



# ACCIO SONGS

## MUSIC SEARCH

CS410 - TEXT INFORMATION SYSTEMS - COURSE PROJECT

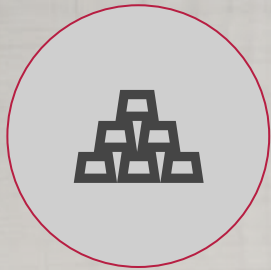
TEAM POTTERHEADS - KUSHAGRA SONI & VIRGINIA ATIEH

UNIVERSITY OF ILLINOIS – URBANA CHAMPAIGN



# CONTENTS

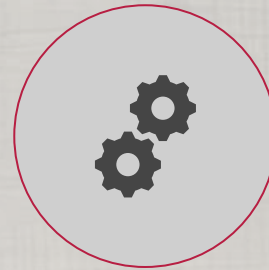
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BACKGROUND



OVERVIEW



IMPLEMENTATION



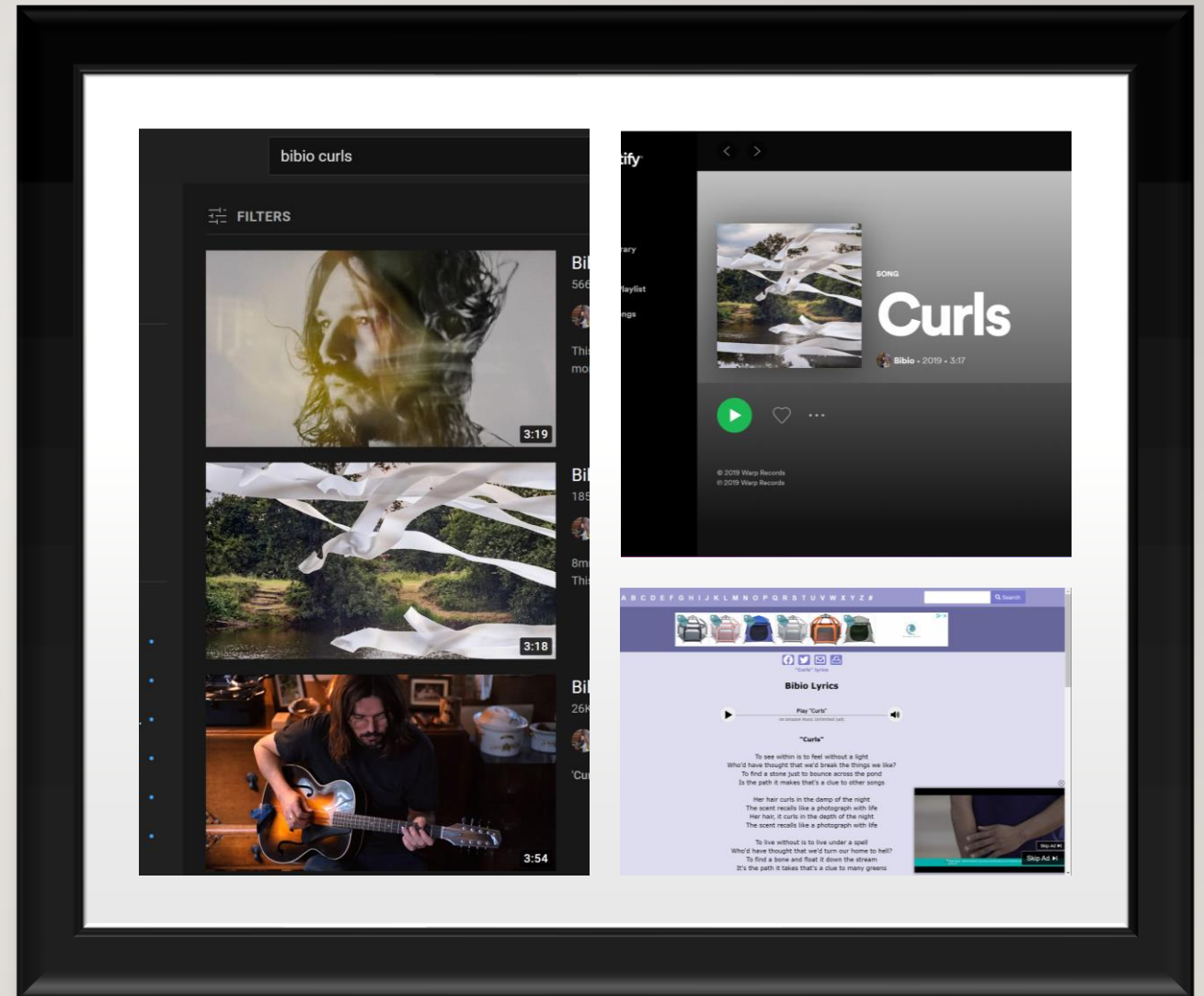
DEMONSTRATION





# BACKGROUND

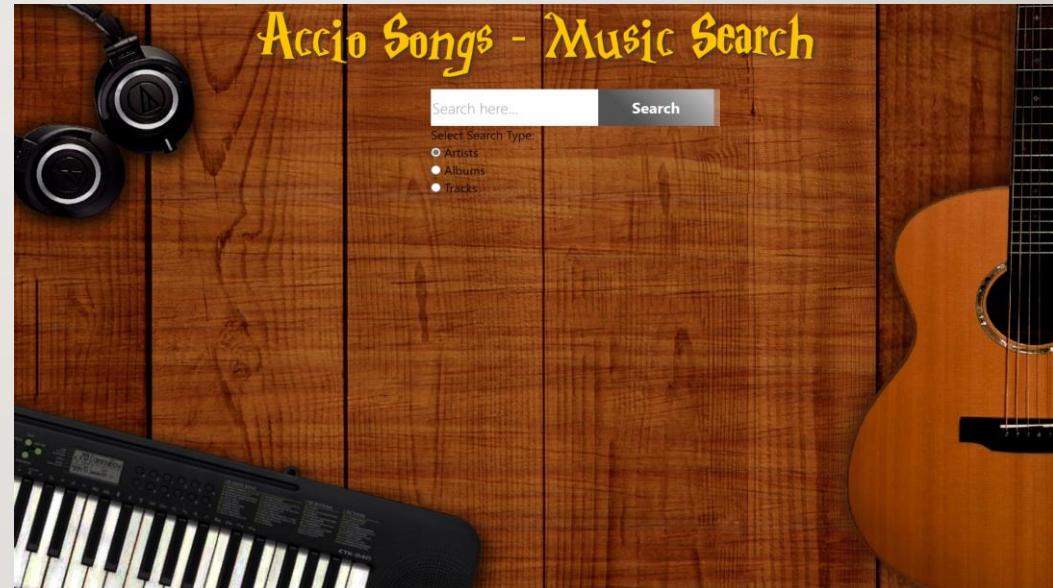
- Searching for a song, artist, or album?
- Filtering through the noise
- A simple UI solution for song searching
- Mining data to achieve actionable knowledge



