



CODECELL-CMPN,VESIT

SYRUS HACKATHON 2025

Category Code: C5

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

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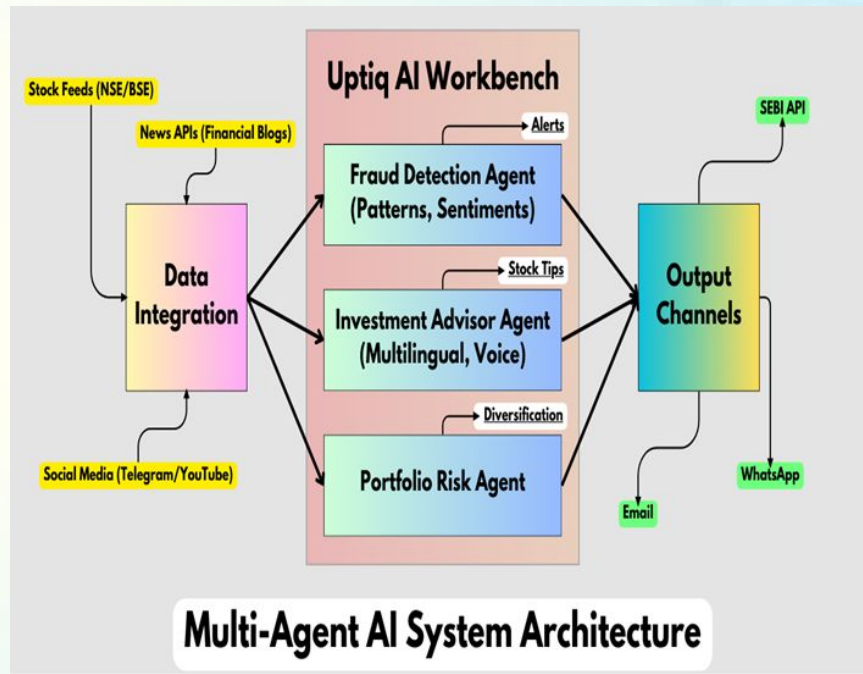
Idea / Approach details

Problem Statement: The stock market is vulnerable to fraud, misinformation, and scams that mislead retail investors.

Solution: AI-driven fraud detection system leveraging NLP, anomaly detection, and risk-based investment insights.

Implemented Features:

- **Personalized Insights:** Provides investment suggestions tailored to risk profiles.
- **Automated Fraud Reporting:** Sends fraud alerts to brokers and regulatory authorities.
- **Real-time Alerts:** chatbot integration for immediate fraud notifications.
- **Smooth AI Integration:** Multi-agent architecture for seamless financial insights.



Implemented Features

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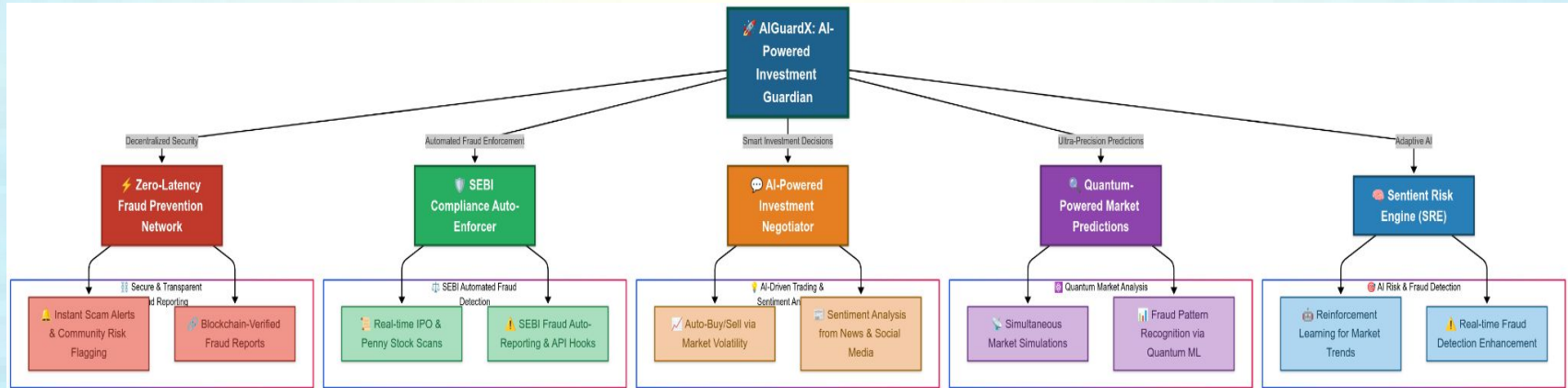
1. **AI Fraud Detection:** Uses NLP and machine learning to identify fraud in news, social media, and stock data.
2. **Personalized Insights:** AI suggests investments based on risk tolerance and market trends.
3. **Automated Fraud Reporting:** Alerts brokers and SEBI via API integration.
4. **Multi-Agent System:**
 - **FraudHunter:** Detects scams.
 - **StockGuru:** AI-powered investment advice.
 - **RiskSentinel:** Monitors market risks.
 - **SEBIBot:** Ensures SEBI compliance.



