Data Science Project
Week 2

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Overview

1 **Main Question**

2 Aspects to analyze

3 Datasets and Apis

"How do various musical elements vary in the most popular songs of the last 20 years?"

Overview

1. Main Question

2. Aspects to analyze

3. Datasets and Apis

- What chord-progressions repeat most frequently? Nike & Henri

- Do certain chord-progressions dominate specific genres? Mika

- What chords and chord types (minor, major, ...) dominate / how did the amount change? Nike & Henri

- What key signatures dominate? Senanur

- How did song...
  - ...length Senanur
  - ...tempo Senanur
  - ...polarity Mika
  - ...metrics on Spotify (e.g. *"danceability"*) Senanur

  ...vary and change over the years? Do they correlate?

- Which words and combinations are the most frequent? Mika

Overview

Datasets and Apis

- **Main source:** "Hot 100 Songs" from the Billboard Year-End of 2005 up to 2024 Nike
- **Refined sources using songs from the main source:**
  - Ultimate-Guitar Webscraping links for tabs Nike
  - Ultimate-Guitar Webscraping tabs-links to chords Henri
  - Spotify-Api for features Senanur
  - Last.fm API for "topTags" (genres) Mika
  - azapi API for lyrics Mika