

# **SPRINT 1**

---

*Deck*

*Project Beta.*



*The Problem.*

A black and white photograph of a busy city street. In the foreground, several people are walking away from the camera. On the right side, there's a building with large columns and a sign that partially reads "EXPO". The background shows more buildings and what appears to be a train or bus on the left.

**TECHNOLOGY  
IS  
GREAT...**



**WE ARE  
INUNDATED  
WITH WAYS TO  
LISTEN TO MUSIC**

A black and white photograph of a city street. In the background, there are several multi-story buildings with classical architectural details like columns and cornices. A person is walking away from the camera on the right side of the frame. In the foreground, a person's legs and feet are visible as they walk towards the camera. The street appears to be made of cobblestones or large tiles.

**WE CAN GET  
WHAT WE LIKE,  
WHEN WE LIKE,  
WHEREVER WE LIKE**

A black and white photograph of a busy city street. In the foreground, several people are walking away from the camera. On the right side, there's a large, ornate building with many windows and columns. A sign on a post in the middle ground has the word "EXPO" visible. The scene is set in a city with other buildings and possibly a bridge or overpass in the background.

**BUT THERE'S A PROBLEM...**



A black and white photograph of a city street. In the foreground, several people are walking away from the camera. In the background, there are tall, classical-style buildings with columns. A sign on one of the buildings reads "EXPO".

*JUST LIKE LIFE,  
MUSIC  
AND  
THE LISTENING EXPERIENCE  
IS ALL ABOUT  
DYNAMICS*

**THERE'S NO**  
**DROP**  
**WITHOUT A**  
**BREAK.**

A black and white photograph of a city street. In the background, there are several multi-story buildings with classical architectural details like columns and cornices. A person wearing a light-colored coat and dark pants walks away from the camera down the center of the street. To the right, another person is seen from behind, wearing a dark jacket and light-colored pants. In the foreground, the perspective is blurred, showing the legs and feet of several other people walking towards the viewer. The street appears to be made of cobblestones or large tiles.

**AND THERE'S NO**  
**CHORUS**  
**WITHOUT A**  
**VERSE.**

A black and white photograph of a busy city street. In the foreground, several people are walking away from the camera on a paved sidewalk. The street is lined with tall, multi-story buildings, some with classical architectural details like columns. A sign for "EXPO" is visible on the right side of the street. The overall atmosphere is one of a bustling urban environment.

*WE NEED A  
RECOMMENDATION SYSTEM THAT'S  
MORE HUMAN*

A black and white photograph of a city street. In the foreground, several people are walking away from the camera. The street is lined with tall, multi-story buildings, some with classical architectural details like columns. A sign for "EXPO MILANO 2015" is visible on the right side of the street. The overall atmosphere is one of a busy urban environment.

*WE NEED A  
RECOMMENDATION SYSTEM THAT  
CHANGES WITH THE  
WORLD AROUND US*

A black and white photograph of a busy city street. In the foreground, several people are walking away from the camera on a paved sidewalk. The street is lined with tall, multi-story buildings, some with classical architectural details like columns. The scene is somewhat blurred, suggesting movement or a long exposure. The overall atmosphere is urban and dynamic.

