



Top Songs on Spotify in 73 countries

VI Practical Assignment

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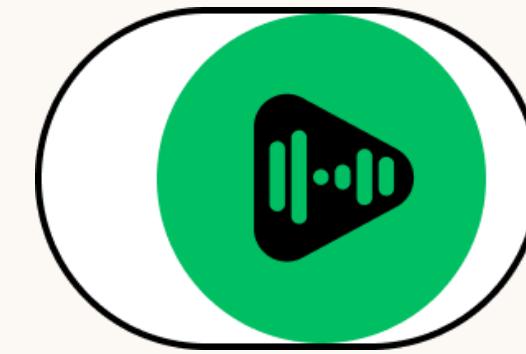


Context

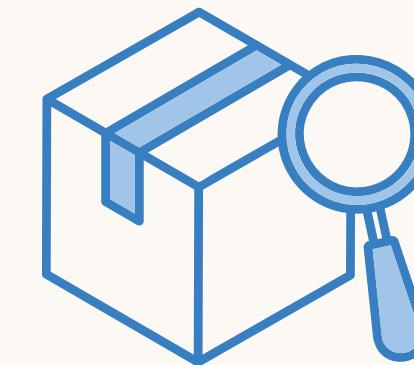


Data

Available data about song popularity and characteristics, as well as rank movements on 70 countries and globally



Spotivis



Why?

We've saw potential in analyzing ranking movements and song characteristics like danceability, explicitly between countries

Objectives

Chart movements

Tell how musics **moved** in the top charts
and which authors are **constantly ranking** on the top charts

Preferences per country

See **what is popular** around the **world**
and **why** it is popular o that place

Music characteristics

Get to know the **characteristics** that make
a **music** so **popular**, like its value of
danceability, valence, energy etc

Data

Our dataset can be found [here](#):

<https://www.kaggle.com/datasets/asaniczka/top-spotify-songs-in-73-countries-daily-updated/data>

- **spotify_id**
- **name**
- **artists**
- **daily_rank**
- **daily_movement**
- **weekly_movement**
- **country**
- **snapshot_date**
- **popularity**
- **is_explicit**
- **duration_ms**
- **album_name**
- **album_release_date**
- **danceability**
- **energy**
- **key**
- **loudness**
- **mode**
- **speechiness**
- **acousticness**
- **instrumentalness**
- **liveness**
- **valence**
- **tempo**
- **time_sign**

▲ spotify_id	▲ name	▲ artists	# daily_rank	# daily_mov...	# weekly_m...	⚑ country	⌚ snapshot...	# popularity	✓ is_explicit
5vNRhkKd0yEAg8suGBpjeY	APT.	ROSE, Bruno Mars	1	0	0		2024-10-29	94	False
2plbrEY59Iik0BgBGLjaee	Die With A Smile	Lady Gaga, Bruno Mars	2	0	0		2024-10-29	100	False
6d0tVTDdaiuQNBQEDotLAB	BIRDS OF A FEATHER	Billie Eilish	3	0	0		2024-10-29	98	False
7tI8dRuH2Yc6RuoTjxo4dU	Who	Jimin	4	0	0		2024-10-29	92	False
1c0boCuWYI2osTOf1MRS6	Tu Boda	Oscar Maydon, Fuerza Regida	5	0	0		2024-10-29	90	True

Dataset view on 10/25 columns and 5 rows

Personas



Mary Muse
Music Enthusiastic

Wants to know what is popular
in other countries, as well as
compare musics to know what
to listen to.



Albert Album
Composer/ Artist

Wants to know what is popular
to write and compose
something similar

Phenomena

Top songs

What songs are on top 10 rank worldwide.



Moviments

How ranks **change** through the time (**daily** and **weekly**)



Characteristics

What features **pop up** per country (energy, danceability, loudness)



Popularity

How **popular** is a song across the globe, **when** was it popular, ...



Sensibility

How **explicit songs** do around the globe, what people prefer



What songs are on top 10 rank worldwide?

