



Skyra

AI-Powered Smart Investment Manager

Skyra

Group Members

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- **Skyra** is a cutting-edge, AI-powered platform that leverages real-time market data and advanced machine learning algorithms to optimize investment strategies.
- Utilizing **Microsoft Fabric**, **Medallion Architecture**, and a multi-agent system, Skyra provides automated, dynamic investment recommendations.
- Powered by continuous data from reliable sources such as **Alpha Vantage**, **Twelve Data**, and **Yahoo Finance**, ensuring up-to-the-minute financial insights.



Traditional Investment Challenges

- Volatile Markets: Constant fluctuations create uncertainty and risk for investors.
- Massive Data: The overwhelming volume of unstructured data makes rapid decision-making difficult.
- Inefficiency in Decision Making: Traditional methods are too slow to adapt, leading to missed opportunities.
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Skyra Solution

- Powered by Microsoft Fabric & Medallion Architecture
- Real-Time Data Processing: Analyzing market shifts instantly.
- Streamlined Insights: AI-driven analytics cut through noise for precise recommendations.
- Automated Alerts: Timely investment opportunities delivered via email.
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Technological Foundation

- **Microsoft Fabric:** A unified platform combining data engineering, data science, and business intelligence, enabling real-time data processing and seamless collaboration.
- **Real-Time Data:** Skyra integrates data sources such as **Alpha Vantage**, **Twelve Data**, and **Yahoo Finance** for up-to-the-minute financial insights.
- **EventHub/EventStream:** Real-time streaming of market data events, ensuring timely updates for decision-making.
- **Medallion Architecture:** A layered approach to data management, facilitating efficient data ingestion, processing, and analysis in a structured format for enhanced decision-making.
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Microsoft Fabric

The unified data platform for AI transformation



Data
Factory



Data
Engineering



Data
Warehouse



Data
Science



Real-Time
Intelligence



Power BI



AI



OneLake

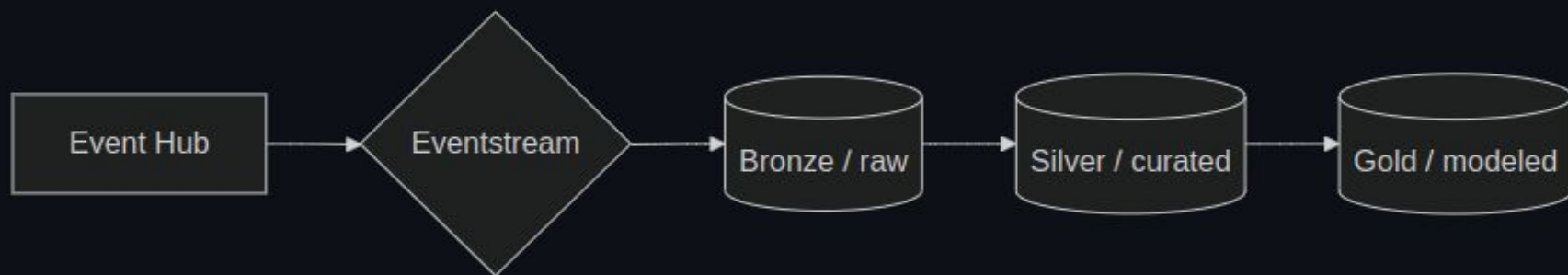


Purview

REAL-TIME DATA FROM API's

- **Alpha Vantage:** Provides real-time and historical data, including stock quotes, forex data, and cryptocurrencies, to fuel Skyra's decision-making.
- **Twelve Data:** Offers robust financial data including stock quotes, forex, and commodities, ensuring the most accurate and current market information.
- **Yahoo Finance:** Delivers a comprehensive range of financial news, data, and analysis, helping Skyra track market movements and emerging trends.
- **EventHub/EventStream:** Streaming real-time updates of financial market events to ensure Skyra's recommendations are always based on the latest data.





