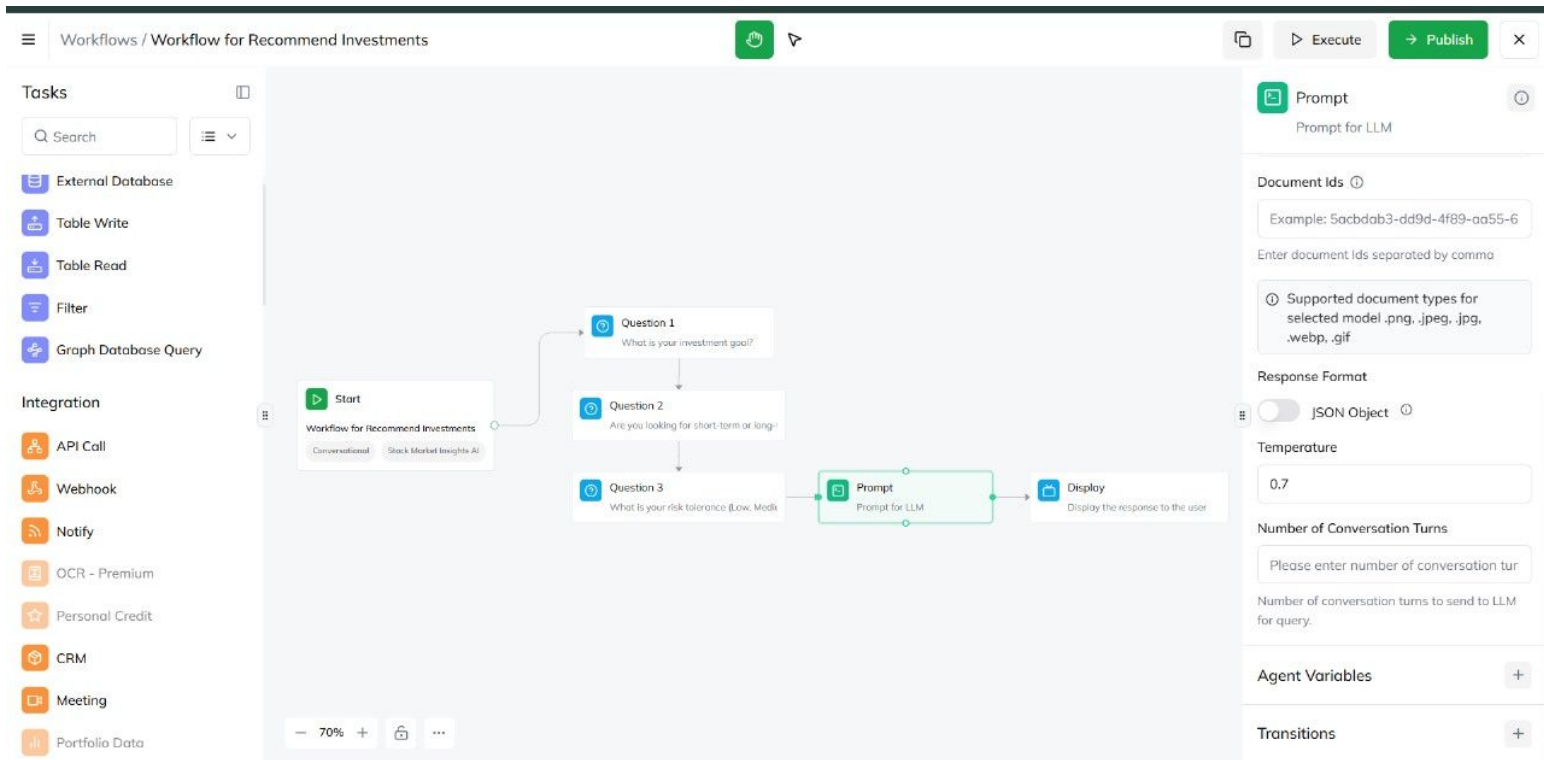
Type here...

## Agent Overview

# Outputs (Uptiq workflow)



WorkFlow

# Outputs (Frontend)

AI Invest Dashboard Investment Planning Trading Simulator Market Analysis 2

Welcome, 2004.somyajain@gmail.com!

## Plan Your Goal

Set financial goals and receive AI-driven suggestions to achieve them.



## Automatic Trading Strategy Evaluator

Evaluate different trading strategies automatically based on market trends.



## AI-Powered Market Sentiment Analyzer

Analyze market sentiment using AI to determine bullish or bearish trends.



## Simulated Trading Platform

Practice trading in a risk-free simulated environment with real-time market data.



AI Invest Dashboard Investment Planning Trading Simulator Market Analysis 2

## Welcome to the Trading Simulator

### Start Game



Start Game

### View Portfolio




View Portfolio



# Outputs (Frontend)

[AI Invest](#) [Dashboard](#) [Investment Planning](#) [Trading Simulator](#) [Market Analysis](#) 2

 **Stock Market Simulator** [Stop Game](#)

**Apple Inc. (AAPL)**

Current Price	Change
<b>\$175.23</b>	<b>+1.25%</b>
Volume	Day High
89M	<b>\$178.50</b>
Day Low	
<b>\$173.80</b>	

**Microsoft Corp. (MSFT)**

Current Price	Change
<b>\$321.45</b>	<b>-0.52%</b>
Volume	Day High
65M	<b>\$325.30</b>
Day Low	
<b>\$319.70</b>	

**Tesla Inc. (TSLA)**

Current Price	Change
<b>\$813.78</b>	<b>+2.15%</b>
Volume	Day High
48M	<b>\$820.20</b>
Day Low	
<b>\$805.10</b>	

**Amazon.com Inc. (AMZN)**

Current Price	Change
<b>\$128.95</b>	<b>+0.75%</b>
Volume	Day High
34M	<b>\$130.20</b>
Day Low	
<b>\$127.40</b>	

**Alphabet Inc. (GOOGLE)**

Current Price	Change
<b>\$142.67</b>	<b>-1.32%</b>
Volume	Day High
29M	<b>\$145.00</b>
Day Low	
<b>\$141.80</b>	

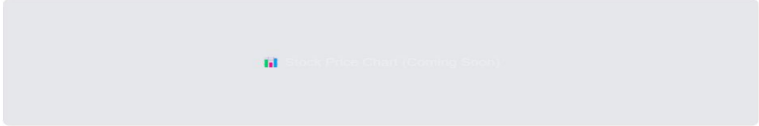
**Meta Platforms Inc. (META)**

Current Price	Change
<b>\$267.45</b>	<b>+0.98%</b>
Volume	Day High
20M	<b>\$270.00</b>
Day Low	
<b>\$265.90</b>	

▲ Stock data is for demo purposes only. Prices may vary in the live market.

[Dashboard](#) [Investment Planning](#) [Trading Simulator](#) [Market Analysis](#)


**Apple Inc. (AAPL)** [Stop Game](#)





**Current Price: \$200.00** **Change: +1.25%**


**Volume: 89M** **High: \$220.50**

**Low: \$190.20**

 **Buy Stock**

 **Buy Now**

 **Sell Stock**

 **Sell Now**

[Return to Game](#)