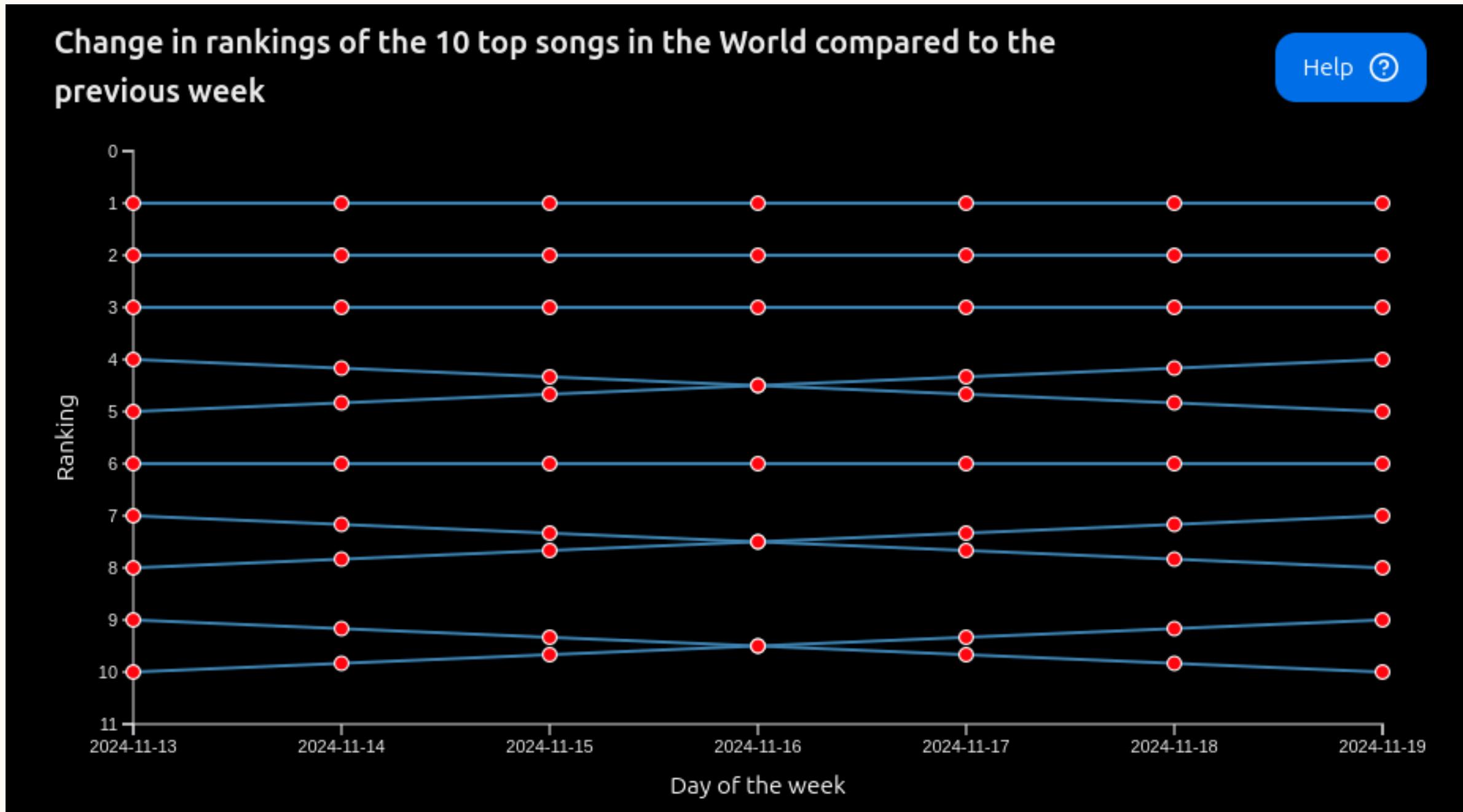


Rank	Name	Variation	Artists
1º	Die With A Smile		Lady Gaga, Bruno Mars
2º	APT.		ROSÉ, Bruno Mars
3º	BIRDS OF A FEATHER		Billie Eilish
4º	That's So True E	↑	Gracie Abrams
5º	Who	↓	Jimin
6º	Tu Boda E		Oscar Maydon, Fuerza Regida
7º	Sailor Song	↑	Gigi Perez
8º	Taste	↓	Sabrina Carpenter
9º	WILDFLOWER	↑	Billie Eilish
10º	Espresso E	↓	Sabrina Carpenter

