SYRUS HACKATHON 2025

Category Code: C5

Problem Statement Title: Empowering investors with AI-driven strategies

Team Name: 404 Found

Institute Name: Vivekanand Education Society's Institute of Technology

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

Idea / Approach details (& implemented features)

Problem Statement:
Because of the complexity of markets, the abundance of data, and the lack of individualized insights, investors struggle to make well-informed judgments. Conventional technologies offer static data without sentiment analysis, predictive modeling, or AI-driven flexibility.

Proposed

The Alvestor AI-Powered Investment Platform is the suggested remedy; it makes use of AI to make investment decisions and provide stock market information.

- **Integration with UptiQ:** Leverages historical and real-time market data for accurate insights.
- **Sentiment analysis and machine learning:** Examines past data and market sentiment to make more accurate forecasts.
- **AI Decision-Making Agents:** Automates trading and investment analysis.
- AI-driven algorithms are used in predictive analytics to forecast stock patterns.
- Portfolio optimization aids users in building and overseeing a variety of investment holdings.
- **Tailored Stock Suggestions:** Makes recommendations for equities according to user preferences and market conditions.
- **Identification of High-Potential Equity:** Identifies cheap stocks with room to expand.
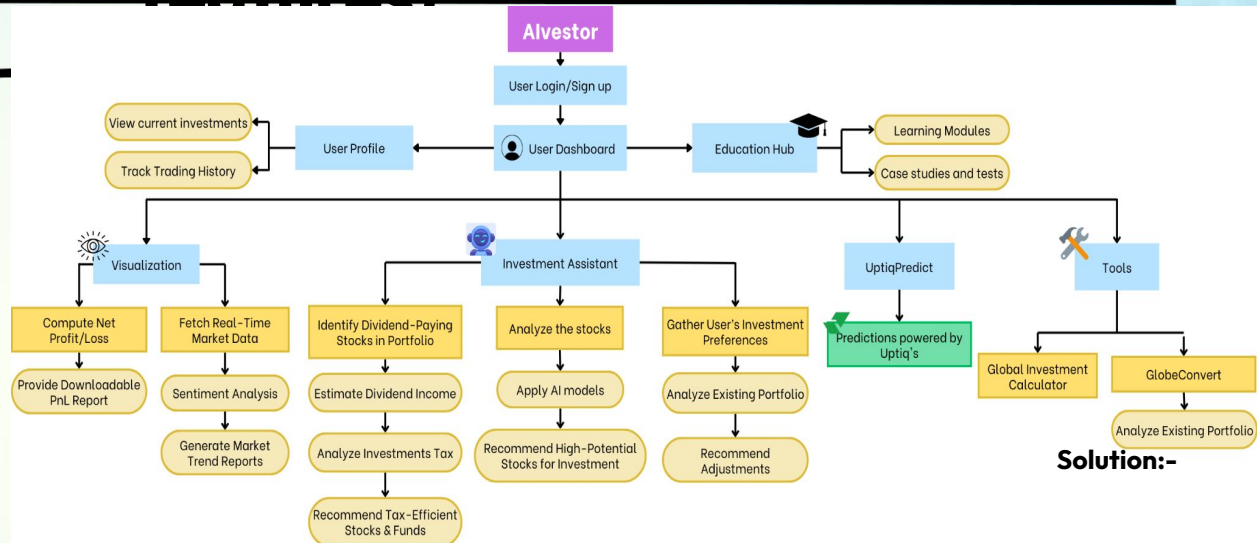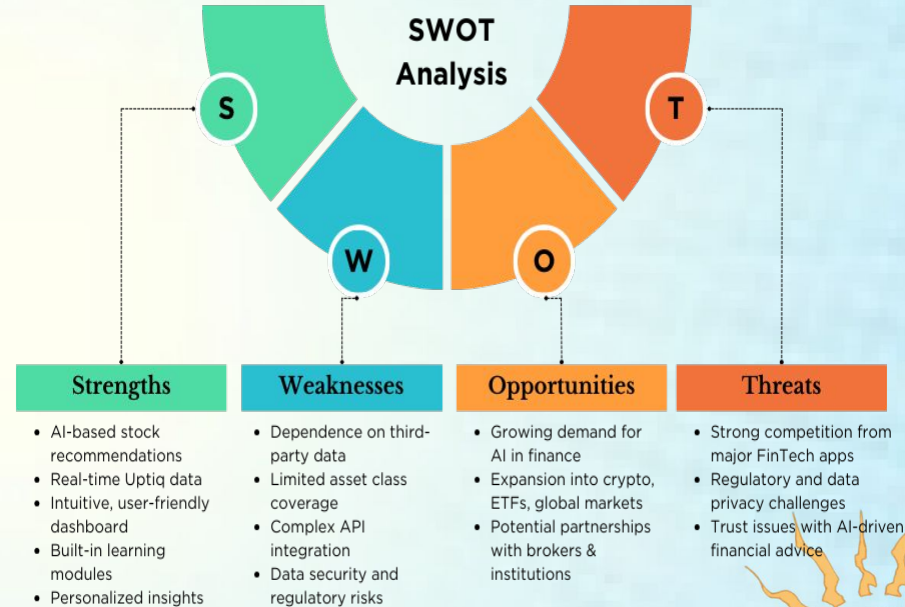
Solution:-

Innovation (Showstopper)

1. **Uptiq Panel :** A centralized hub with AI agents for easy access to all Uptiq solutions.
   - **Stock Prediction Sentinel:** AI-driven predictions to guide stock investments with precision.
   - **Trend Prediction Agent:** Identify market trends early to stay ahead of the curve.
   - **Closing Price Prediction Agent:** Forecast stock closing prices for better timing of trades

2. **Visualization & Insights**
   - **Real-Time Market Data:** Stay ahead with live market updates.
   - **Profit/Loss Tracker:** Instantly compute your performance with downloadable reports.
   - **Market Trends:** Visualize trends to make data-driven investment decisions.

