

Big Data Multi-Platform Intelligent Integration System

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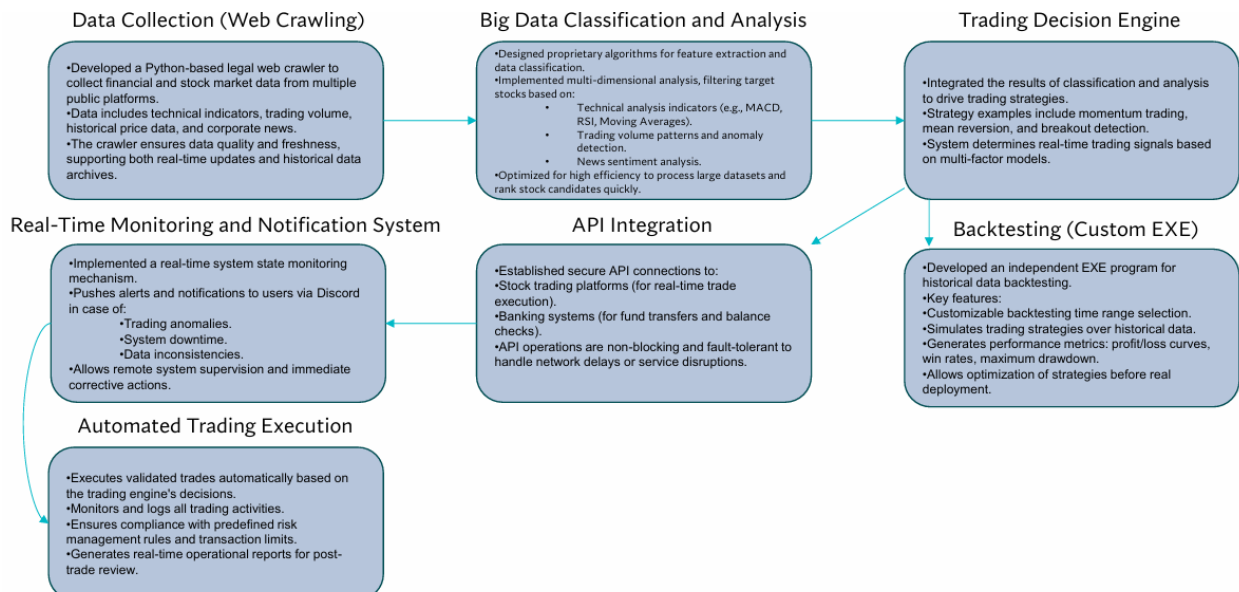
Project Overview

Designed and implemented a big data-driven intelligent trading system for automated stock trading. The system integrates data from various public sources, analyzes it using custom-built classification algorithms, and performs automated trading via secure API connections to financial platforms. Key technical focuses include real-time monitoring, system reliability, and fault-tolerant automation.

Key Contributions

- Developed a legal Python-based web crawler to gather technical indicators, trading volume, historical data, and corporate news from public sources.
- Designed proprietary classification algorithms incorporating technical indicators (MACD, RSI, MA), trading volume patterns, and news sentiment.
- Built an executable (.EXE) backtesting tool to simulate historical trades and evaluate strategies (win rate, drawdown, P/L curves).
- Integrated with stock trading and banking APIs for real-time execution, fund transfers, and position tracking.
- Implemented a real-time Discord notification system for trade anomalies, system downtime, and remote status control.
- Engineered a fault-tolerant architecture with auto-restart and network fallback for 24/7 uninterrupted operation.

Core Functional Architecture:



Project Achievements:

- Deployed and maintained for over 12 months with consistent real-time trade logging and no critical system failure.
- Automated decision engine demonstrated success in executing momentum, mean reversion, and breakout strategies.
- Achieved millisecond-level trading latency and high-efficiency multi-platform data processing under live conditions.