

# Pipeline Microservice Overview

## Pipeline Microservice Overview

The Pipeline Microservice handles the data pipelines, ensuring efficient processing and transformation of data. This microservice is critical for managing large datasets and ensuring data integrity across the application.

### Key Components:

#### 1. **Pipeline.Api**:

- Exposes HTTP endpoints for managing pipelines.
- Handles requests for starting, stopping, and monitoring data pipelines.

#### 2. **Pipeline.Application**:

- Contains the business logic for managing data pipelines.
- Implements streaming and batch processing operations.

#### 3. **Pipeline.Controllers**:

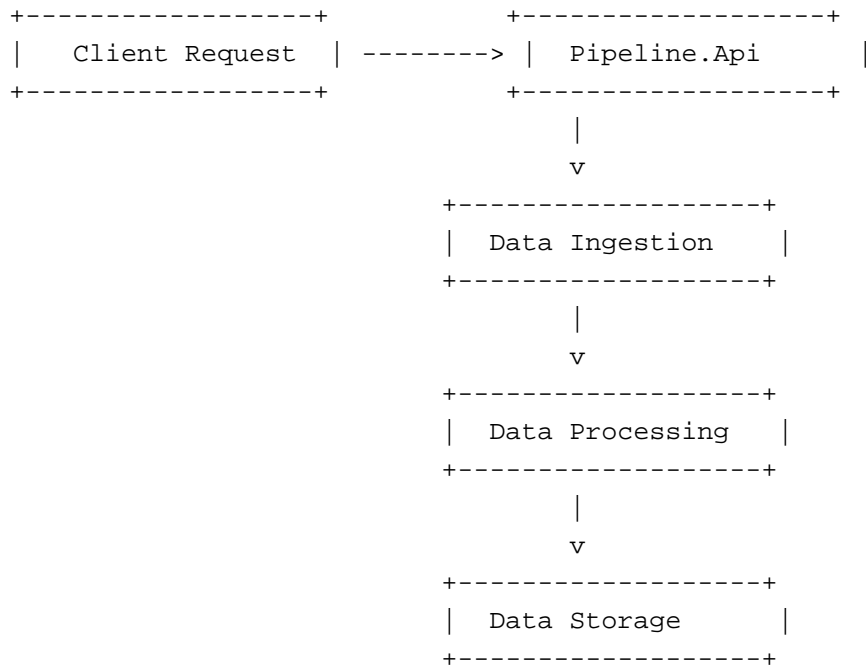
- Manages API controllers for pipeline operations.
- Orchestrates the flow of data through various stages of the pipeline.

### Design Patterns:

- **Pipeline Pattern**: Breaks down data processing into discrete stages, each performing a specific operation.
- **Controller Pattern**: Manages API endpoints and orchestrates business logic.

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ASCII Diagram:



**Q: What is the role of the Pipeline Microservice?**

A: The Pipeline Microservice handles data pipelines, ensuring efficient processing, transformation, and storage of large datasets.

**Q: How does the Pipeline Microservice ensure data integrity?**

A: The microservice implements various stages in the pipeline, each responsible for validating and processing data before passing it to the next stage.

**Q: What design patterns are used in the Pipeline Microservice?**

A: The Pipeline pattern breaks down data processing into stages, while the Controller pattern manages API endpoints.