



# CS410 Project: Who's That Artist?!

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# Introduction

# Introduction

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Marcia Dai (Yutong)



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02

# Overview

# Overview

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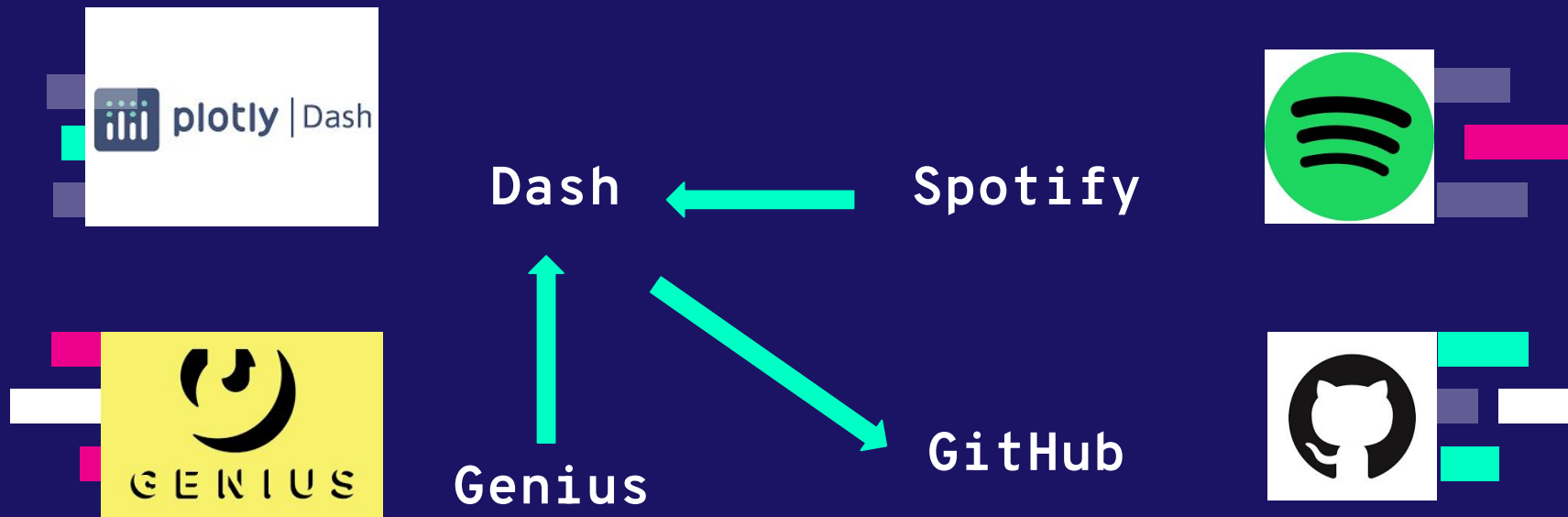
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03

Components

# Components





# Spotify

- Search for Artists on Spotify.
  - Audio Features of Songs (Discography)
  - Profile Image
- Spotipy Integration
  - Spotipy Library
    - A lightweight Python library for the Spotify Web API.
    - Facilitates seamless interaction with Spotify API endpoints.

## Welcome to Spotipy!

Spotipy is a lightweight Python library for the [Spotify Web API](#). With Spotipy you get full access to all of the music data provided by the Spotify platform.

Assuming you set the `SPOTIPY_CLIENT_ID` and `SPOTIPY_CLIENT_SECRET` environment variables (there is a [video](#) explaining how to do so). For a longer tutorial with examples included, refer to this [video playlist](#). Below is a quick example of using *Spotipy* to list the names of all the albums released by the artist 'Birdy':



# Genius

- Search for Artists on Genius.
  - Lyrics of Songs (Discography)
- Tasks
  - Text Preprocessing
    - NLTK
    - spaCy
  - Common Themes
    - Gensim
    - Latent Dirichlet Allocation (LDA)
  - Word Cloud
  - Sentiment Analysis
    - Polarity Distribution
    - Subjectivity Distribution
    - Ratings

The logo for spaCy, featuring the word "spaCy" in a blue, sans-serif font. The "spa" is in a lighter blue and the "Cy" is in a darker blue. The logo is set against a white background with a pink horizontal bar behind it.

# Dash

- Lightweight framework for data apps in Python.
  - Imports
    - "spotify.py"
    - "genius.py"
- User Interaction
  - Search bar allows user to search for a musical artist.
  - Combines data from Spotify and Genius APIs to offer a comprehensive overview of an artist's profile.
  - Outputs the results into separate tabs.





04

Demonstration

# FIN



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