*WE NEED A  
RECOMMENDATION SYSTEM THAT  
SETS MUSIC FREE.*

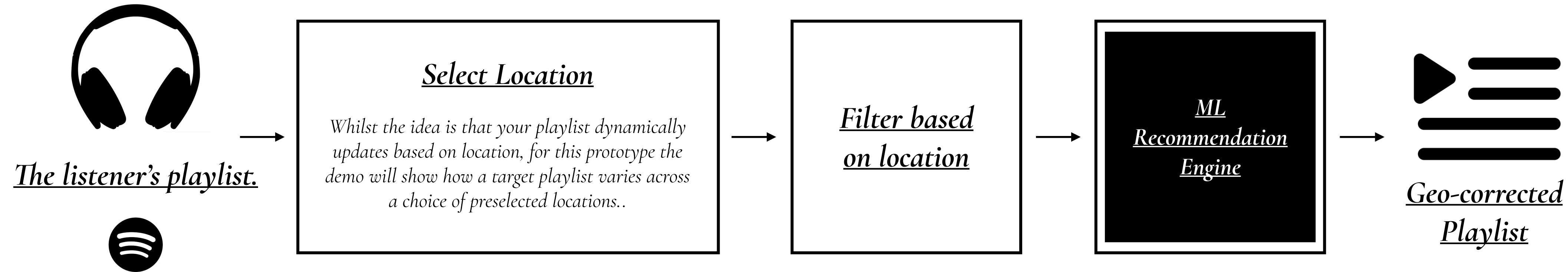


*The Idea.*



# PROJECT B3TA

# *Geo-corrected Playlists*





*The Impact.*

# **THE IMPACT.**

**A BETTER LISTENING EXPERIENCE FOR FANS OF MUSIC,  
TRAVEL AND REAL LIFE.**

&

**A SERVICE THAT BRINGS PEOPLE TOGETHER THROUGH A  
CELEBRATION OF DIVERSITY.**

*Metrics; User #s, % time spent listening to geo-corrected  
playlists, quant research.*



*The Data.*

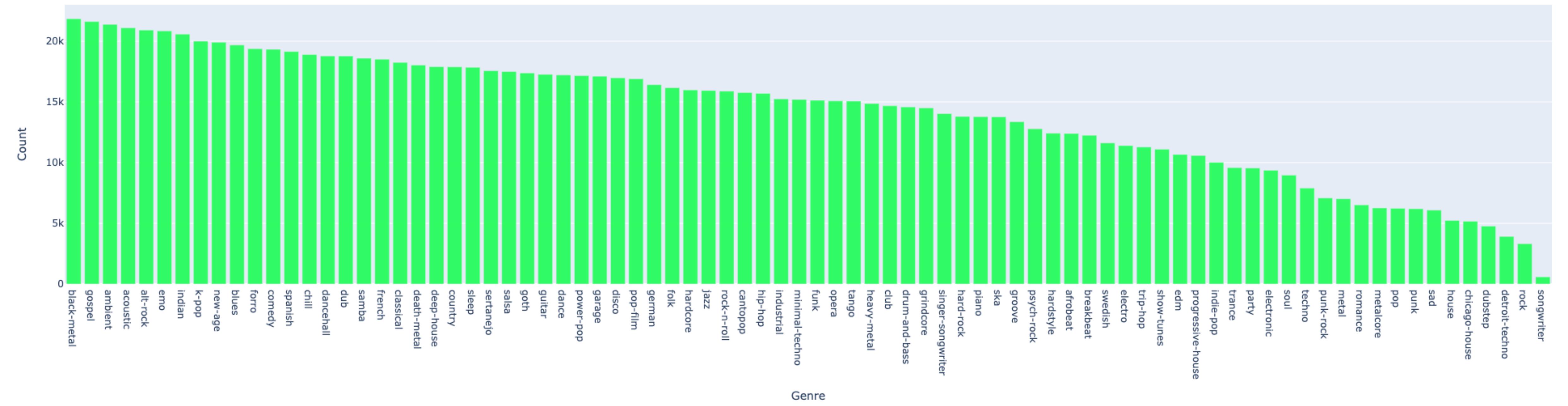
(...so far)

