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.
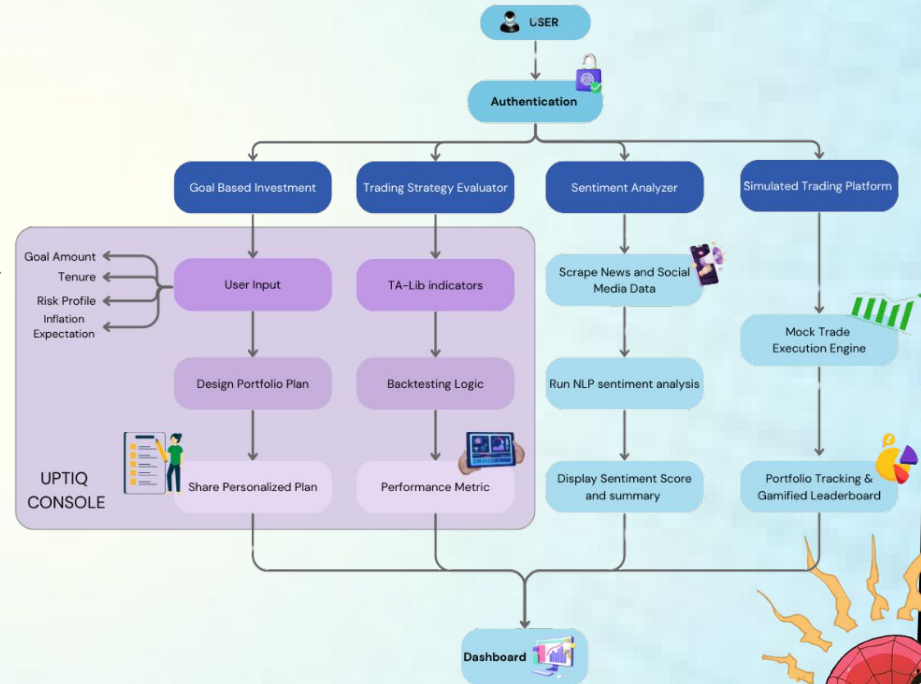
Innovation (Showstopper)/ Use Case Diagram

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.
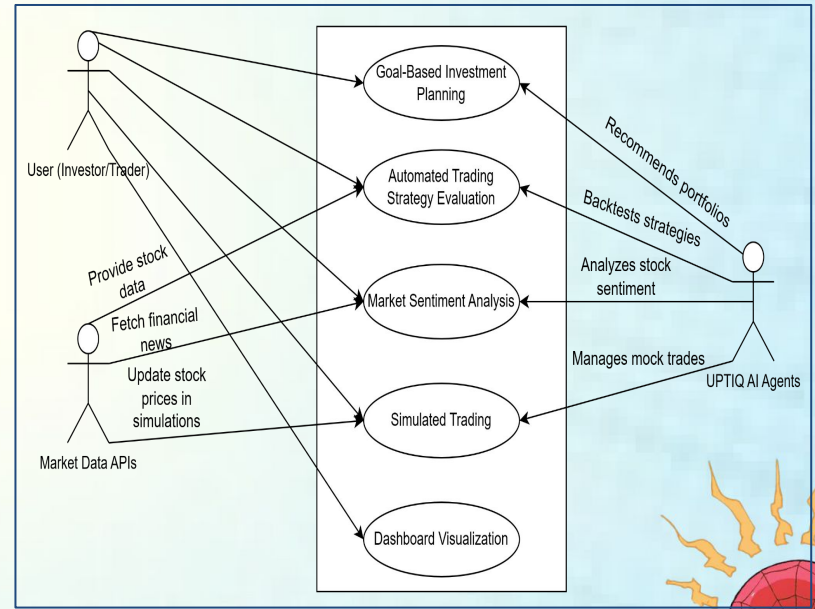
Tech Stack

