

Information Visualization

Project Proposal and Dataset

G17

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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?

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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
```