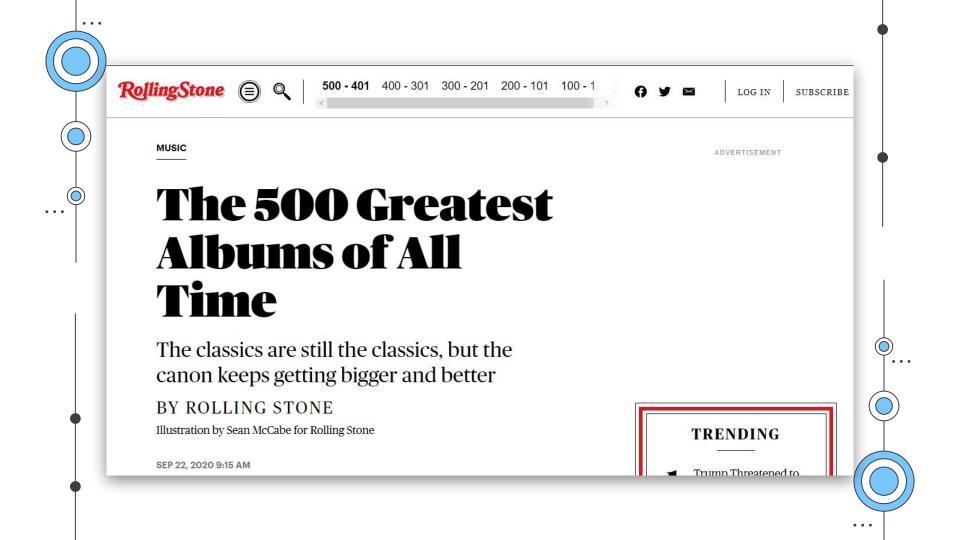


## 500 Best Albums Ever

Search System

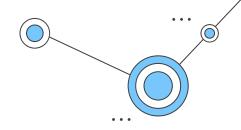
Eunice Amorim Henrique Nunes Henrique Sousa



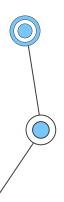




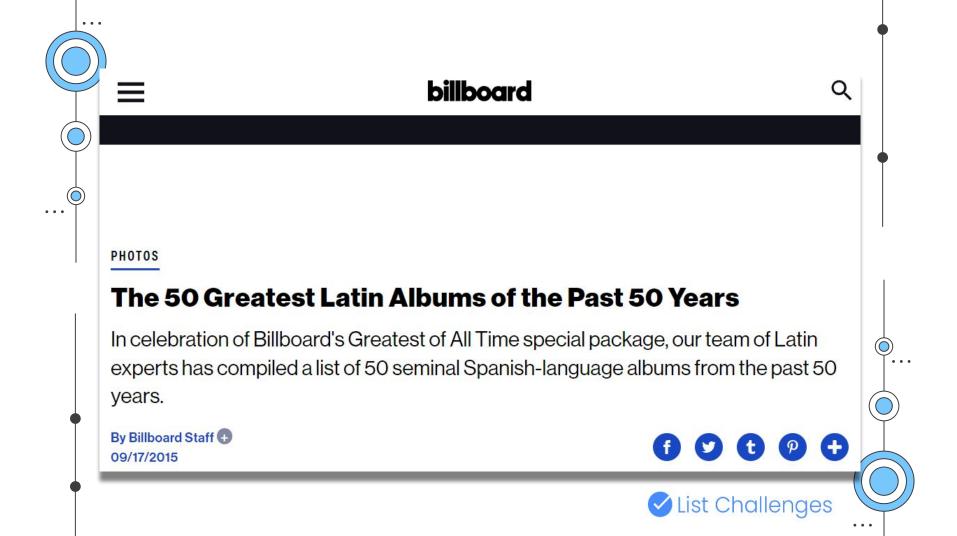
## **Improvements Performed**



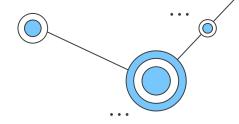
- 1. Other language support
- 2. Missing lyrics
- 3. Information Retrieval







