Category Code: C5

Problem Statement Title: AI-Powered Investment & Trading Assistant

Team Name: T-bits

Institute Name: Vivekanand Education Society's Institute of Technology

UPTIQ | unstop | Github | sprect | Rotary Club Bombay Chembur West | interview buddy | appwrite | .xyz | fueler | Interview Cake

# 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.

Target audience : Retail Investors, Beginner investors, Traders and Analysts, and Consultants
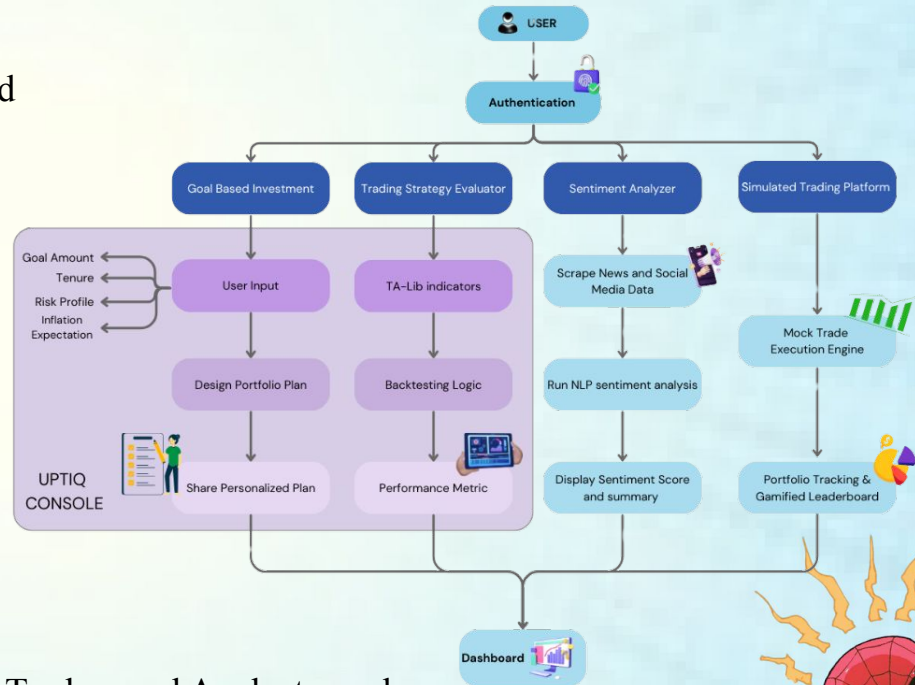
Implemented Features

Financial Sentiment Analysis :
- Analyzes market sentiment by processing financial news, social media trends, and expert opinions.
- Provides insights into market mood and potential shifts.

Investment Strategy Evaluator :
- Evaluates and backtests trading strategies using historical data.
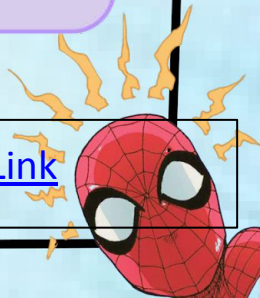- Analyzes performance metrics to help users refine and optimize their strategies.

Investment Recommendations Agent :
- Provides personalized investment insights and market analysis.
- Utilizes multiple specialized sub-agents, each linked to a specific intent and workflow.
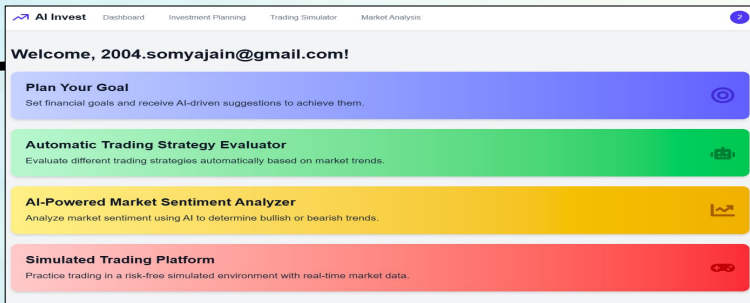
Implementation Video : Link
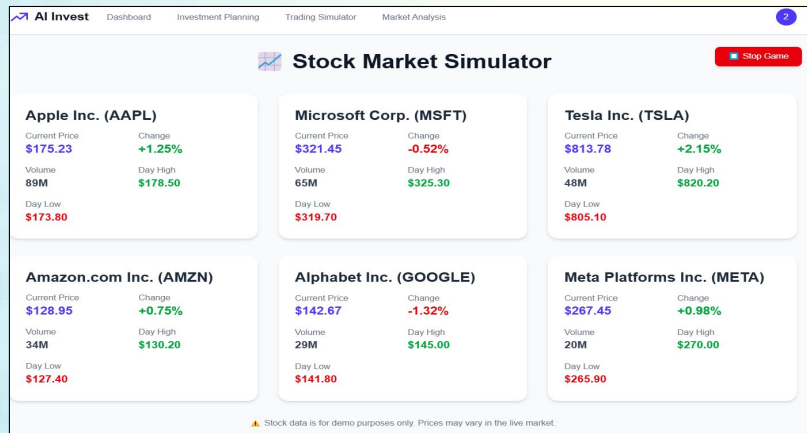
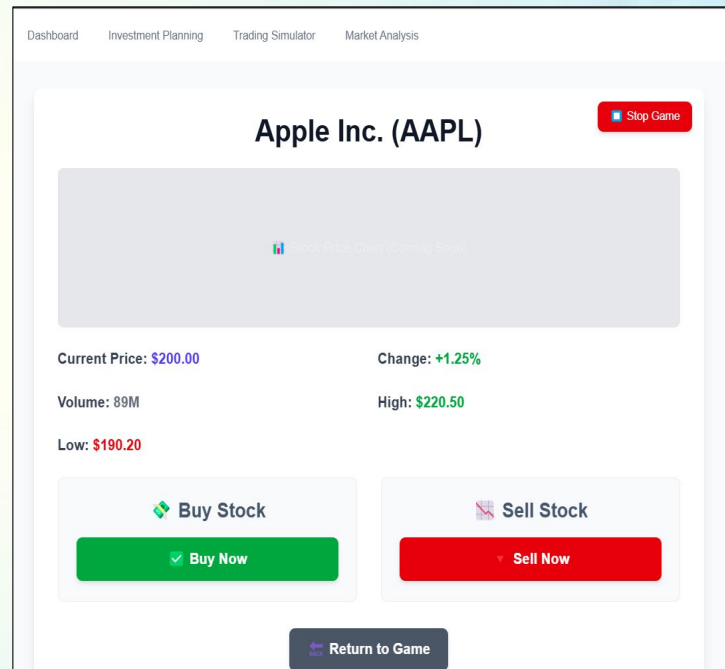Feature Documentation and output : Link

Uptiq issues :Link

UI Design

Dashboard

Simulated Market

Buy/Sell of a stock

Architecture and Tech Stack

Project Architecture

```
Investor(user)
      │
      ▼
User authentication
   (Supabase)
```

Dashboard (Next.js)
- Goal-Based Investment Planning
- investment strategy evaluator
- sentiment analysis agent
- Simulated Trading

UPTIQ agents
- Predictive insights agent
- investment recommendations agent
- Sentiment analysis agent
- market analysis agent
- News summarization agent

Output

External APIs (Yahoo Finance, UPTIQ, Alpha Vantage)
- Scrapes Financial News & Social Media
- Fetches Real-Time Stock Data

Tech Stack

Frontend
Next.js

Database
Supabase

Agentic Workflow
Uptiq

Backend
Python

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**.