

## **Spyglass MTG**

Spyglass Fabric LOOM Overview



# Spyglass Fabric LOOM Large-Scale Optimized Orchestration Model

Spyglass Fabric LOOM a pre-built solution accelerator that utilizes Microsoft Fabric to handle the provisioning, configuration, orchestration, and governance of data pipelines.

With Spyglass' Fabric LOOM accelerator and framework, **we can deploy and integrate customer data in a matter of hours**, allowing you to securely manage and ingest data from on-premises, private and public sources into a best-practice data solution.

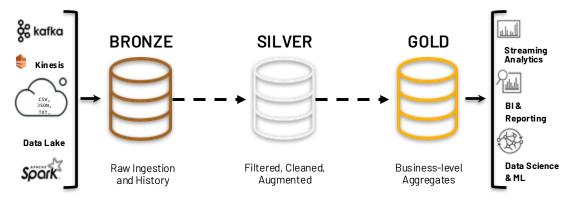
LOOM with **dramatically simplify your multi-modal data orchestration** supporting ingestion, cleansing, cracking, validation, chunking, transformation, enrichment, aggregation, indexing, and visualization

#### **Key Capabilities**

- Dynamic Metadata-Driven Framework
- Modular Data Cleansing Rules
- Multi-Model Data Processing for Al
- Seamlessly Extensible for Any Data Source
- Integrated Data Quality and Process Reporting
- Automated Secure Tenant Baseline & Governance Framework

#### **Key Benefits**

- Accelerated Time-to-Market: Pre-built components and seamless integration help customers quickly develop and deploy analytical, AI, machine learning, and generative AI solutions, achieving results faster.
- Unified Data & Al Ecosystem: Consolidate your Data, Al, machine learning, and generative Al initiatives into a single data ingestion framework with robust data orchestration, governance, and infrastructure management for complete efficiency.
- Cost Efficiency and Scalability: Save time and resources with a pre-built solution accelerator. Spyglass LOOM scales with your organization's needs, ensuring longterm cost efficiency.
- Future-Ready Foundation: Easily customize stage activities using templates, modules, parameters, or custom plug-ins. Quickly onboard new data sources within minutes
- Security and Governance at the Core: Monitor data processes with built-in dashboards, alerts, and visibility into data quality, performance, errors, and recovery.
   Benefit from our tenant-level Fabric governance baseline for scalability, reliability, and security.





### Fabric LOOM for EDU - Technical Summary

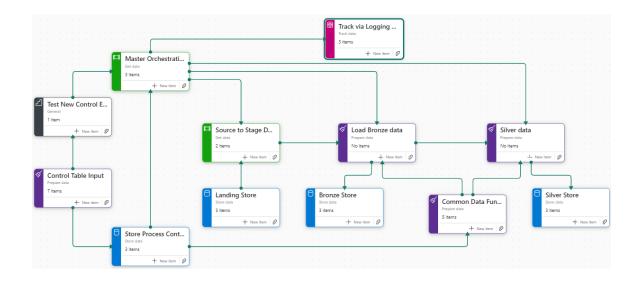
Spyglass' Fabric LOOM is a robust data processing framework designed to **optimize and streamline data handling within**Microsoft Fabric, specifically tailored for education and academic institutions.

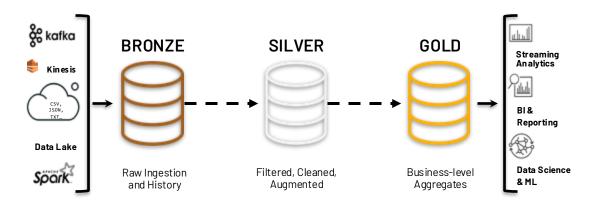
Utilizing a dynamic metadata-driven approach through a lakehouse control database, **LOOM ensures modularity and extensibility, allowing for seamless integration across various data sources**.

The framework efficiently manages the entire data lifecycle, from source ingestion to Bronze, Silver, and Gold layers, while maintaining stringent data quality and security standards.

LOOM is particularly beneficial for systems such as **Canvas**, **Blackboard Learn**, **Anthology**, **and education grant data**, **providing a comprehensive foundation for integrating student and academic data** for advanced analytics.

This makes **LOOM** an invaluable asset for educational institutions seeking to accelerate, simplify, and govern their data processes effectively.







#### **Constellation – Fabric LOOM**

#### **Multimodal Data Processing Framework**

 LOOM for Constellation employs a single framework for processing unstructured and structured data assets alike.
 LOOM provides cracking, chunking, cleansing, modeling and indexing actions necessary for delivering data to Al.

#### **Dynamic Metadata & Al Driven Framework**

The pipeline employs a dynamic metadata-driven framework, ensuring adaptability and scalability. This framework allows for automated handling of various data sources and formats, providing a robust structure for data ingestion and processing.

#### **Modular Data Cleansing Rules**

 Data cleansing is applied in a modular manner, starting from the source and continuing through the Bronze and Silver layers. Each stage incorporates specific cleansing rules to ensure the data is accurate, consistent, and ready for further processing.

#### **100% Extensible for Supported Sources**

 The Fabric LOOM Data process is fully extensible, capable of integrating any supported data source into Microsoft Fabric. This feature provides flexibility and scalability, accommodating diverse data environments and evolving business needs.

#### **Auto Profiles Data Quality and Processing Reporting**

 Automated profiling of data quality and processing reporting is a key feature of the pipeline. This functionality provides real-time insights and metrics on data quality, helping organizations make informed decisions and maintain high standards of data governance.

#### **Secure Tenant Baseline & Workspace Management**

 A secure workspace management approach is provisioned for the foundational data landing zone on Microsoft Fabric. This approach ensures data protection and compliance with security standards, safeguarding sensitive information throughout the data lifecycle.



## Spyglass GENIE + LOOM: Delivering Scalable Solutions for Education



Spyglass FABRIC LOOM and AI GENIE technical solution accelerators enable various scenarios immediately, such as real-time processing, batch processing, clinical analytics, foundational AI and more.

- Streamlined Data Processing: Optimizes and simplifies data handling within Microsoft Fabric.
- **Modularity and Extensibility:** Dynamic metadata-driven framework allows for seamless integration across various data sources.
- **Comprehensive Data Management:** Efficiently manages the entire data lifecycle from ingestion to Bronze, Silver, and Gold layers.
- **Data Quality and Security:** Ensures high standards of data quality and security throughout the process.
- **Specifically Tailored for Education:** Designed for systems such as Canvas, Blackboard Learn, Anthology, and education grant data.
- **Advanced Analytics:** Provides a solid foundation for integrating student and academic data for analytics.
- Governance and Simplification: Helps in accelerating, simplifying, and governing educational data processes effectively.





