MUSIKI DBPEDIA VISUAL EXPLORER

Markup Languages and Document Processing

MIEIC 2019/20

Project Description

 Implementation of a dynamic graph that shows users, visually, data provided by DBpedia relating to artists, bands, songs, albums or music genres

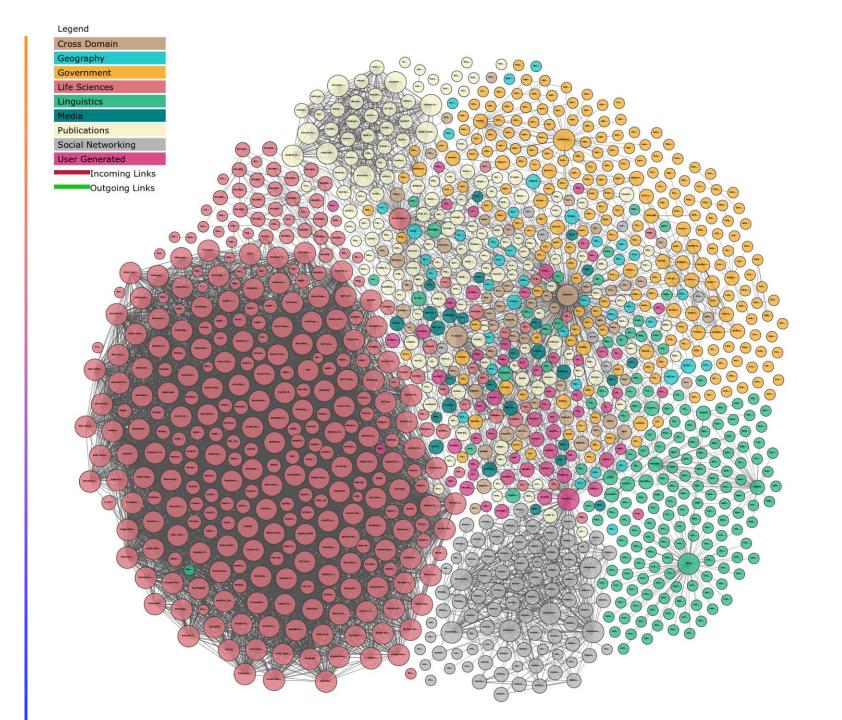
Show connections between the different data

Context

• DBpedia - **DB** for **DataBase** - is a project which aims to extract structured content from the information existing in Wikipedia

• DBpedia allows users to semantically query relationships and properties of Wikipedia resources, including links to other related datasets





DBpedia & Linked Data

Related work



Fig. 1- Bubble Navigator

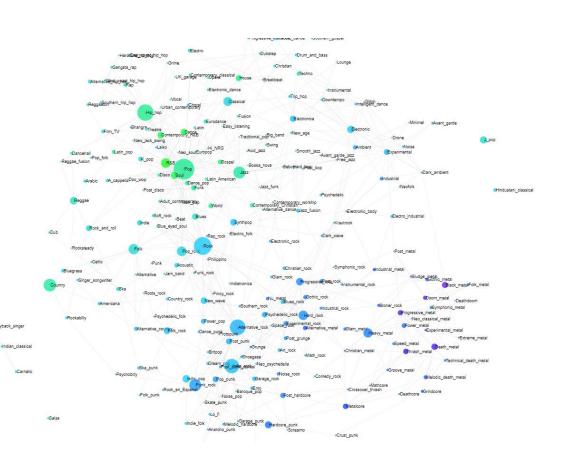


Fig. 2 - Music Genre Map

Project Arquitecture

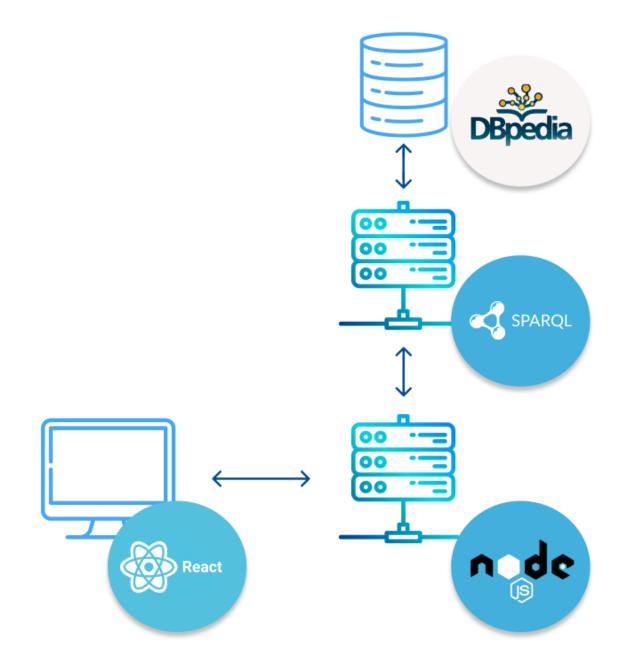


Fig. 3 — Project Arquitecture

Main Features

Search of music related topics, based on available filters

Visualization of related topics when applying a filter to a selected node

Visualization of a small description and image about a selected node when available

Custom filters based on node type

Dynamic and interactive graph

Result Evaluation Some observations

Caching database of our own not necessary as DBpedia already exhibits this behaviour

Home page idea was scraped, in order to not confuse the user, which might have gotten overwhelmed by the graph presented, and to encourage exploration

DBpedia / API restrictions — DBpedia's immense variety of attributes and properties, many times indicating very similar concepts, restricts the number of results returned since it would be infeasible to test for each single one

Changes to the original design were made as we saw fit to improve user experience

Live Demo

Musiki DBPedia Visual Explorer

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MIEIC 4th year

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