



# Apollo's Orchestra

## CP2

Presented by Eduardo Ramos & Lucas Sousa



# Context

For this project we decided on developing a music database that provides a rich collection of information, including detailed profiles of artists, albums, singles, and record labels. It also categorizes music by genres, highlights the role of instruments, and features an extensive archive of songs and recordings.

# Motivation

We are passionate about music and its diverse classifications, aiming to create a project that integrates knowledge into a database for easier music discovery. Users can search music by instruments, genre, and other metrics, while a prediction system will enhance recommendations for new music.

# Requirements

## Functional Requirements

### Technical Requirements

- 01 Database Management
- 02 Data Linking
- 03 Reasoning and Inference

- 01 Data Integration
- 02 Search Capabilities
- 03 Data Presentation
- 04 Ontology Design
- 05 Semantic Query Support
- 06 Recommendations

### Non-Functional Requirements

- 01 Consistency
- 02 Interoperability
- 03 Data Quality

# Existing Solutions



MusicBrainz is an Extensive Music database with many bands, labels, people of interest and their relationships with each other

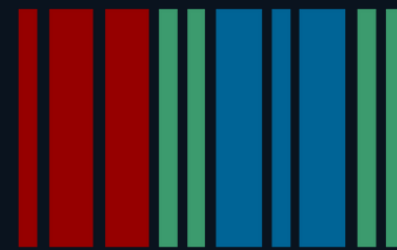
Discogs has a lot of information about artists, genres and music releases. It includes information on various formats, labels, and contributions from artists and collectors, making it a rich source of music-related data



# Knowledge Bases



MusicBrainz  
API



WIKIDATA

WIKIDATA  
API



Discogs  
API



Last.fm  
API

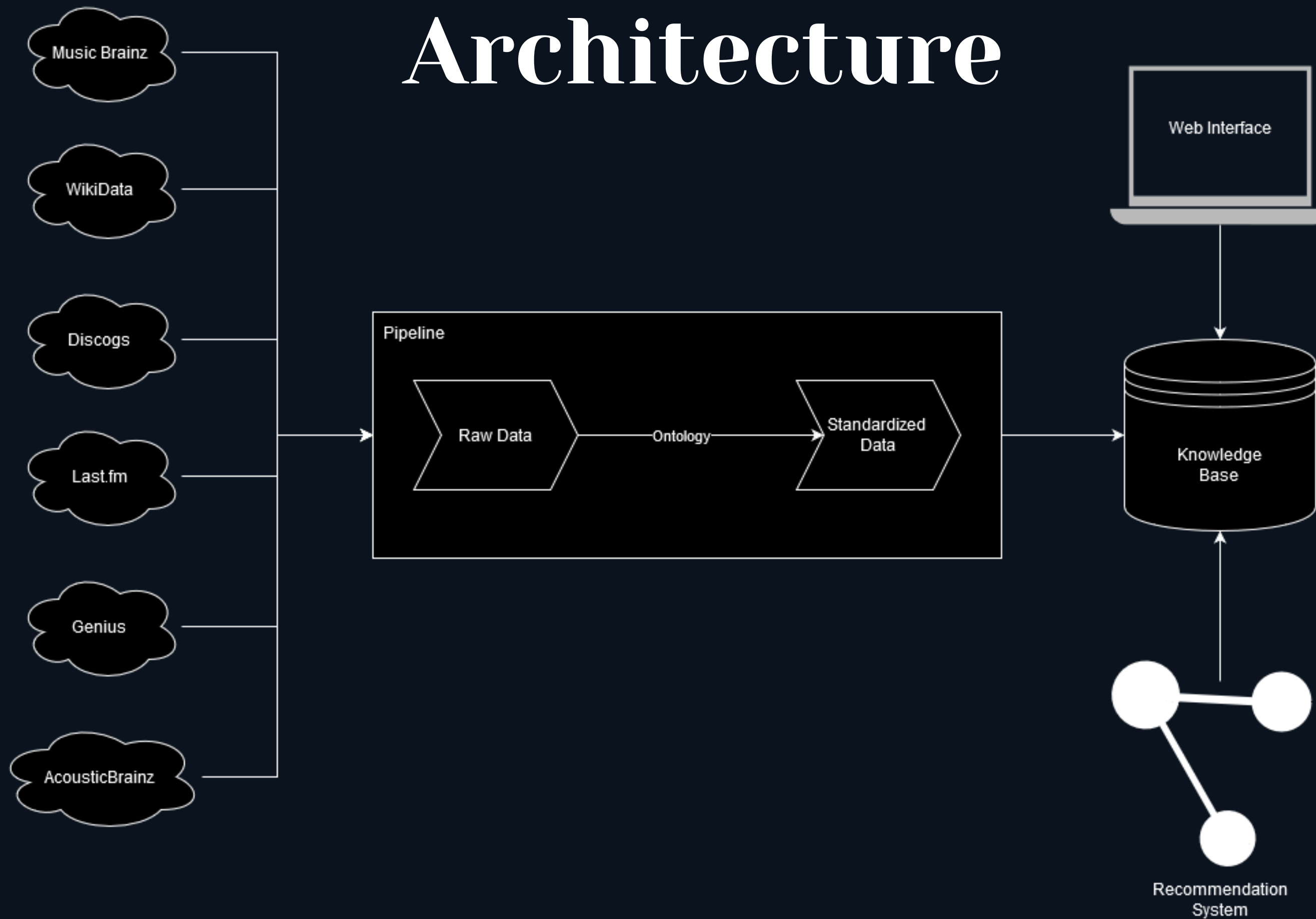


Genius  
API



AcousticBrainz  
API

# Architecture







**Thank  
You!**