# OVERVIEW

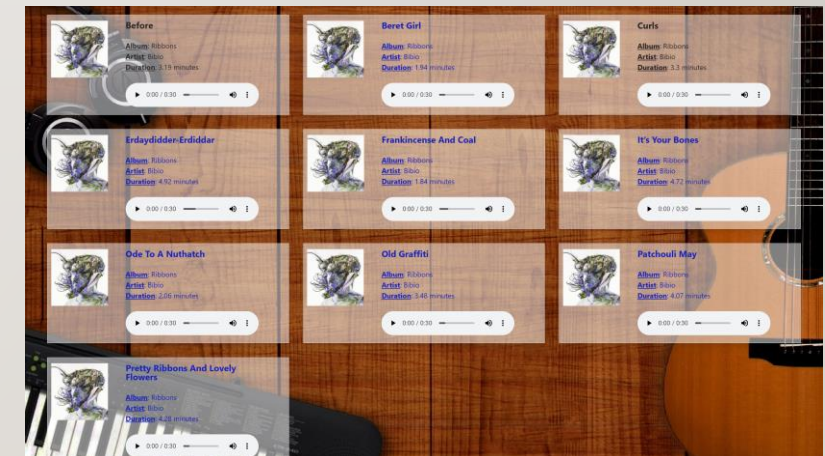
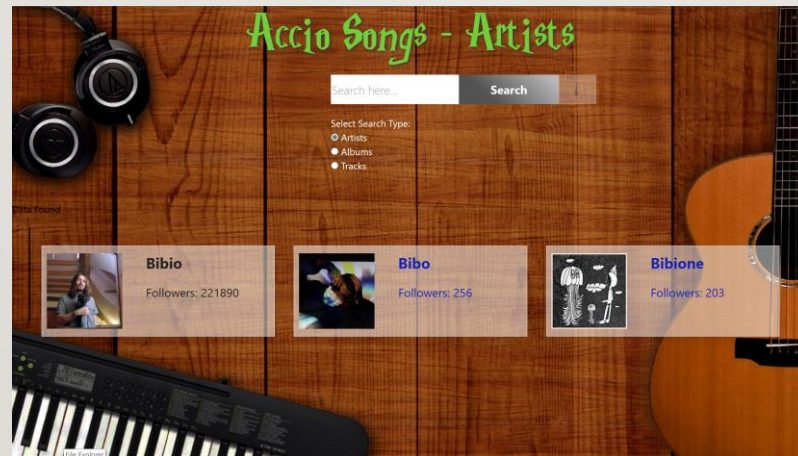
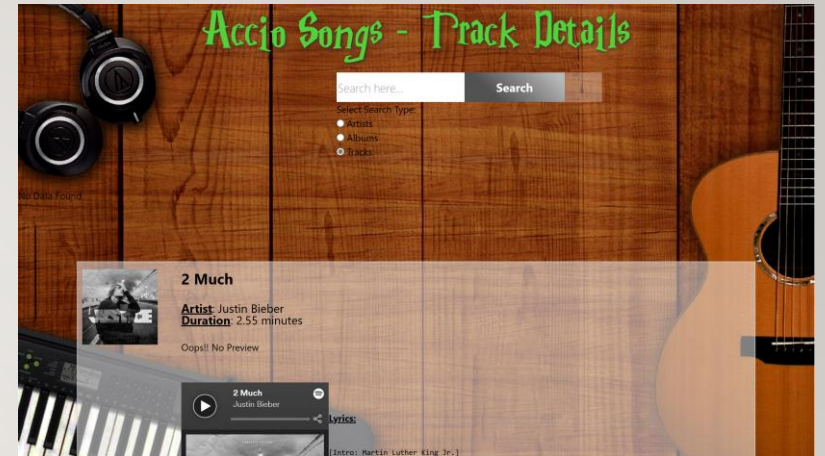
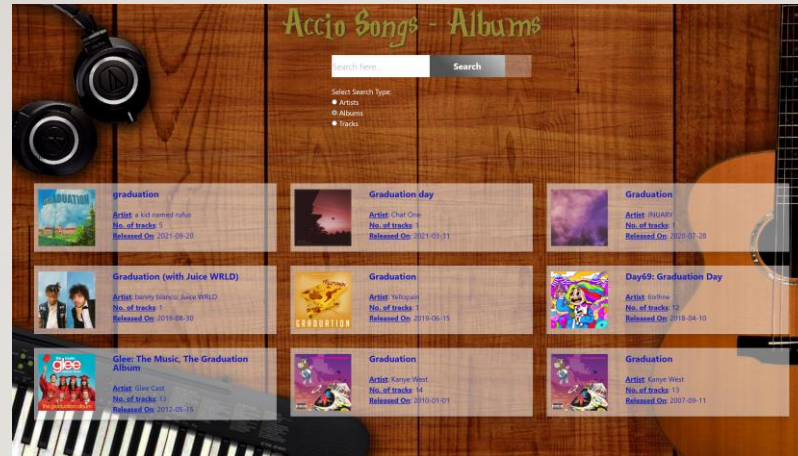
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- Accio Songs:  
Search Engine Tool for The  
Musically Inclined
- Powered by Elastic Enterprise  
Search – App Search
- Use APIs to mine text data
- Search bar & results