Database

Frontend

Backend
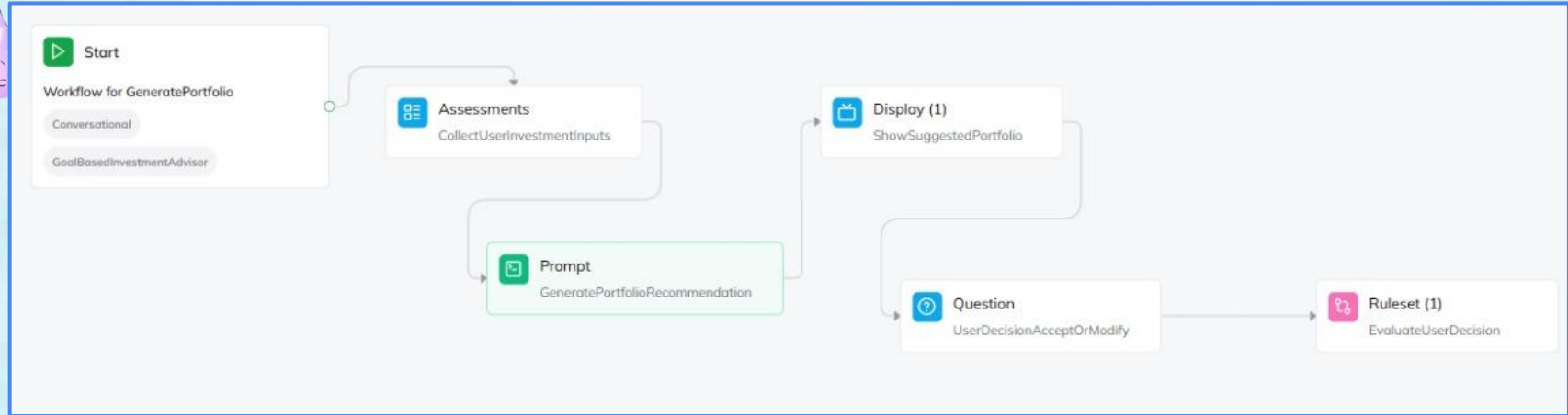
Agentic Workflow

Data resources

Implementation/Prototype/Use Case Diagram (screenshots)
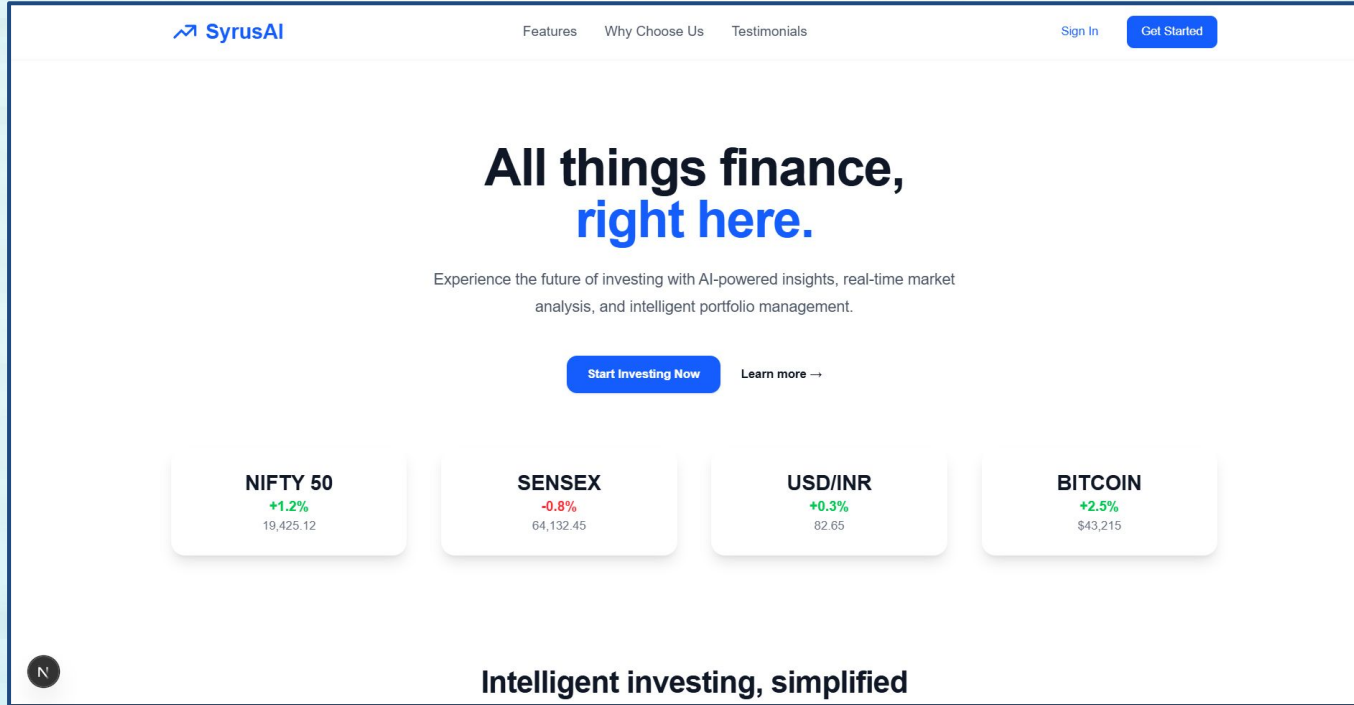
In case of Uptiq category - Your Uptiq Agent (explain in detail)