3. **AI-Powered Investment Assistant**
   - **Dividend Stock Finder:** Quickly identify stocks with high dividend yields
   - **Tax-Efficient Funds:** Get recommendations for tax-optimized fund selections.
   - **Personalized Portfolio Adjustments:** Adjust your portfolio based on real-time market changes and personalized goals.

SWOT Analysis

Strengths	Weaknesses	Opportunities	Threats
• AI-based stock recommendations • Real-time Uptiq data • Intuitive, user-friendly dashboard • Built-in learning modules • Personalized insights	• Dependence on third-party data • Limited asset class coverage • Complex API integration • Data security and regulatory risks	• Growing demand for AI in finance • Expansion into crypto, ETFs, global markets • Potential partnerships with brokers & institutions	• Strong competition from major FinTech apps • Regulatory and data privacy challenges • Trust issues with AI-driven financial advice

Tech Stack

- **Frontend :**
  - **React.js** for building the user interface
  - **Chart.js** for interactive data visualizations
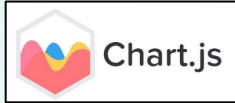
- **Database : Firebase** for real-time data storage and authentication

- **Backend : Flask** for creating RESTful APIs and handling server-side logic

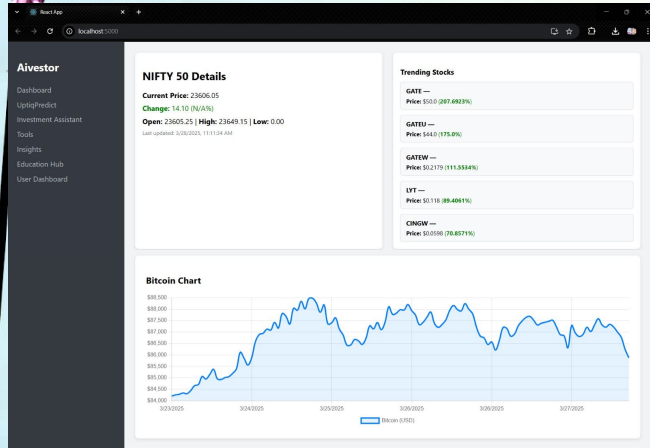- **Uptiq console** for creating advanced AI agents

- **AIML :** NLP,
- **APIs :** Integration with multiple external APIs for market data and other services
  - Alphavantage
  - Coingeko
  - yahoofinance

Implementation/Prototype/Use Case Diagram (screenshots)

Implementation Screenshots

Our dashboard is an all-inclusive investment center that shows current market information from live APIs, such as equities, NIFTY indexes, and Bitcoin values. For improved financial insights, it also has a global conversion tool that makes it simple for users to swap between currencies.


Use Case Diagram

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

 UptiqPredict is an AI stock market prediction tool that uses advanced algorithms to assist users in predicting closing prices and stock movements. The agent offers useful insights to direct trading and investing decisions by harnessing historical data and financial indicators, ultimately assisting users in navigating the complex dynamics of the stock market.

- **User Interaction :** An investor or analyst looking for stock market predictions communicates with our AI agents.
- **Sub-Agent:** This is the main module in charge of stock data analysis. It interprets user input and routes it to the appropriate prediction models.
- **Intents :** After determining the user's intent, the agent divides it into two main prediction categories:
- **Trend Prediction:** Uses technical indicators and historical patterns to predict whether the stock price will rise or fall.
- **Closing Price Prediction:** Makes use of statistical and machine learning models to forecast the precise closing price of a stock for a specified period of time.
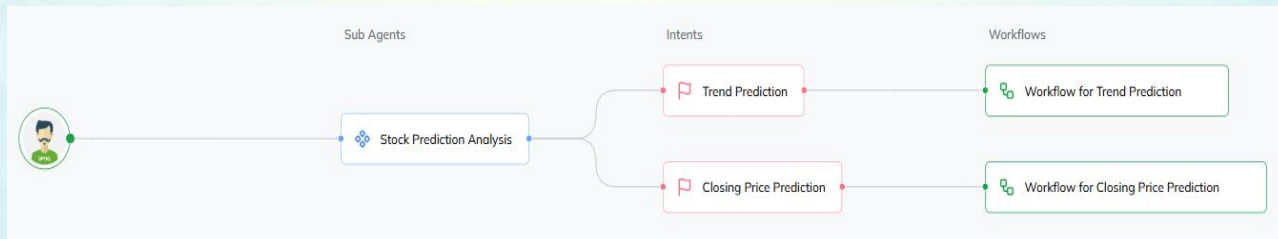
Future Objectives

Enhance AI Models with Uptiq Console
Utilize Uptiq to develop more intelligent and efficient AI models. This will increase precision in trend and price prediction.

Automated P&L Report Generation
Implement auto-generated Profit & Loss statements based on the user's portfolio transactions.
This assists users in tracking their performance and examining returns over time with transparency.

Tax-Optimized Investment Recommendations
Create AI systems that offer investment suggestions aimed at reducing tax liabilities.
It will take into account holding durations, capital gains, and dividend tax strategies.

Investment Learning Hub
Merge all educational materials such as tutorials, quizzes, and market insights into a single module.
This will establish a structured pathway for users to enhance their financial knowledge.