Ranked List

Ranked list with top ten songs and daily movement indicator and details

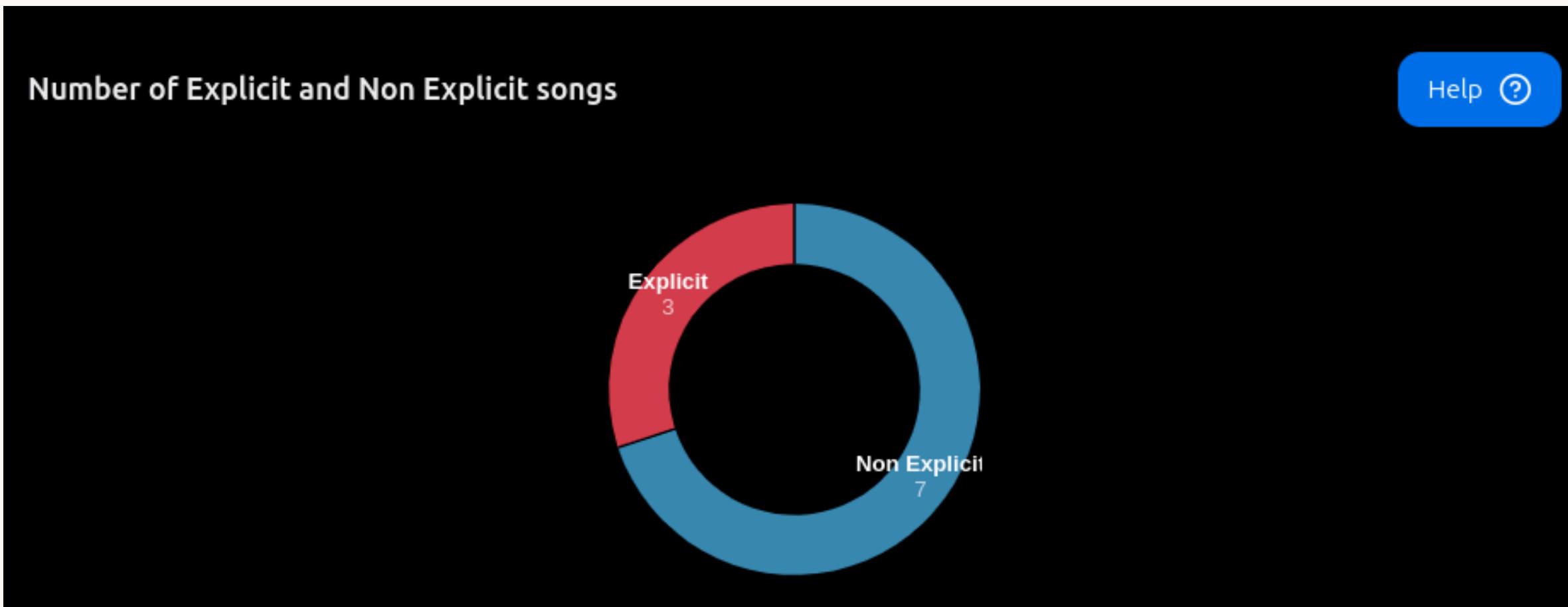
How ranks change through the time (daily and weekly)



Line chart

With ranking on y axis and dates on the x axis to see the movement over the week. The rank ends on 1 and starts on 11 to represent the notion of ranking (top - higher in rank)

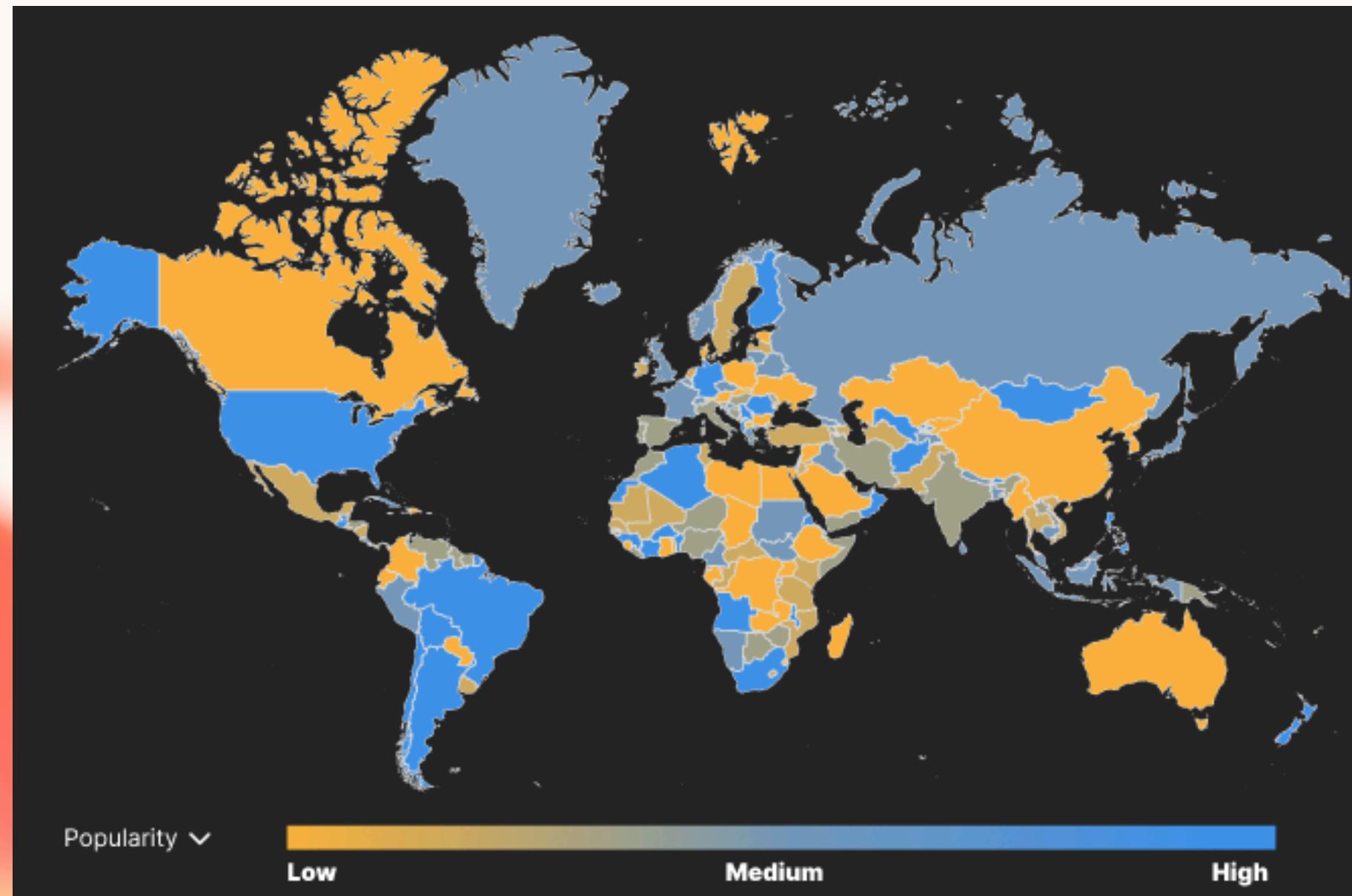
How explicit songs do around the globe, what people prefer