Medallion Architecture



Bronze Layer

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graph LR; B[Bronze Layer] --> S[Silver Layer]; S --> G[Gold Layer];
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Raw data ingestion from external sources like **Alpha Vantage**, **Twelve Data**, and **Yahoo Finance**, with real-time event streaming via **EventHub/EventStream**.

Silver Layer

Data cleaning and transformation processes, making raw data usable for predictive analysis and machine learning models.

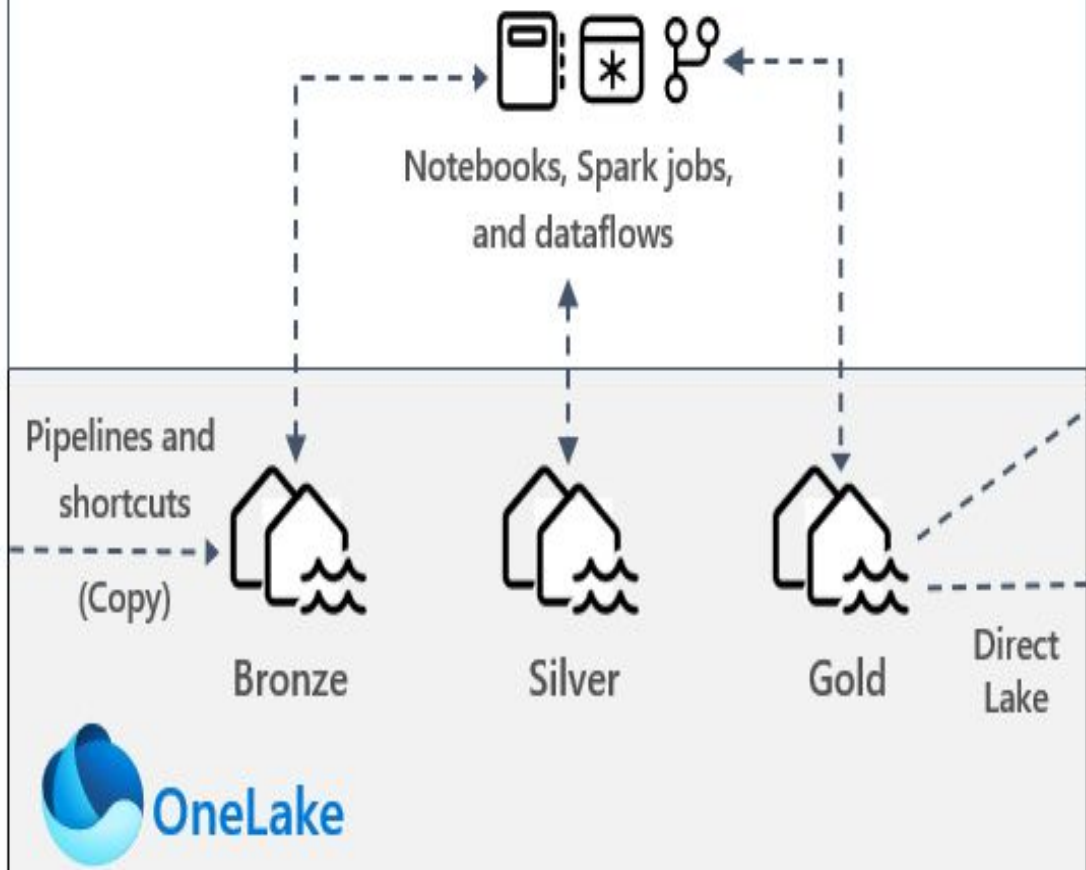
Gold Layer

Refined, actionable insights and analytics, optimized for decision-making and portfolio recommendations.