*1,159,764 songs, 19 columns*

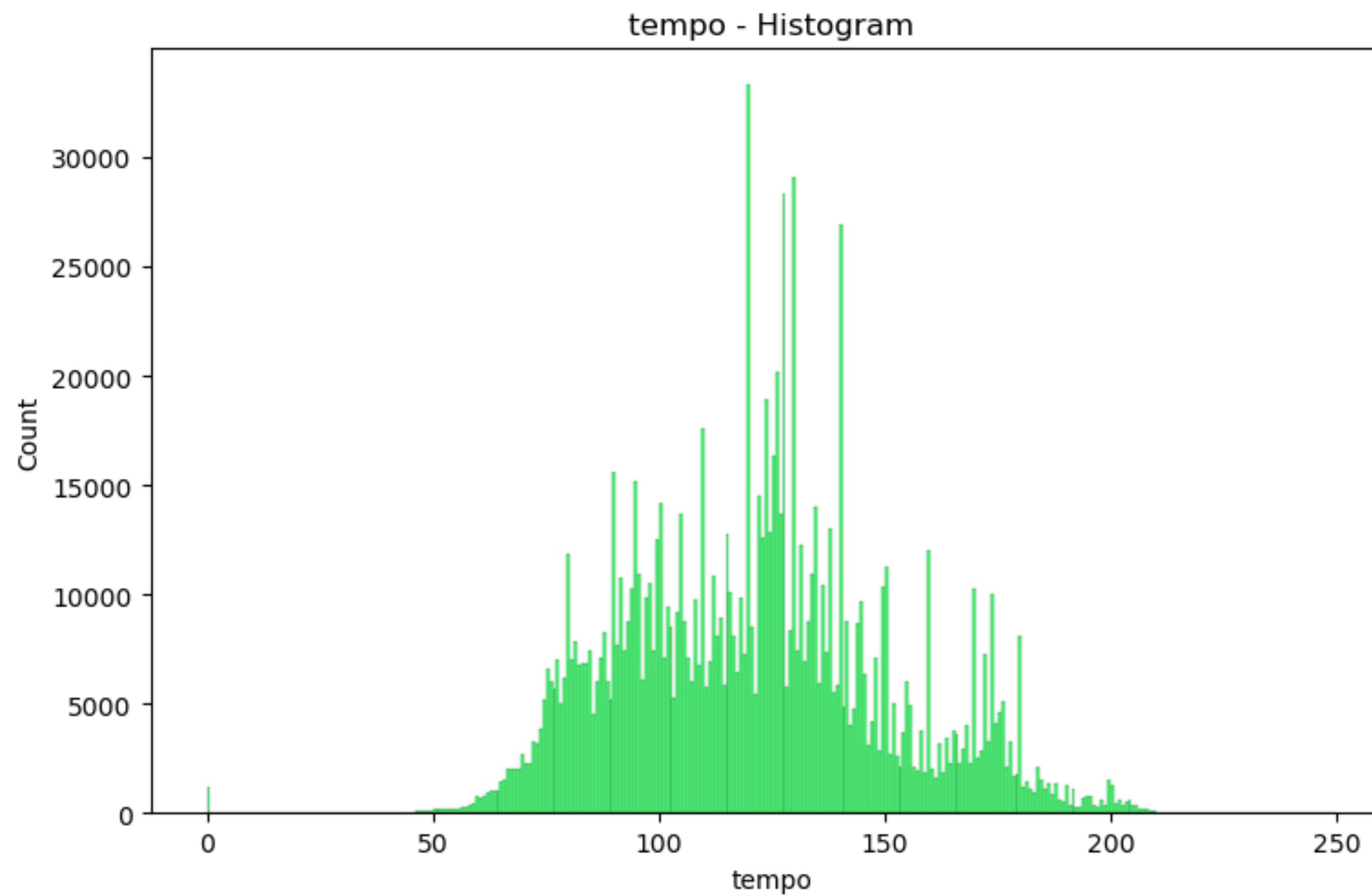
```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1159764 entries, 0 to 1159763
Data columns (total 19 columns):
 #   Column           Non-Null Count  Dtype  
--- 
 0   artist_name      1159749 non-null   object 
 1   track_name       1159763 non-null   object 
 2   genre            1159764 non-null   object 
 3   year             1159764 non-null   object 
 4   duration_ms     1159764 non-null   int64  
 5   tempo            1159764 non-null   float64
 6   time_signature   1159764 non-null   int64  
 7   key              1159764 non-null   int64  
 8   mode             1159764 non-null   object 
 9   loudness         1159764 non-null   float64
 10  popularity       1159764 non-null   int64  
 11  liveness         1159764 non-null   float64
 12  acousticness    1159764 non-null   float64
 13  speechiness      1159764 non-null   float64
 14  instrumentalness 1159764 non-null   float64
 15  energy           1159764 non-null   float64
 16  valence          1159764 non-null   float64
 17  danceability     1159764 non-null   float64
 18  track_id         1159764 non-null   object 

dtypes: float64(9), int64(4), object(6)
memory usage: 168.1+ MB
```