Start
Workflow for GeneratePortfolio
Conversational
GoalBasedInvestmentAdvisor

Assessments
CollectUserInvestmentInputs

Display (1)
ShowSuggestedPortfolio

Prompt
GeneratePortfolioRecommendation

Question
UserDecisionAcceptOrModify

Ruleset (1)
EvaluateUserDecision

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)
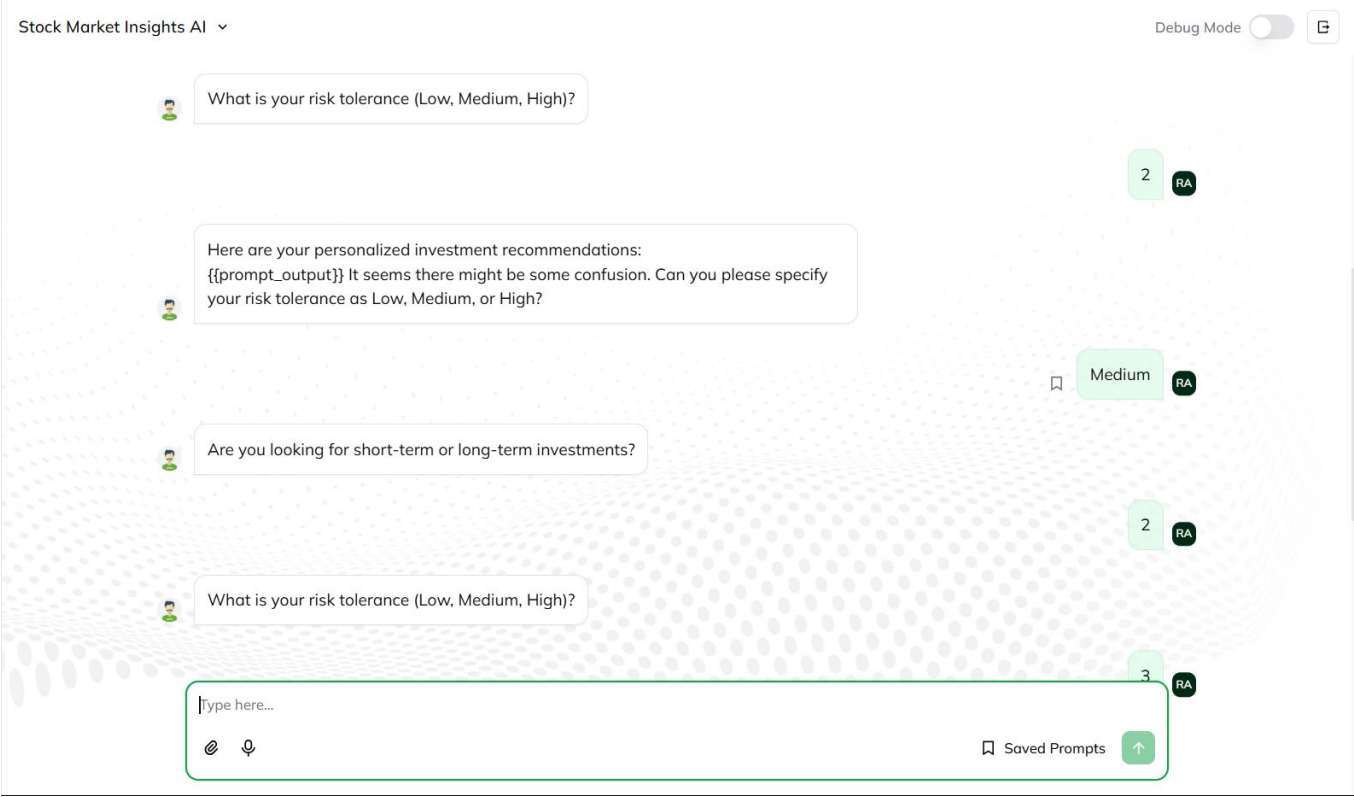
Goal based investment plan