Data sources

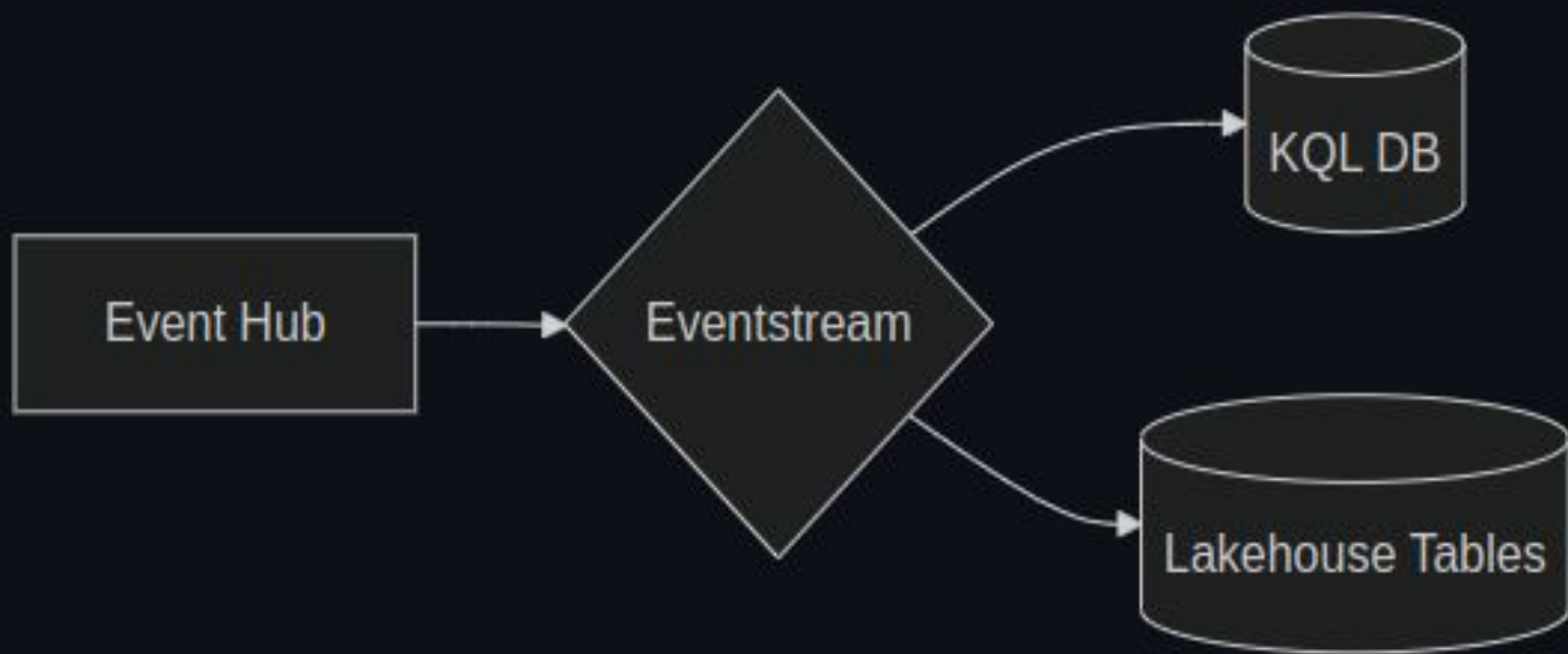


Prepare and transform



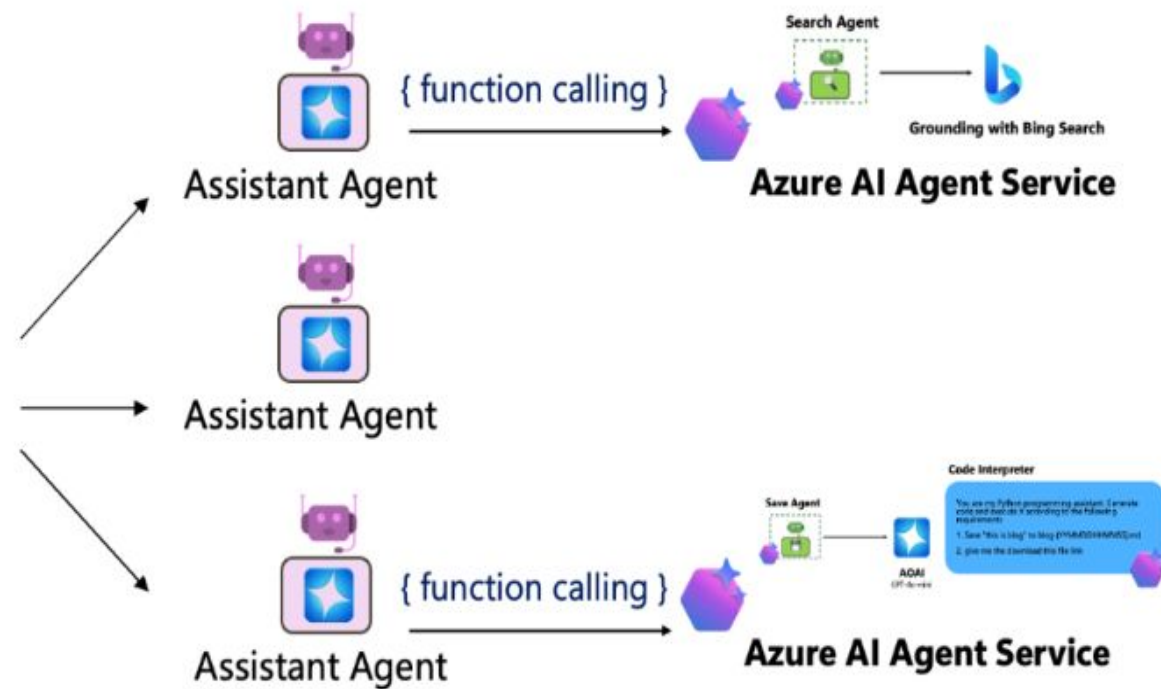
Analyze



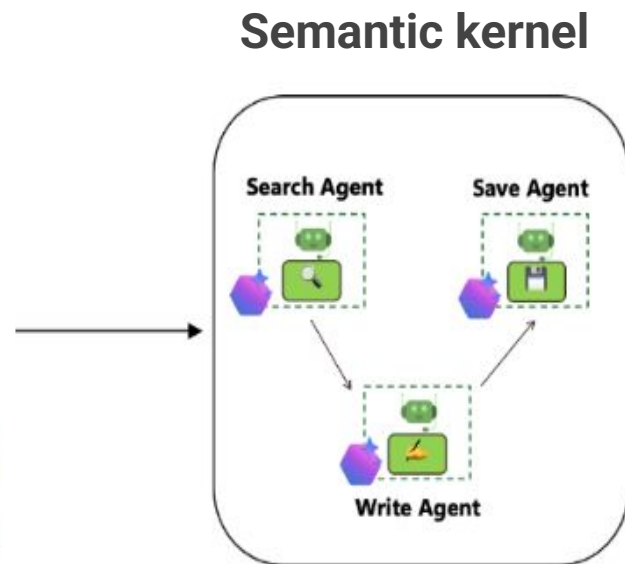


MULTI-AGENT & SEMANTIC KERNEL

- **Multi-Agent System:** Skyra utilizes multiple AI agents working collaboratively to analyze data, forecast trends, and provide investment insights.
- **Semantic Kernel:** The agents use Semantic Kernel to understand, process, and generate natural language insights from structured financial data.
- **AI-Powered Decision Making:** Each agent specializes in different aspects, such as trend forecasting, risk analysis, and portfolio management, ensuring comprehensive analysis across all investment domains.