Pie chart

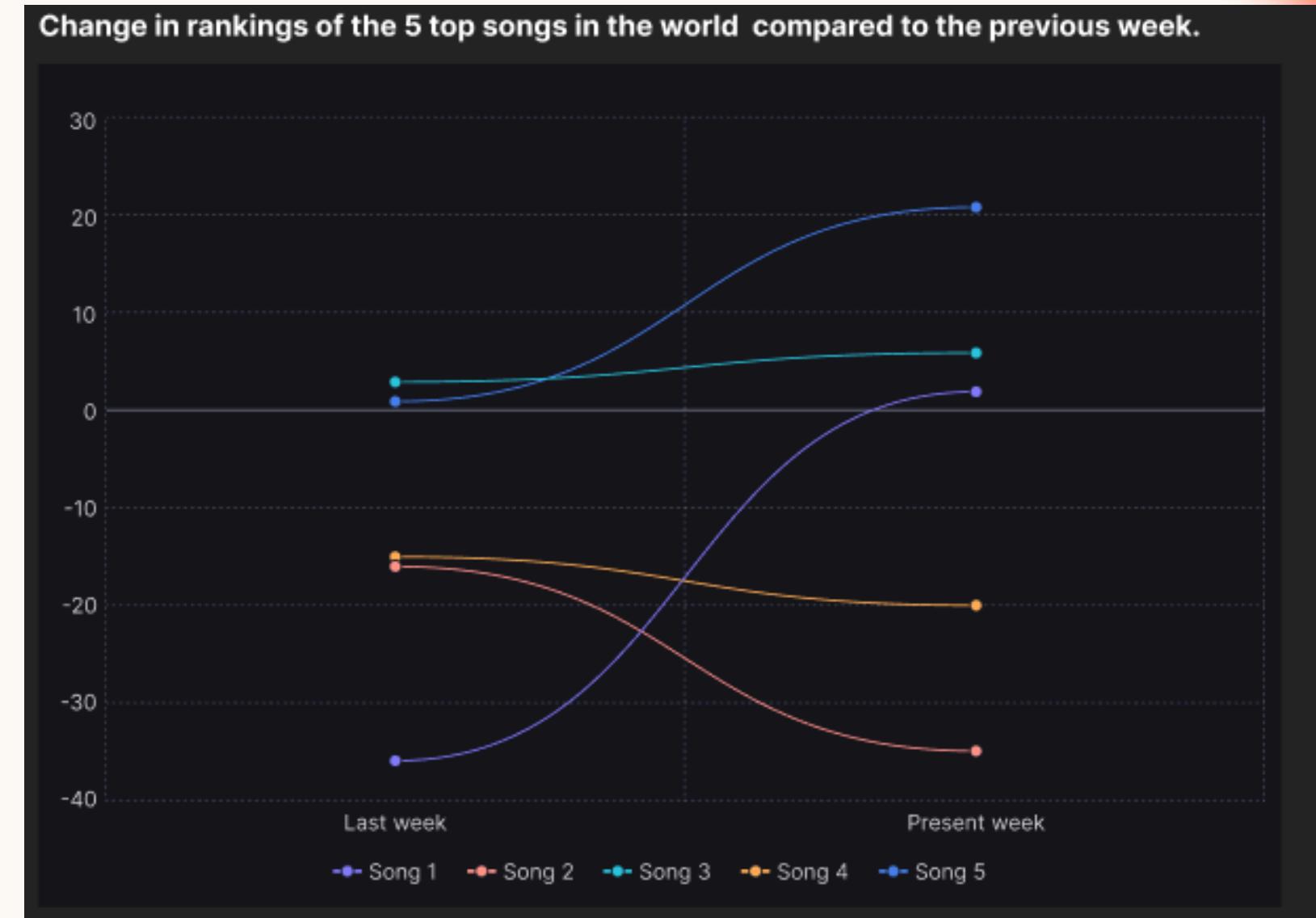
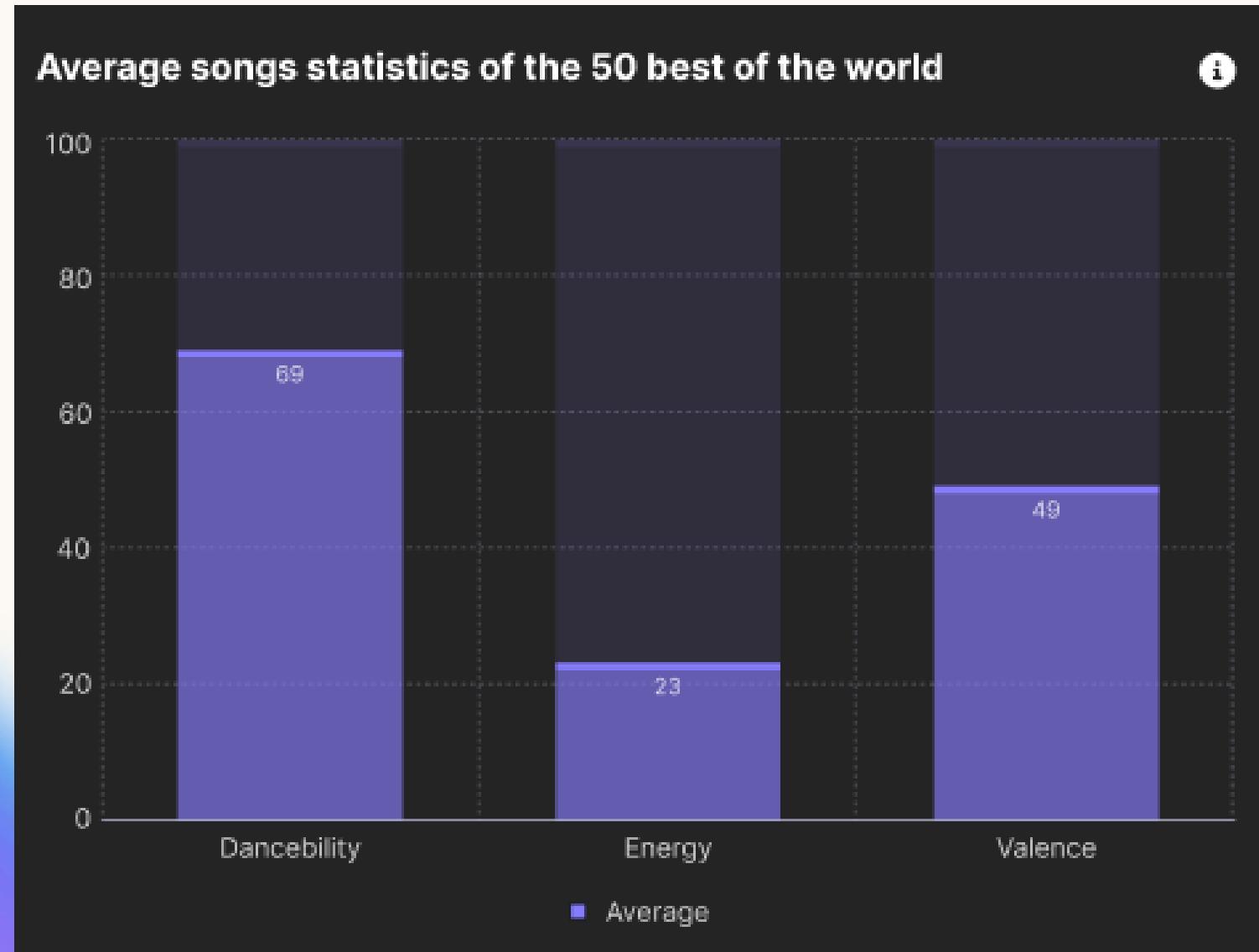
Number of top 10 musics with explicit and non explicit lyrics