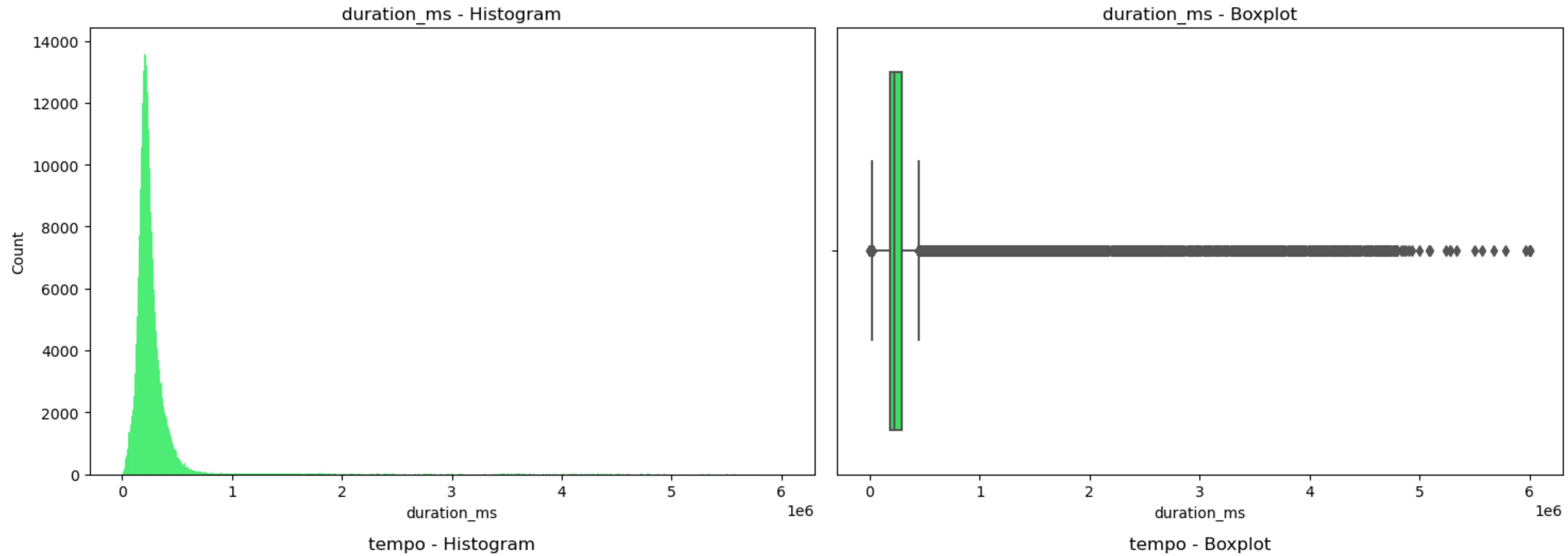
*Categorical data: 82 genres to be dealt with numerically*