- **Continuous Learning:** The agents evolve over time, refining their predictions based on new data and user feedback.
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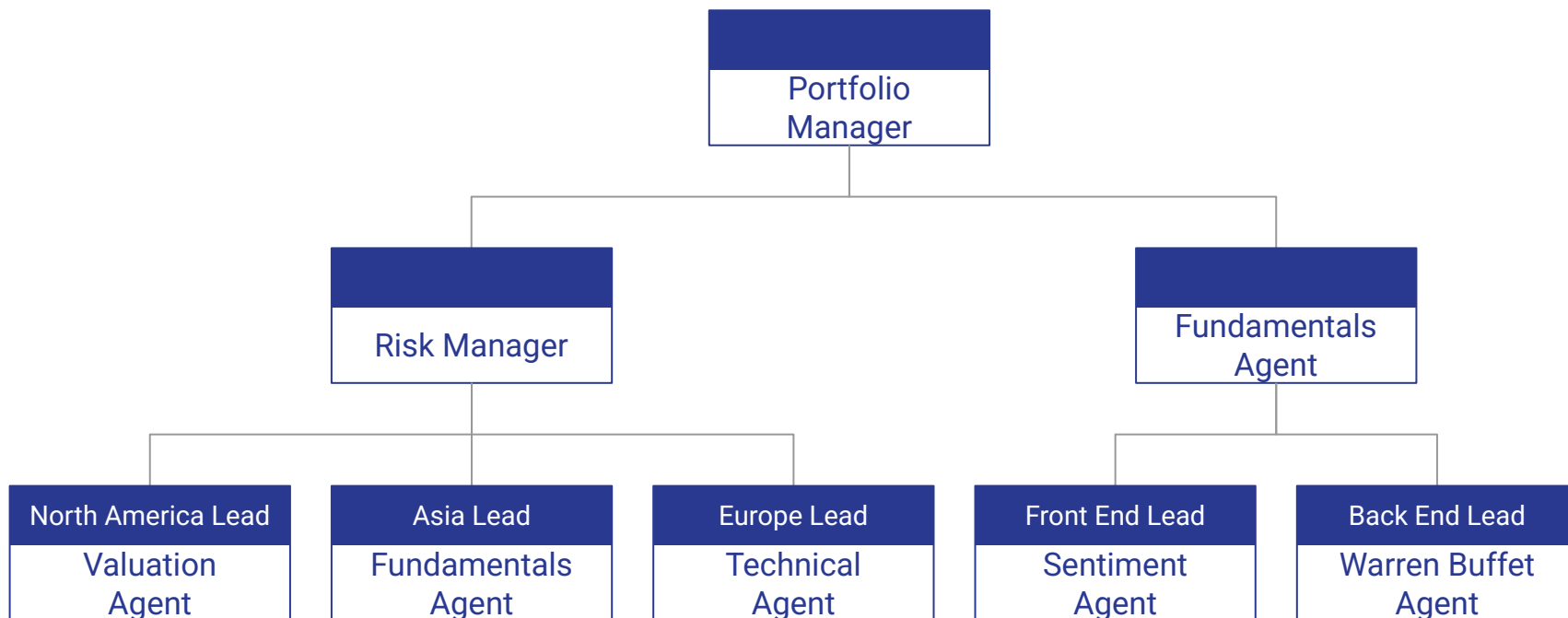
Definition Multi-Agents



Multi-Agents Group Chat

Skyra Agents

1. **Warren Buffett Agent** - Seeks wonderful companies at a fair price
2. **Valuation Agent** - Calculates the intrinsic value of a stock and generates trading signals
3. **Sentiment Agent** - Analyzes market sentiment and generates trading signals
4. **Fundamentals Agent** - Analyzes fundamental data and generates trading signals
5. **Technicals Agent** - Analyzes technical indicators and generates trading signals
6. **Risk Manager** - Calculates risk metrics and sets position limits
7. **Portfolio Manager** - Makes final trading decisions and generates orders



BENEFITS

- **Maximized Returns:** By using predictive models, Skyra identifies high-value opportunities in real-time, helping you achieve better investment outcomes.
- **Reduced Risk:** AI-powered risk analysis allows Skyra to manage your portfolio in a way that mitigates unnecessary risks.
- **Time Efficiency:** Automation of decision-making and portfolio management frees up your time while improving performance.
- **Scalability:** Whether you are an individual investor or a large enterprise, Skyra scales to fit your needs, offering flexibility and customization.
- **Seamless Integration:** Real-time data integration from reliable sources ensures that Skyra stays up-to-date and accurate.

Impact

Smart Investment Decisions

