



CODECELL-CMPN,VESIT

SYRUS HACKATHON 2025

Category Code: C5

Problem Statement Title: InvestmentGuardian - AI-Powered Stock Market Fraud Detection & Insights

Team Name: YugaNayaks

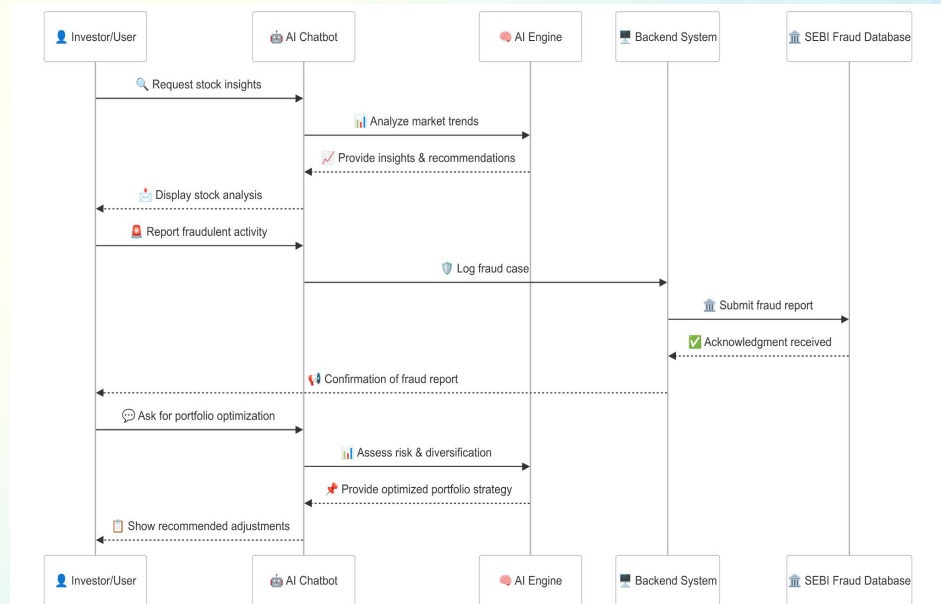
Institute Name: Vivekanand Education Society's Institute of Technology



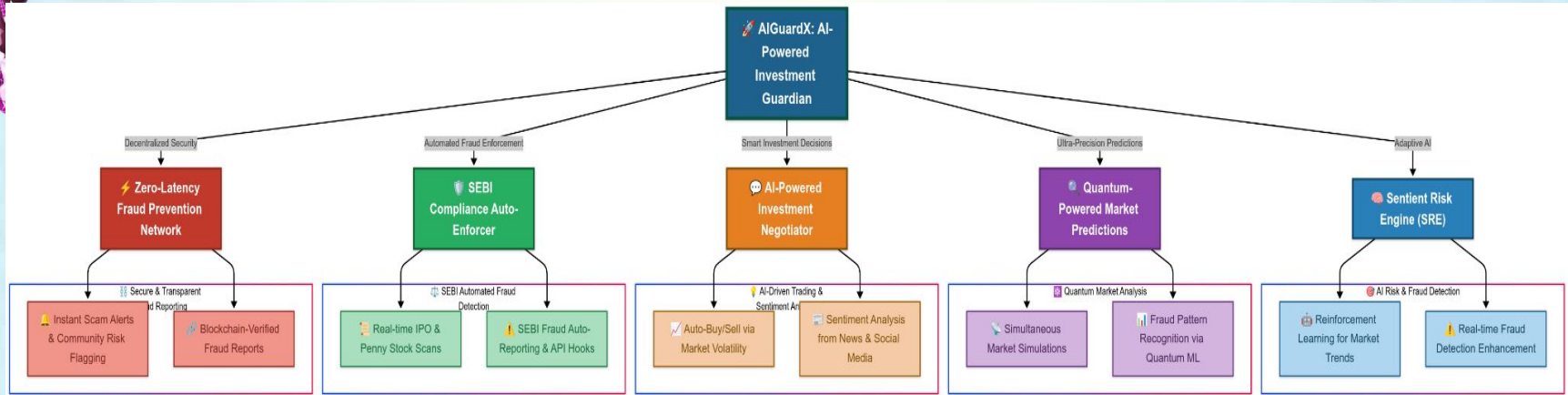
Idea / Approach details (& implemented features)

An **AI-powered platform** for **fraud detection**, **real-time stock insights**, and **automated fraud reporting** to **protect retail investors**.

- **AI Fraud Detection:** Looks for scams in news, social media, and stock data.
- **Personalized Insights:** Risk-based stock recommendations powered by AI.
- **Automated Fraud Reporting:** Notifies brokers and SEBI of fraud.
- **Real-time scam alerts:** Alerts are provided by an AI chatbot on WhatsApp.
- **Smooth AI Integration:** Multi-agent data flow is managed by Uptiq AI Console.



