

# Information Visualization

## Project Proposal and Dataset

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01







**DOMAIN**

# Domain

## High level description

What will you be visualizing?

**“How weather influences what music we stream”**










-  Position on Spotify charts
-  Title of song
-  Artist name of musician or group
-  Number of streams on Spotify
-  Date
-  Country

# Domain

## High level description

What will you be visualizing?

**“How weather influences what music we listen”**

-  Mean Temperature
-  Wind Speed
-  Fog
-  Precipitation
-  Snow
-  Visibility
-  Thunder
-  Tornado
-  Hail

# Domain

## High level description

Why is that relevant?

- Everybody listens to music, and nowadays streaming is the main way people do it
- Spotify is the most used streaming service in the world, with 83 million daily users in 53 countries
- By crossing this data with daily weather conditions for 2017 on each of the 53 countries, we can observe how each country's weather influences its people music habits

02

***DATASET***

# Dataset

## Music dataset description

Which dataset?

- Top 200 songs streamed each day, for each of the 53 countries, from 2017/01/01 to 2018/01/09

How will you obtain the data?

- The dataset can be obtained via the Spotify's own API

# Dataset

## Weather dataset description

Which dataset?

- 2017 daily weather conditions for each capital of the 53 countries Spotify is available in

How will you obtain the data?

- The dataset can be obtained via the U.S. government's own National Centers for Environmental Information  
(<https://bit.ly/2PiSfDQ>)



03

**TASKS**

# Tasks

## Discover

Find music to listen based on the season of the year

## Identify

Given a weather condition, identify which songs or artists are most likely to be streamed

## Compare

Select two songs/countries to see how each country's weather conditions influences what people stream

## Analyze

Study how music habits change with the weather

04

# EXAMPLE QUESTIONS

# Questions

## Question 1

**On a sunny day, which song is the most listened worldwide?**

## Question 2

**If it's raining, what genre do people listen the most in Ecuador?**

## Question 3

**In what weather conditions is "*Despacito*" most likely to be heard?**

# Questions

## Question 4

**Between Portugal (winter) and Australia (summer), where was *“All I Want For Christmas Is You”* most streamed during Christmas?**

## Question 5

**How likely is *“Let It Snow”* to be streamed during snow days?**

05

**DATA SAMPLE**

# Data Sample

```
(from "spotify.csv")
```

```
position; trackname; artist; streams;  
url; date; country
```

```
19 Starboy, The Weeknd, 7006,  
https://open.spotify.com/track/5aAx2y  
ezTd8zXrkmtKl66Z, 2017-01-01, ec
```

# Data Sample

(from "weather.csv")

```
station; date; temperature;  
visibility; windspeed; precipitation;  
indicators
```

```
723150, 20170101, 23.6, 6.0, 3.2,  
0.00, 100000
```