# USING THE SPOTIFY API

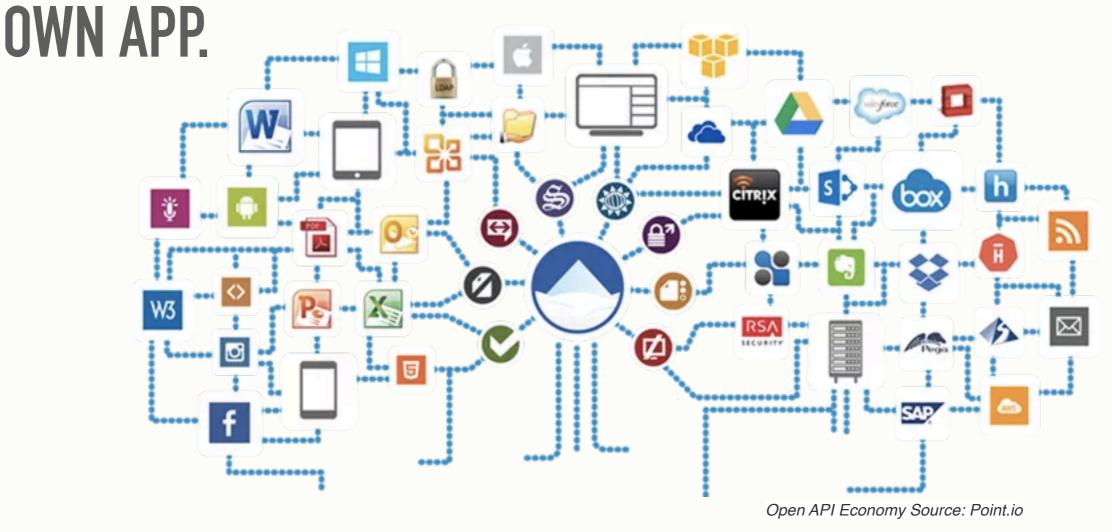
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HUBERT LÉVEILLÉ GAUVIN SCHOOL OF MUSIC, THE OHIO STATE UNIVERSITY

#### WHAT'S AN API?

•AN APPLICATION PROGRAMMING INTERFACE (API)
ALLOWS YOU TO INTERACT WITH AN EXISTING PROGRAM,
EITHER FOR RESEARCH PURPOSES OR TO CREATE YOUR



#### WHAT CAN I DO WITH THE SPOTIFY API?

- GET INFO ABOUT...
  - ARTISTS: # OF FOLLOWERS, GENRES, POPULARITY (0–100)
  - ALBUMS: DATE, GENRES, POPULARITY, TRACKS
  - SONG FEATURES: DANCEABILITY, ENERGY, KEY, MODE, VALENCE, TEMPO, TIME SIG., DURATION
  - AUDIO ANALYSIS: LOUDNESS, TIMBRE

# GETTING STARTED: WEB API CONSOLE

HTTPS://DEVELOPER.SPOTIFY.COM/WEB-API/CONSOLE/

WHAT YOU WILL NEED:

A SPOTIFY ACCOUNT

A SPOTIFY ITEM ID (E.G. FOR SONG: 2VEQ9ZBIWBAVXZS2SOXODY)

## **GOING FURTHER: SHELL SCRIPT**

WHAT YOU WILL NEED:

UNIX SYSTEM (MAYBE WITH JQ TOOL)

A SET OF SHELL SCRIPTS

A SPOTIFY ACCOUNT

A SPOTIFY ENDPOINT (E.G. FOR FEATURES: /V1/AUDIO-FEATURES/{ID})

(SEE HTTPS://DEVELOPER.SPOTIFY.COM/WEB-API/ENDPOINT-REFERENCE/)

A SPOTIFY ITEM ID (E.G. FOR SONG: OMTO2GJ425XJM7C3JYKOBN)

### SOME FEATURES OF THIS SHELL SCRIPT

- AUTOMATICALLY USES YOUR CLIENT ID AND CLIENT SECRET TO GENERATE A NEW AUTHENTIFICATION TOKEN (ALL BEHIND THE SCENE)
- AUTOMATICALLY SAVES THE RESULTS OF YOUR LAST QUERY IN A TEMP FILE FOR IMMEDIATE USE
- ALLOWS YOU TO DESIGN MORE COMPLEX QUERIES

# SAMPLE PROBLEMS (FROM README FILE)

- CALCULATE THE NUMBER OF MEASURES IN A SONG
- •GET THE SPOTIFY ID FOR EVERY SONGS ON AN ALBUM
- •GET THE NAME AND DURATION (IN MS) OF EVERY SONGS ON AN ALBUM
- SORT ALBUM TRACKS BY ASCENDING TEMPO