Innovation (Showstopper)

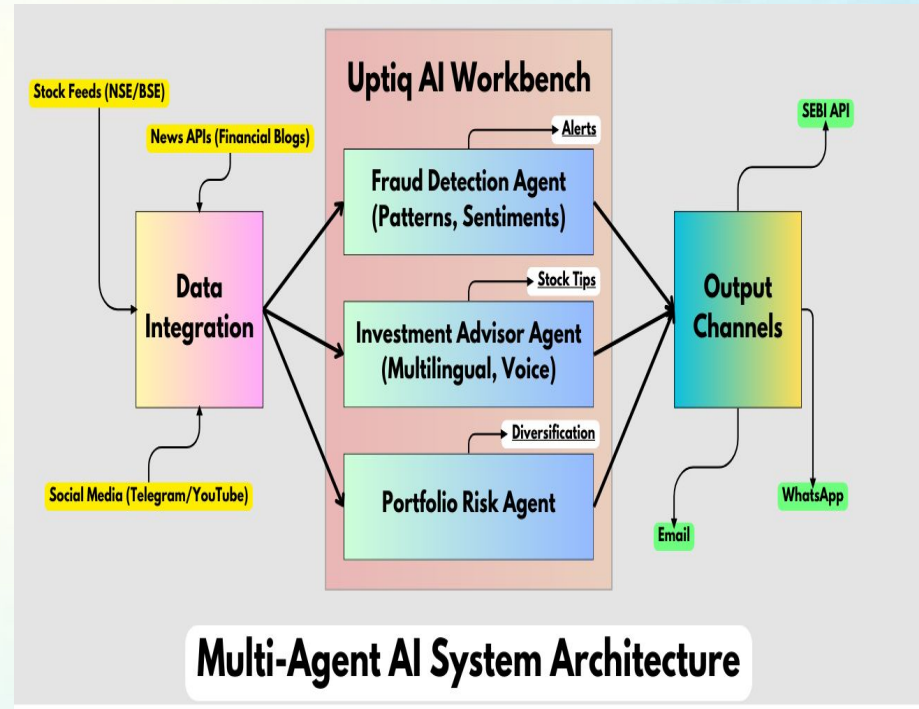


- **AI-Powered Insights** – Provides real-time, data-driven financial advice.
- **Smart Automation** – Streamlines investment and financial management with automated solutions.
- **Personalized Strategies** – Offers recommendations based on user preferences and risk profiles.
- **Seamless Integration** – Integrates with financial platforms for a hassle-free experience.



Implementation/Prototype/Use Case Diagram (screenshots)

- **Data Integration:** Fetches data from **Stock Feeds**, **News APIs**, and **Social Media**.
- **Uptiq AI Workbench:**
 - **Fraud Detection** → Flags anomalies.
 - **Investment Advisor** → Provides multilingual stock tips.
 - **Portfolio Risk** → Suggests diversification.
- **Output:** Insights via **Email**, **WhatsApp**, **SEBI API**.
- **AI-driven fraud detection, investment guidance & risk management.**



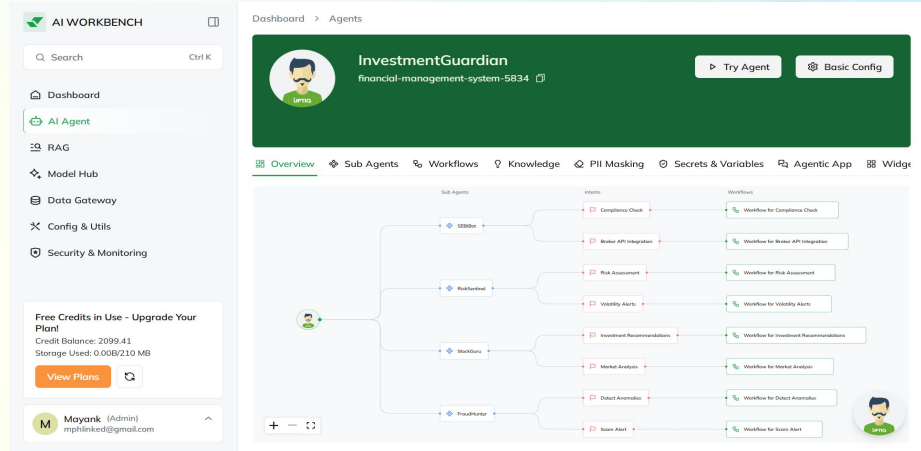
In case of Uptiq category - Your Uptiq Agent (explain in detail)

InvestmentGuardian is an AI-driven financial management system with specialized sub-agents for fraud detection, investment insights, risk assessment, and compliance reporting.

- ◆ **FraudHunter** – Detects scams using NLP & anomaly detection.
- ◆ **StockGuru** – Provides investment insights with risk-based filters.
- ◆ **RiskSentinel** – Monitors portfolio risks & alerts on volatility.
- ◆ **SEBIBot** – Ensures compliance with SEBI regulations via API.

Features:

Automated monitoring & real-time alerts
AI-powered market analysis
Seamless integration with NSE/BSE & broker APIs



Agent Name	Role	Uptiq Template	Key Config
FraudHunter	Scam Detection	Anomaly Detection Agent	NLP model + trading volume thresholds
StockGuru	Investment Insights	Predictive Analytics Agent	Risk-profile filters + multilingual NLP
RiskSentinel	Portfolio Safety	Decision Tree Agent	Correction matrices + volatility alerts
SEBIBot	Compliance Reporting	Rule-Based Agent	SEBI fraud schema + broker API hooks

Future Objectives

AI-Powered Predictive Analytics – Employ deep learning to predict market trends and identify nascent fraud patterns before they scale.

Blockchain-Driven Transparency – Harness blockchain to provide tamper-proof investment histories and safe fraud reporting.

Autonomous Portfolio Management – Allow AI-driven, auto-tuning investment portfolios depending on market conditions and user risk levels.

Quantum Computing for Simulation of the Market – Leverage quantum algorithms to forecast stock market patterns for extremely precise risk calculation.

