Apollo's Orchestra

Final Presentatiom

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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.

Features Implemented

Functional Requirements

01 Data Integration
02 Search Capabilities
03 Data Presentation
04 Ontology Design
05 RDF Support

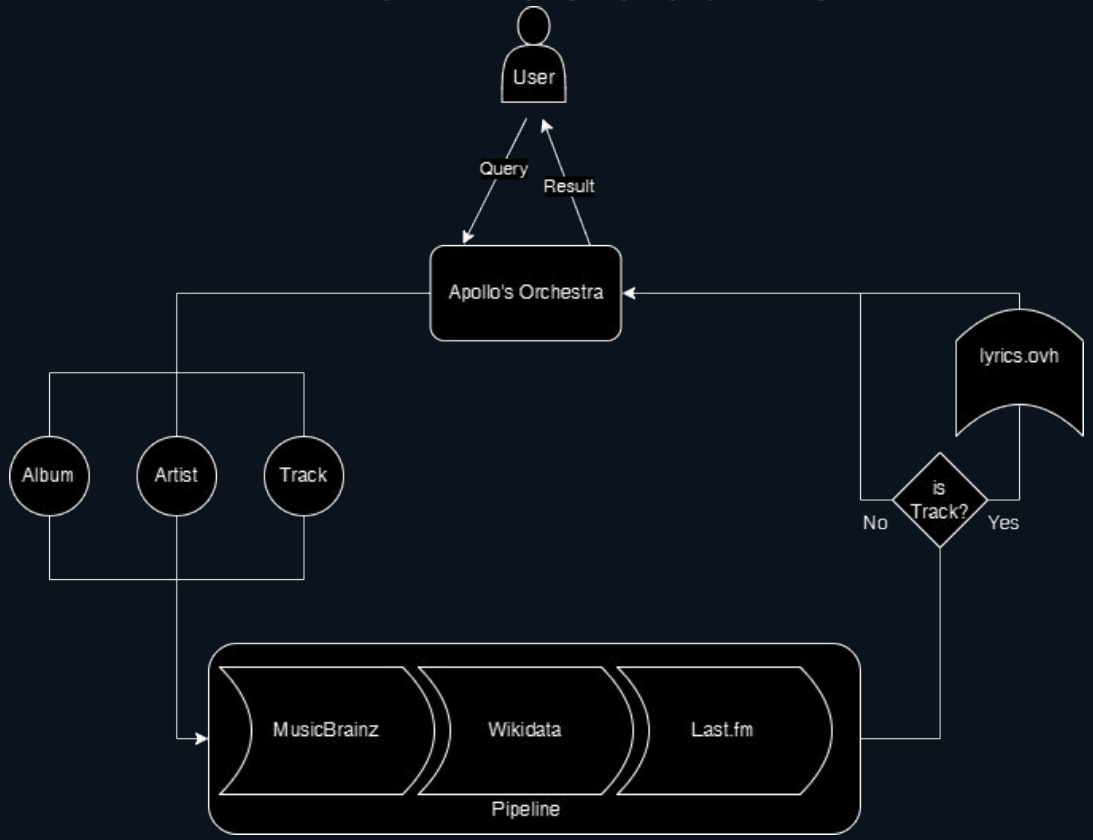
Technical Features

01 Data Retrieval
02 Data Linking

Non-Functional Features

01 Data Consistency
02 Interoperability
03 API support

Architecture



Ontology

MusicGroup
member
genre - Text
DissolutionDate - Date
foundingLocation - Text
foundingDate - Date
album
logo - URL
description - Text
name - Text
gender - Text
givenName - Text
artistName - Text
birthDate - Date
deathDate - Date
nationality - Text
numTracks - Integer
track
about - Text
datePublished - Date
logo - URL
name - Text
name - Text
lyrics - Text

Knowledge Bases Used

MusicBrainz API

Lyrics.ovh API

WIKIDATA API

Last.fm API

AcousticBrainz API

Challenges

Data Inconsistency

Data was stored inconsistently across different knowledge bases, in some cases, even within itself.

Data Incompleteness

Some information was missing from lots of entries. And that problem aggravated for lesser known artists or tracks

Defining Concepts

Our solution had to be able to handle differences in the definition of music concepts: Group or single artist, album or release, etc.

DEMO

Thank You!