# IMPLEMENTATION – RESULTS



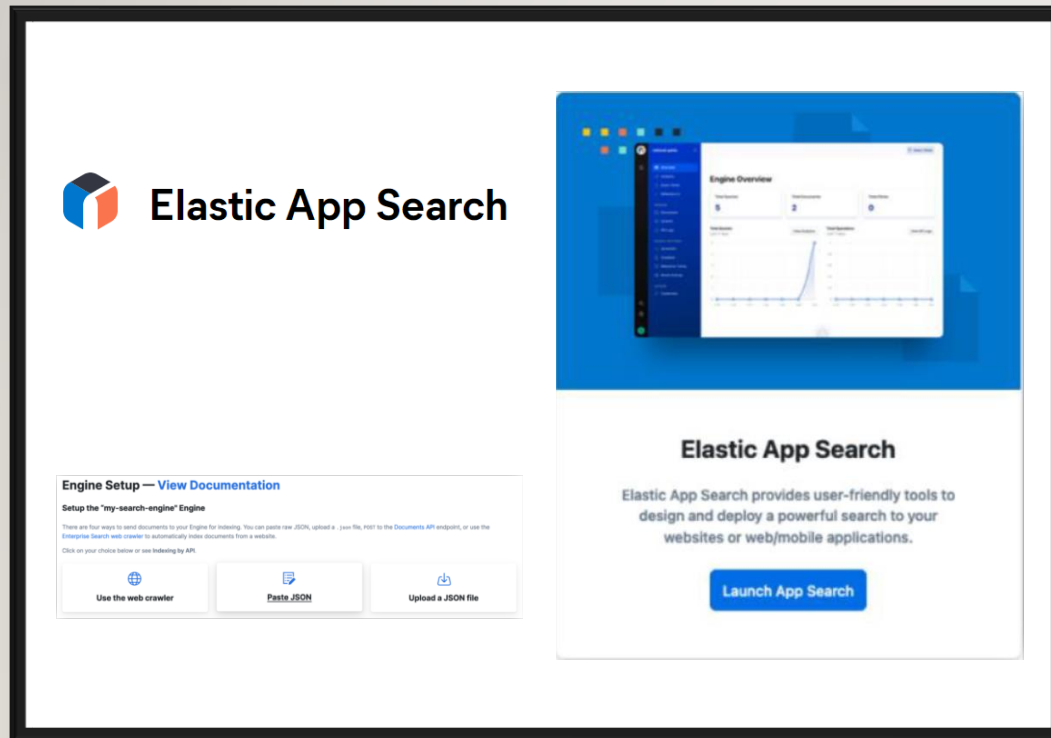
# IMPLEMENTATION – API CLIENTS

Feature	API	Python API Clients
Track	<a href="https://developer.spotify.com/documentation/web-api/">https://developer.spotify.com/documentation/web-api/</a>	<a href="#">spotipy</a>
Album	<a href="https://developer.spotify.com/documentation/web-api/">https://developer.spotify.com/documentation/web-api/</a>	<a href="#">spotipy</a>
Album Art Cover	<a href="https://developer.spotify.com/documentation/web-api/">https://developer.spotify.com/documentation/web-api/</a>	<a href="#">spotipy</a>
Artist Name	<a href="https://developer.spotify.com/documentation/web-api/">https://developer.spotify.com/documentation/web-api/</a>	<a href="#">spotipy</a>
Audio	<a href="https://developer.spotify.com/documentation/web-api/">https://developer.spotify.com/documentation/web-api/</a>	<a href="#">spotipy</a>
Lyrics	<a href="https://docs.genius.com/">https://docs.genius.com/</a>	<a href="#">lyricsgenius</a>
Video	<a href="https://developers.google.com/youtube/v3/">https://developers.google.com/youtube/v3/</a>	<a href="#">googleapiclient</a>
Search	<a href="https://cloud.elastic.co">cloud.elastic.co</a>	<a href="#">enterprise-search-python</a>





# IMPLEMENTATION – ELASTIC APP SEARCH



- Data Indexing using webcrawler or API clients
- Relevance models through Elasticsearch
- Dashboard providing user behavior analytics
- More info at Elastic.co



# IMPLEMENTATION – ELASTIC APP SEARCH CONT.

accio-songs

Overview

Analytics

Query Tester

Search UI

MANAGE

Documents

Schema

API Logs

Web Crawler

SEARCH SETTINGS

Synonyms

Curations

Relevance Tuning

Result Settings

ACCESS

Credentials

KS

Manage Engine Schema

image

spotify\_id

album

type

spotify\_url

duration

explicit

total\_tracks

followers

artists

release\_date

genres

preview\_url

popularity

name

Documents

Filter documents...

Sort by: Recently updated (desc) < 1 2 3 4 5 ... 20 >

Did you know that you can customize your document search experience? Click "Customize" below to get started.

Customize

total\_tracks

20

total\_tracks

20

spotify\_id

spotify\_id

spotify\_id

spotify\_id

album

album

album

album

type

type

type

type

spotify\_url

spotify\_url

spotify\_url

spotify\_url

duration

duration

duration

duration

explicit

explicit

explicit

explicit

total\_tracks

total\_tracks

total\_tracks

total\_tracks

followers

followers

followers

followers

artists

artists

artists

artists

release\_date

release\_date

release\_date

release\_date

genres

genres

genres

genres

preview\_url

preview\_url

preview\_url

preview\_url

popularity

popularity

popularity

popularity

name

name

name

name

Engine Overview

Total Queries

1,387

Total Documents

400

Total Clicks

0

Total Queries

Last 7 days

View Analytics

Total Operations

Last 7 days

View API Logs

Recent API Events

Last 7 days

View API Logs

Method	Time	Endpoint	Status	Details
GET	an hour ago	/api/v1/songs/accio-songs/search	200	Details
GET	an hour ago	/api/v1/songs/accio-songs/search	200	Details
GET	an hour ago	/api/v1/songs/accio-songs/search	200	Details







# ACCIO SONGS - DEMO