Prototype - Visualisations

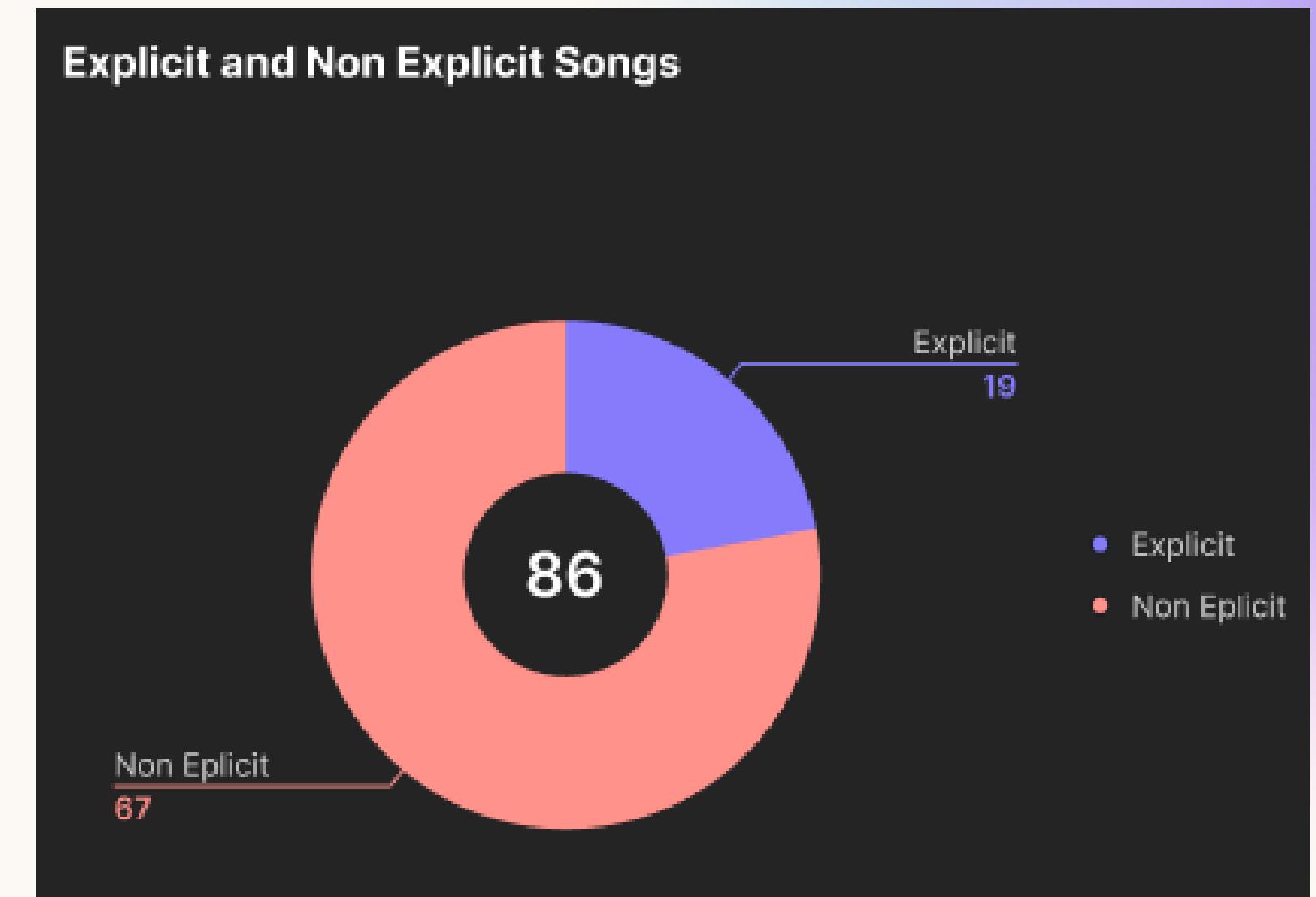