## **Missing Lyrics**



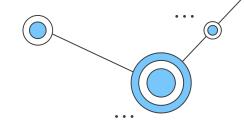


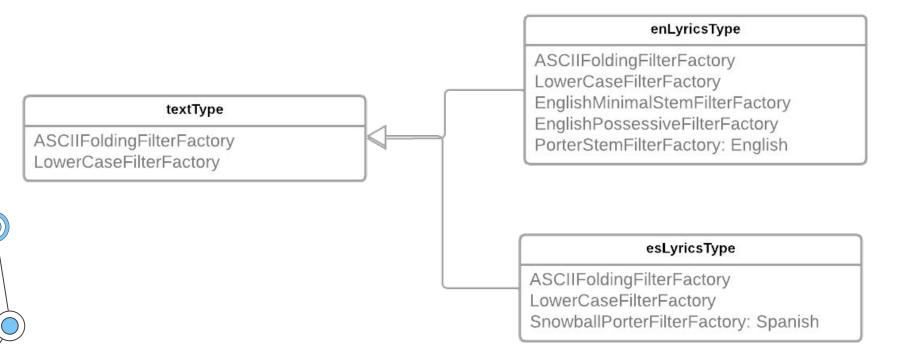




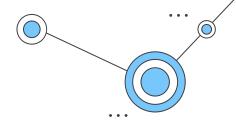
# Information retrieval

## Schemas - Indexing





## Schemas - Query



#### textType

ASCIIFoldingFilterFactory LowerCaseFilterFactory

#### enLyricsType

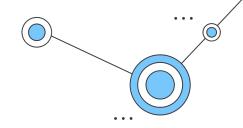
ASCIIFoldingFilterFactory
LowerCaseFilterFactory
EnglishMinimalStemFilterFactory
EnglishPossessiveFilterFactory
PorterStemFilterFactory
RemoveDuplicatesTokenFilterFactory
SynonymGraphFilterFactory: English

#### esLyricsType

LowerCaseFilterFactory
SnowballPorterFilterFactory: Spanish
RemoveDuplicatesTokenFilterFactory
SynonymGraphFilterFactory: Spanish

ASCIIFoldingFilterFactory

## **Synonyms**



#### English

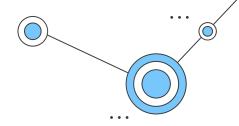
1. Gathered from a public repository

#### Spanish

- 1. Get data set of spanish words
- Web scrapp to get synonyms for each of the words



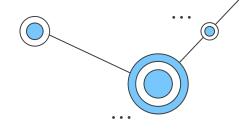
## Single query configuration

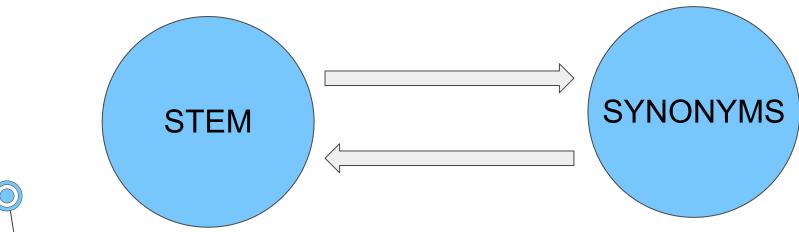


- 1. defType: edismax
- **2.** qf: lyrics\_en^4 lyrics\_es^4 lyrics\_other^4 artist^2 track^8 album album\_release\_date^0.1
- **3.** qs: 5
- **4.** rows: 20