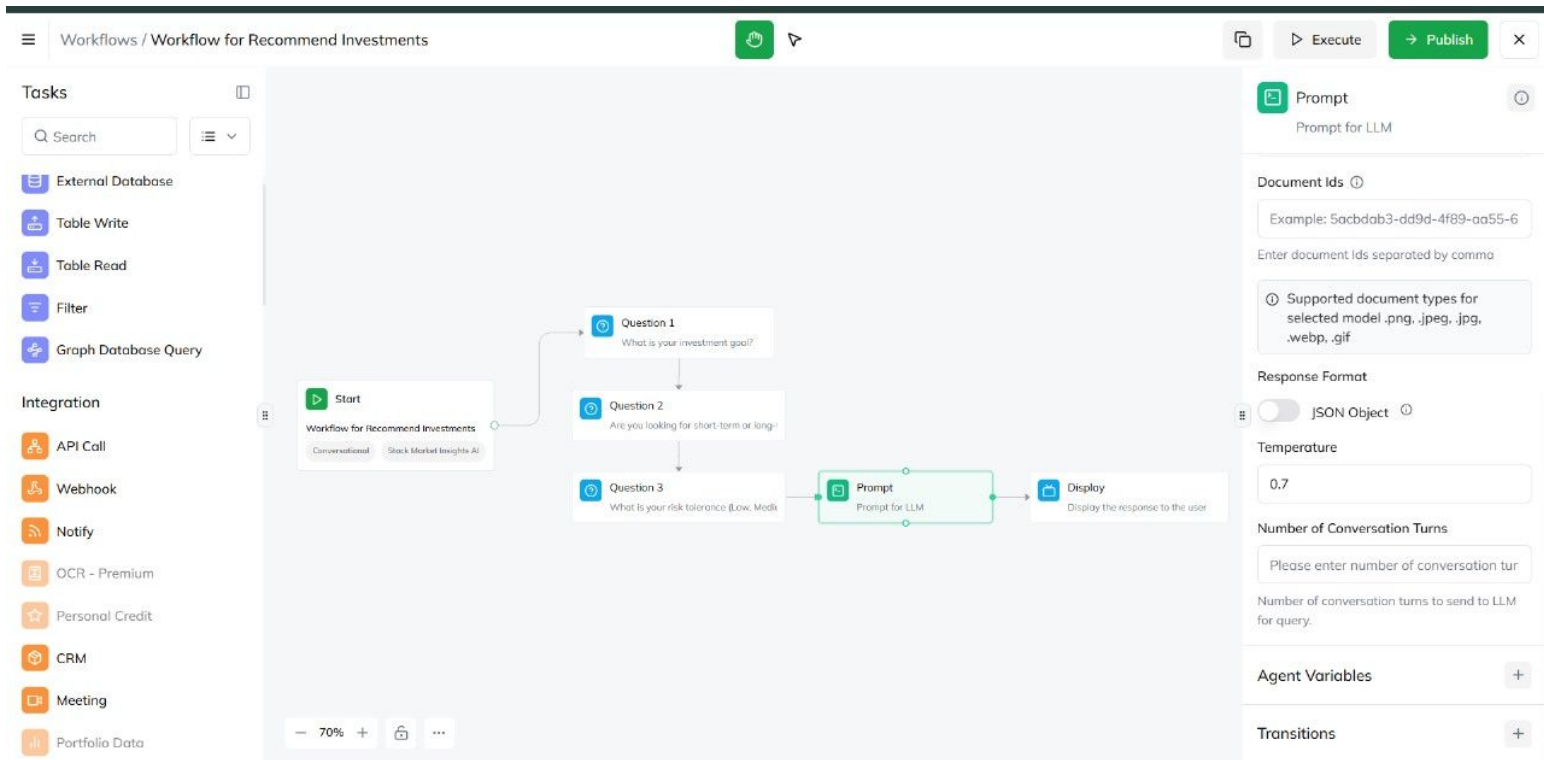# Outputs (Uptiq workflow)

Agent Overview

Outputs (Uptiq workflow)

WorkFlow

Outputs (Frontend)

AI Invest — Dashboard · Investment Planning · Trading Simulator · Market Analysis

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

Welcome to the Trading Simulator

Start Game
Start Game

View Portfolio
View Portfolio

Outputs (Frontend)