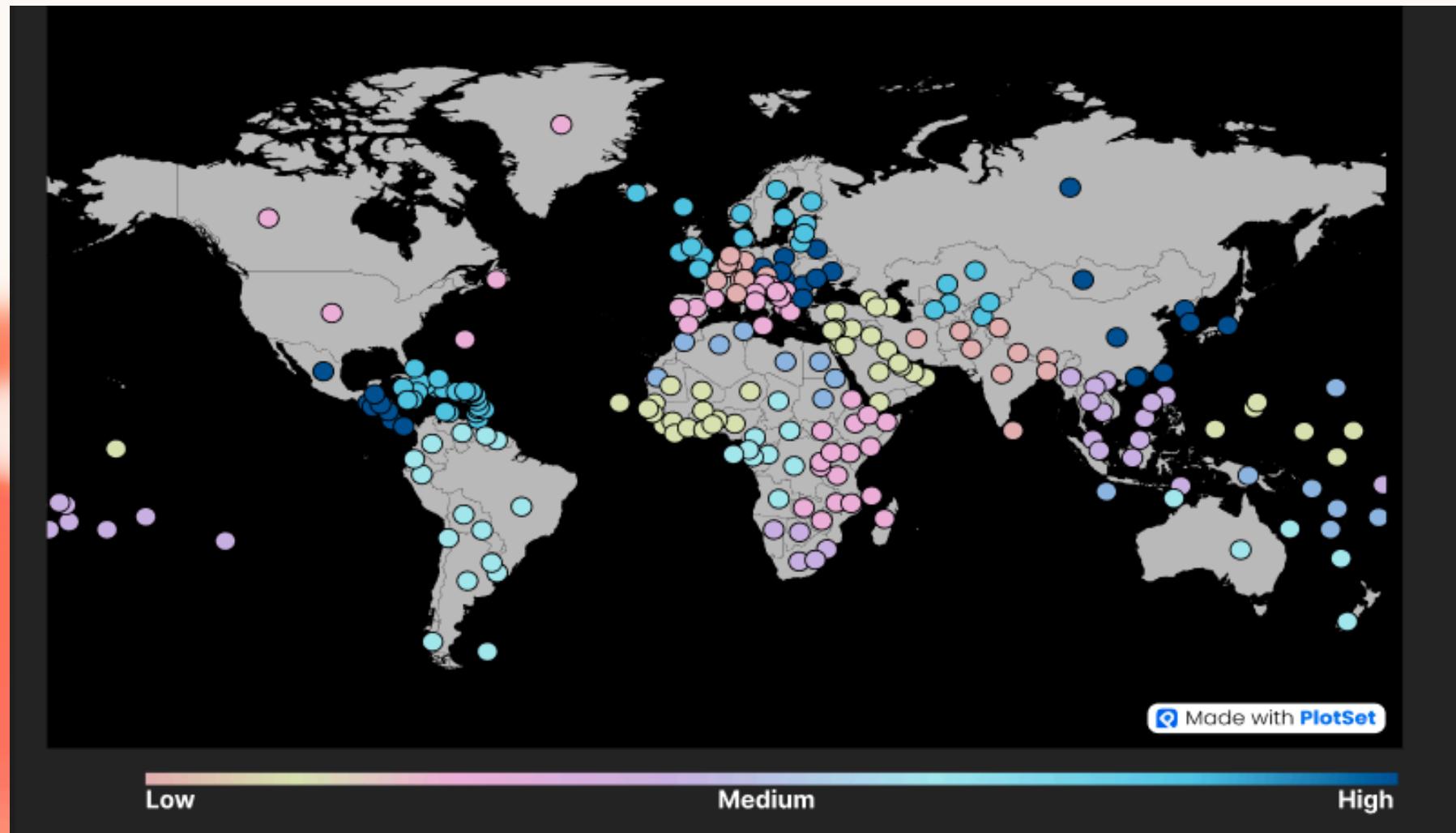


