

CODECEUL-CMPILIUS DE CODECEUL CMPILIUS DE CODECEUL

Category Code: C5

Problem Statement Title: AI-Powered Investment & Trading

Assistant

Team Name: T-bits

Institute Name: Vivekanand Education Society's Institute of Technology























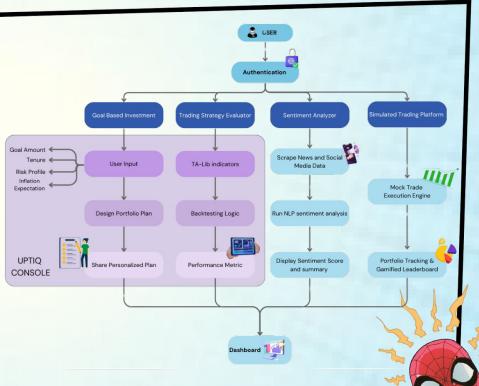
Idea / Approach details (& implemented features)

Problem Statement

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

Solution

- Al-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

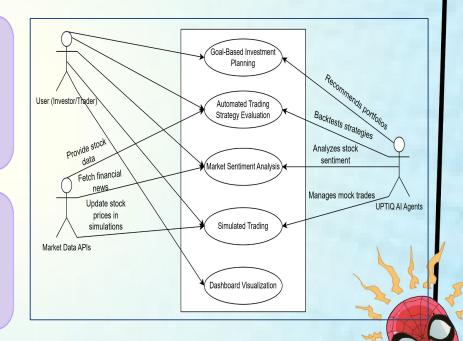
- Analyzes sentiment from news and social media.
- Guides informed investment decisions.

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



supabase

Frontend

HIGHCHARTS



Backend









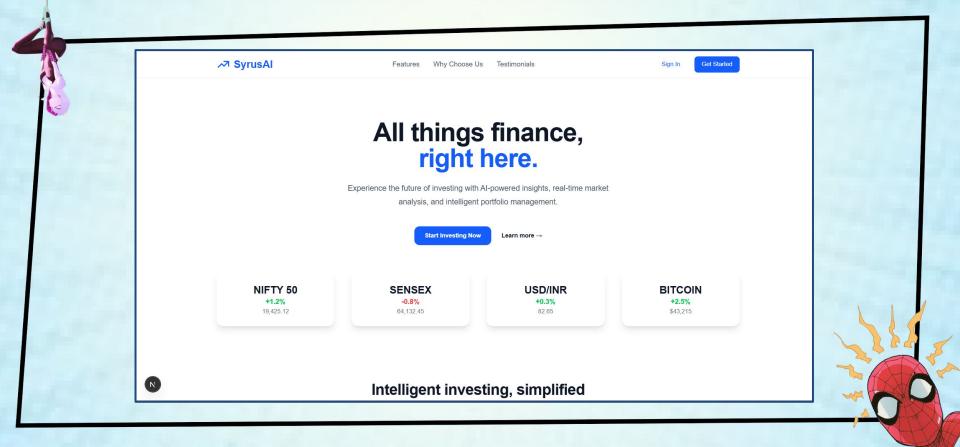
Agentic Workflow



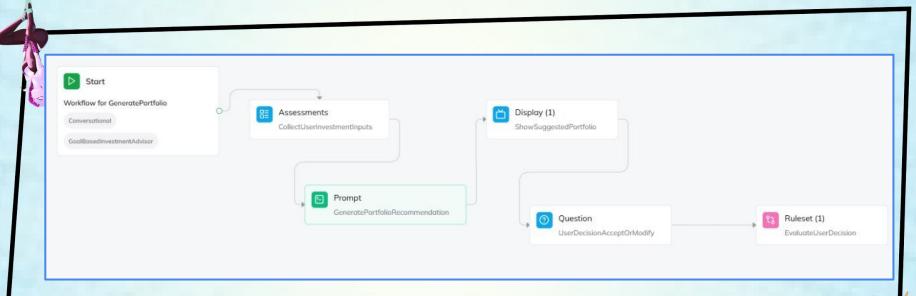
Data resources



Implementation/Prototype/Use Case Diagram (screenshots)



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



User Input: Goal, amount, duration, and risk. **Al Recommendation:** Asset allocation with future

value.

User Choice: Accept or modify.

Confirmation: Confirms or stores portfolio.

Modification: Al re-evaluates custom allocation.

Final Confirmation: Displays and confirms updated

portfolio.



Future Objectives

- Improve Al 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 Al detects sudden Nvidia stock drops (e.g., 5% in pre-market) and alerts users instantly.
- Personalized Strategies Al adapts; e.g., if a user prefers low-risk dividend stocks, it suggests Coca-Cola over Tesla.