Innovation & Technologies used

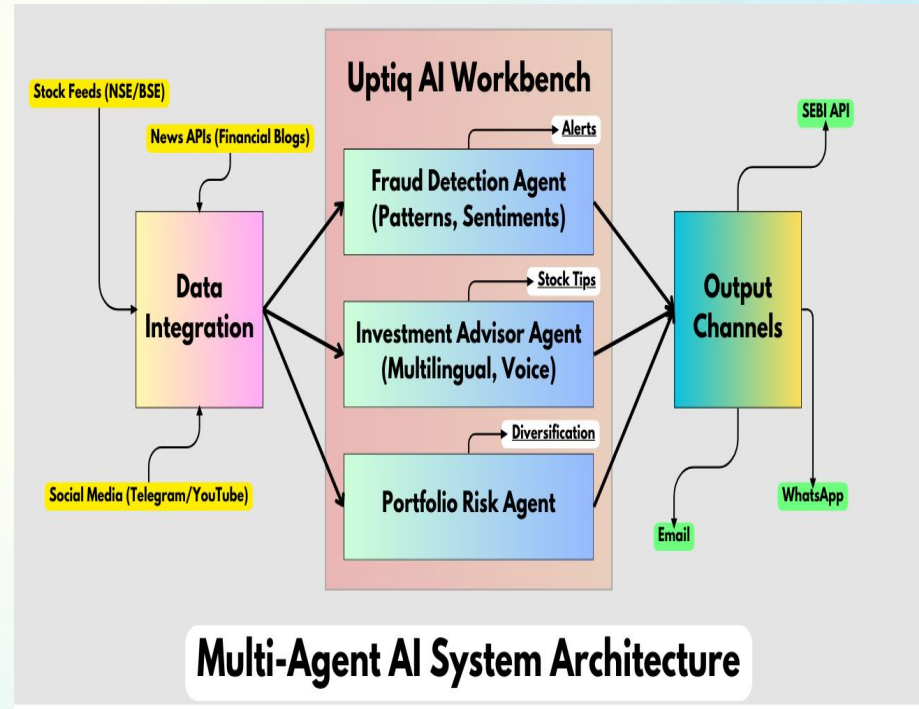
Innovation & Technologies Used:

- **AI-Powered Insights:** Real-time financial analysis.
- **Smart Automation:** AI-driven fraud detection and investment strategies.
- **Personalized Strategies:** Tailored stock recommendations.
- **Seamless Integration:** Works with NSE/BSE, broker APIs.



Flow diagram / Architecture

- **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.**



Demo video link And Document Link

Document Link:

https://docs.google.com/document/d/1VPm_uXSDJobkzjoKeAfjQF2ASJ_Pz4iHP2Hwo20k6l/edit?usp=sharing

Video link:

<https://drive.google.com/file/d/1-fGJrViAXMggSljjLcrgkTYP36DAseEL/view?usp=sharing>



Future Scope

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.