*Numerical data: Some distributions you'd expect...*

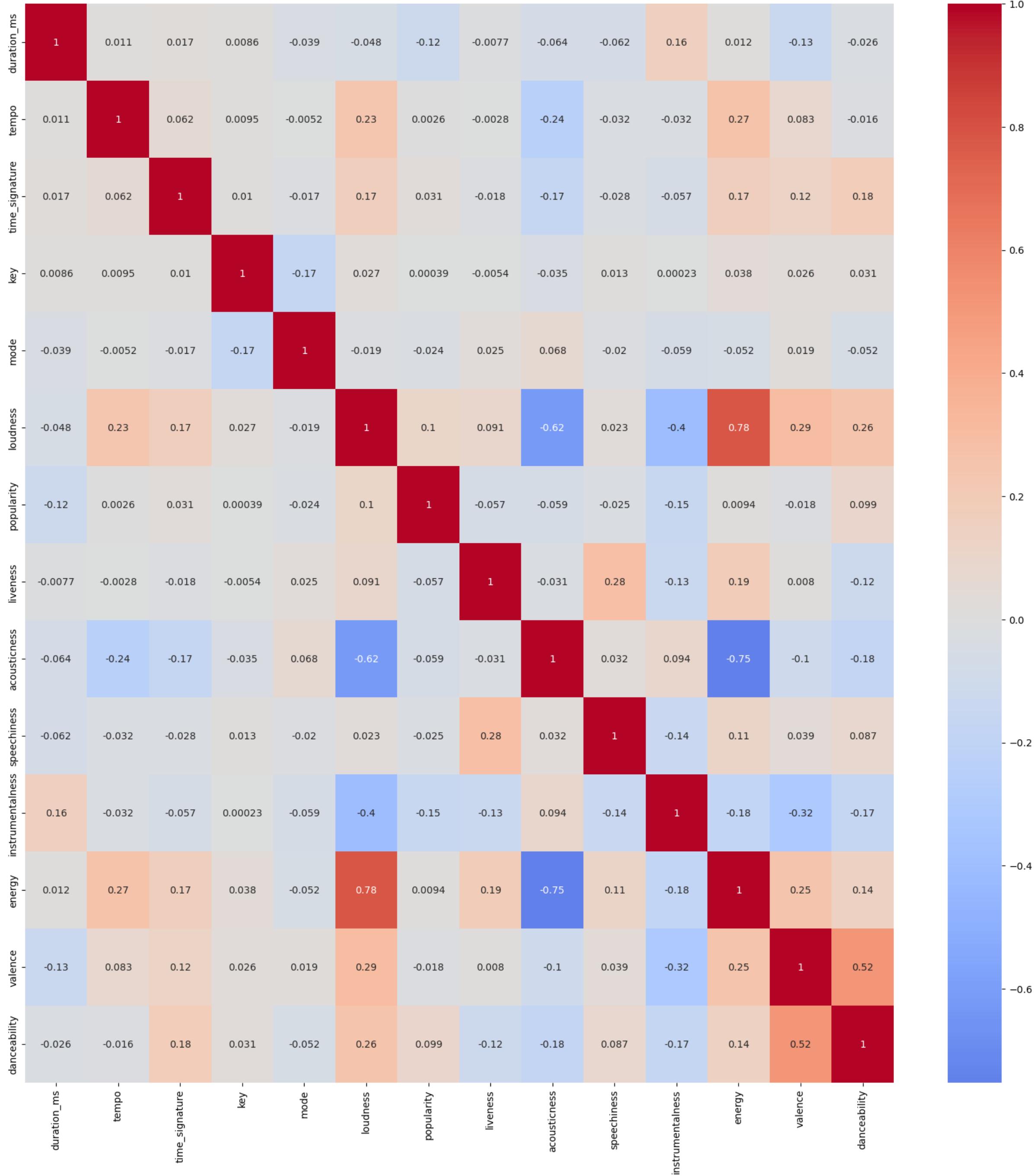


*Numerical data: Others that will need some further interrogation and cleaning...*