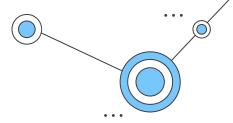
## Filter application order



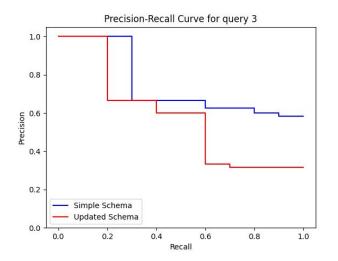


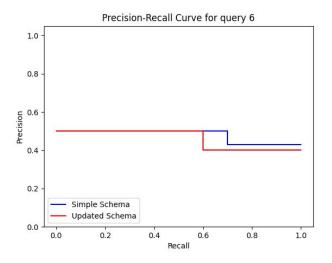




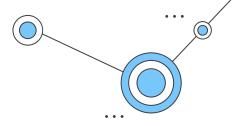


#### Lost in performance

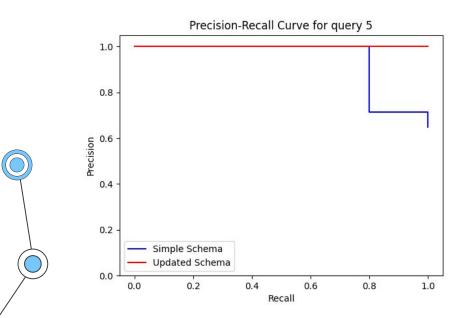


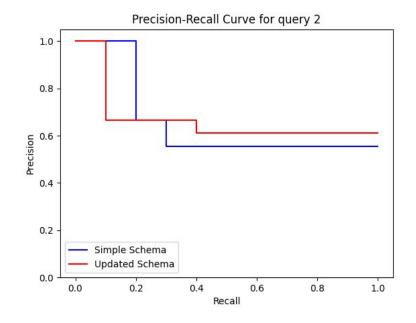


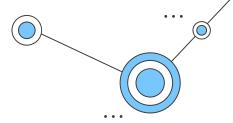




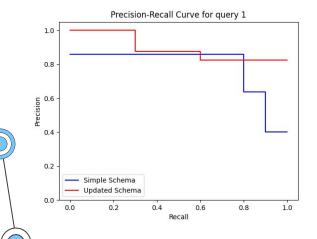
#### Small increase in performance

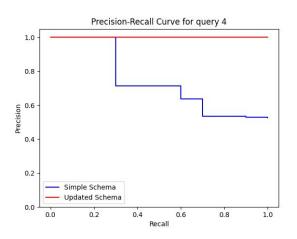


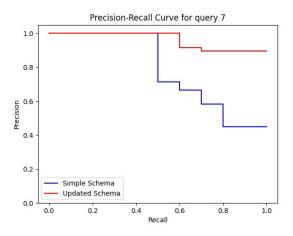


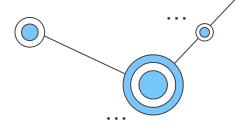


#### Increase in performance









#### Metrics

#### Average Precision

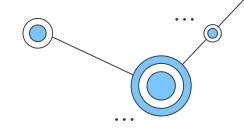
| Query | Simple Schema | Updated<br>Schema |
|-------|---------------|-------------------|
| 1     | 0.6804        | 0.8696            |
| 2     | 0.5631        | 0.6120            |
| 3     | 0.7250        | 0.5322            |
| 4     | 0.8956        | 1.000             |
| 5     | 0.9140        | 1.000             |
| 6     | 0.4762        | 0.4500            |
| 7     | 0.7595        | 0.9519            |

#### Mean Average Precision

| Simple Schema | Updated Schema |
|---------------|----------------|
| 0.6877        | 0.7737         |

# Conclusions

## **Conclusions**

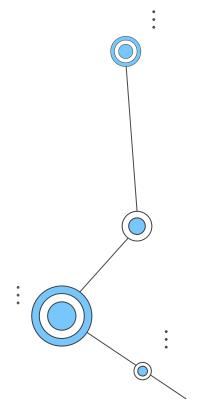


Data correctness

Data completeness

Information retrieval





## Thanks!

Do you have any questions?

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