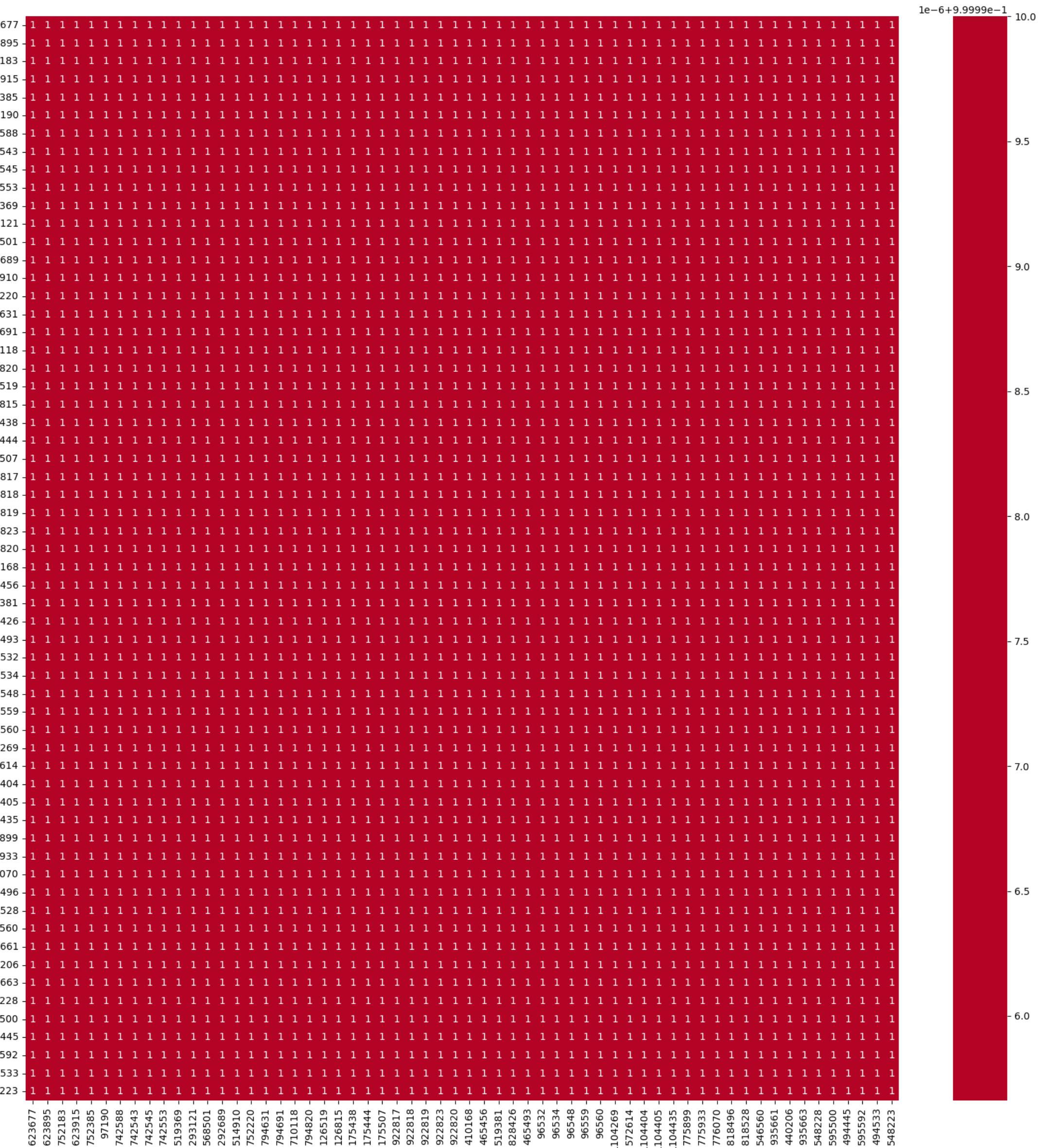


# Relationships: Some signs of correlations but more digging to be done

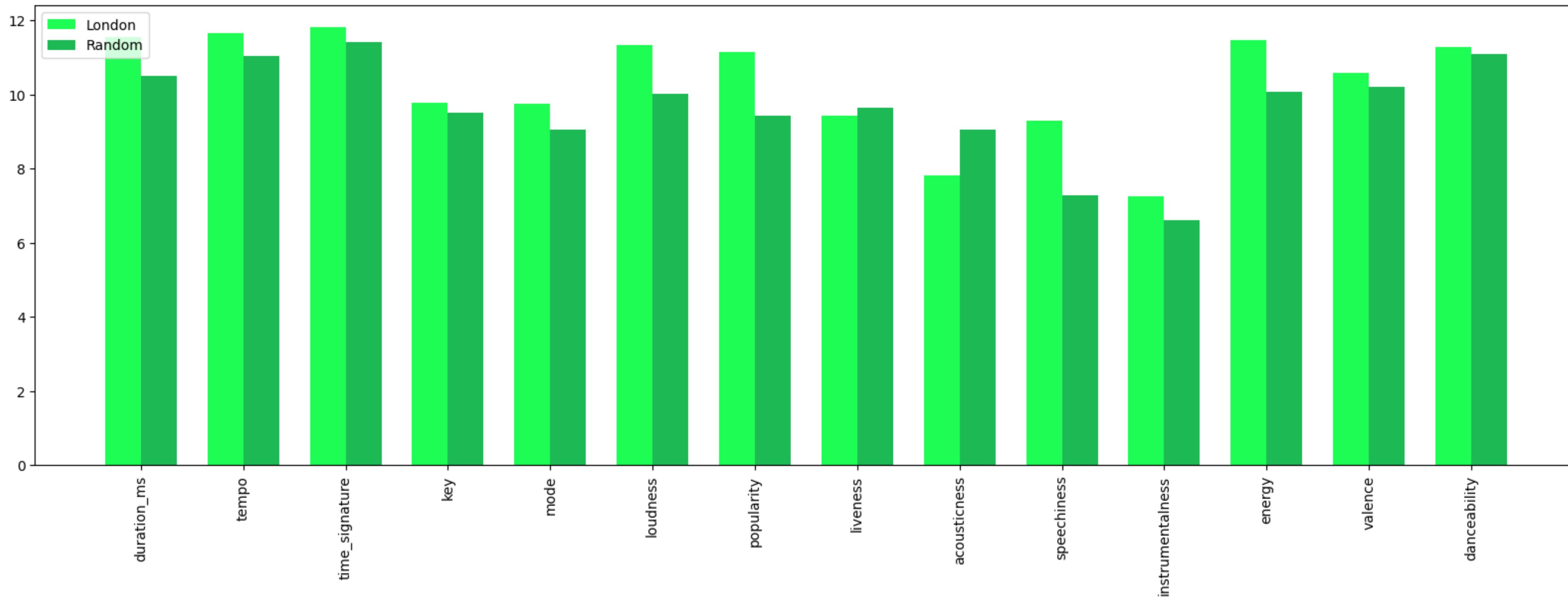
• • •



*Initial attempts at  
track and playlist  
comparisons need  
more work ...*



*But there may be (very small) signs of promise .*





*Next Steps.*

# *Next Steps*

- Lock down location playlists for testing (Shortlist; London, Manchester, Ibiza, NYC, Kingston, Berlin, LA)
- Decide on modelling approach
- Finalise cleaning & Pre-process data
- Begin feature engineering and baseline modelling phase

*Sprint 2 deadline - Thursday 28th March*



A collage of various satellite imagery and maps from space, featuring a variety of landscapes, celestial bodies, and abstract patterns.

**THANK YOU.**