Top 10 Songs of the World			
1º Whatever	98	⌚ 2:31	↑
Some Band			
1º Whatever	98	⌚ 2:31	↑
Some Band			
4º Whatever	63	⌚ 2:31	
Some Band			
3º Whatever	62	⌚ 2:31	
Some Band			
5º Whatever	54	⌚ 2:31	
Some Band			
6º Whatever	50	⌚ 2:31	↓
Some Band			
7º Whatever	45	⌚ 2:31	
Some Band			
8º Whatever	44	⌚ 2:31	
Some Band			
9º Whatever	32	⌚ 2:31	
Some Band			
10º Whatever	31	⌚ 2:31	
Some Band			

Prototype - Visualisations



Prototype - Visualisations



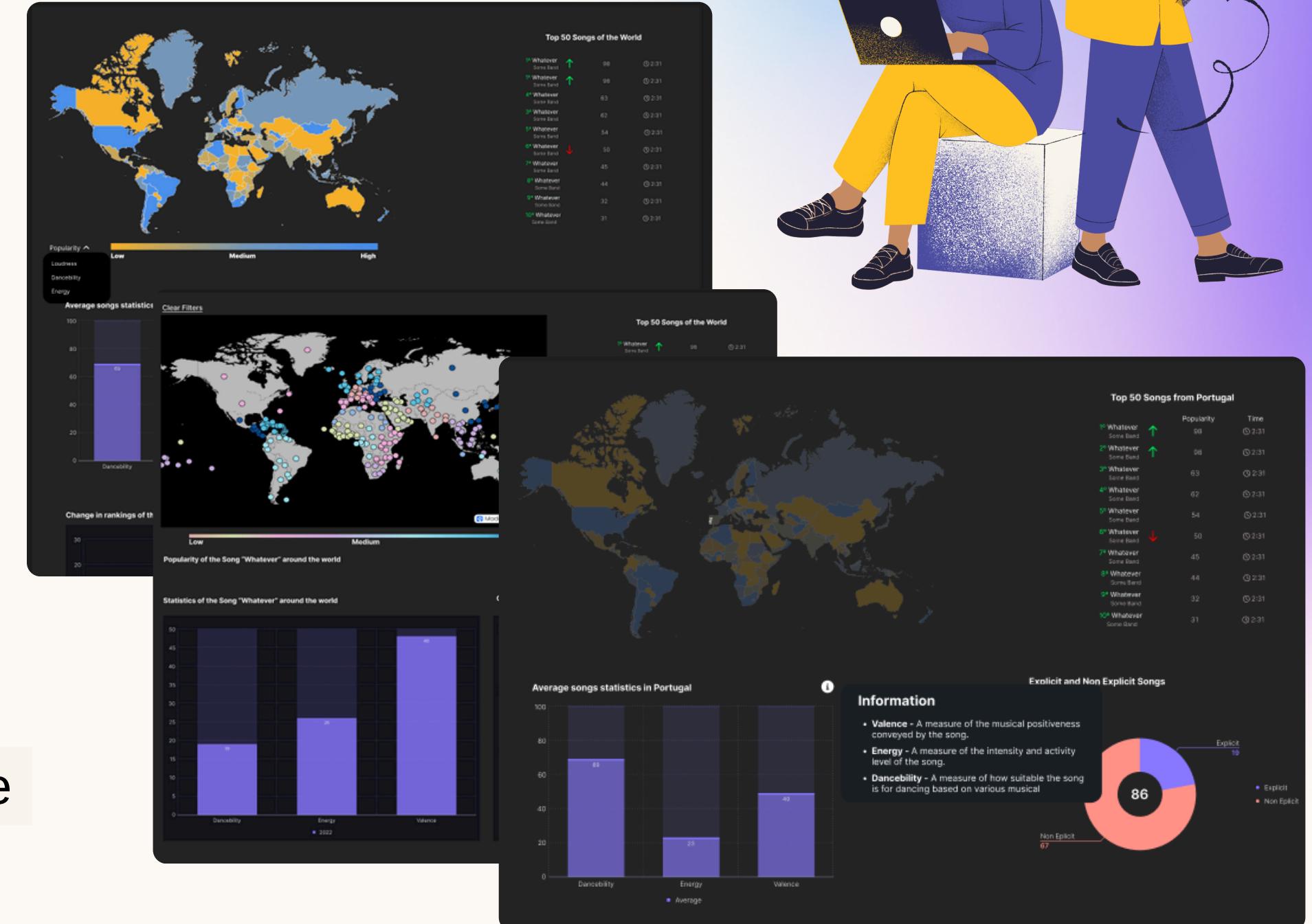
Usability Evaluation - Prototype

5 participants

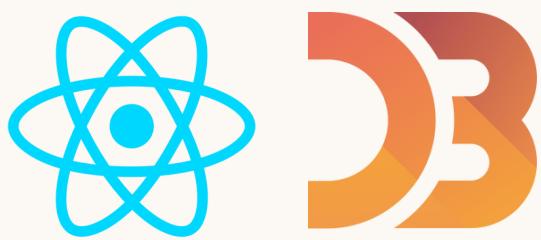
Completion rate: 100%

Success rate: 94,8%

Users seemed to be pretty satisfied with the overall usability of our system.



<https://www.figma.com/design/5hhbTu8psQqTs5s8jL0Hym/Untitled?node-id=0-1&node-type=canvas&t=UHRPmOuK8VzKf7AV-0>



Live Demo

vi-project.pages.dev



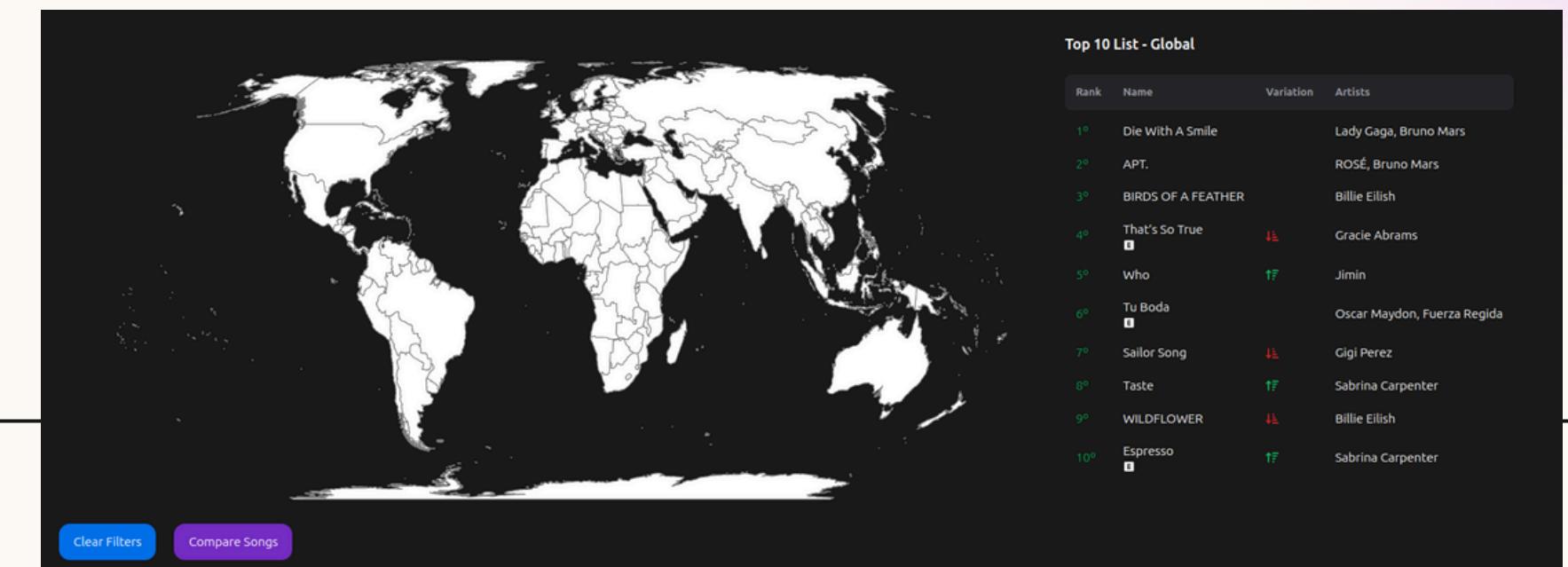
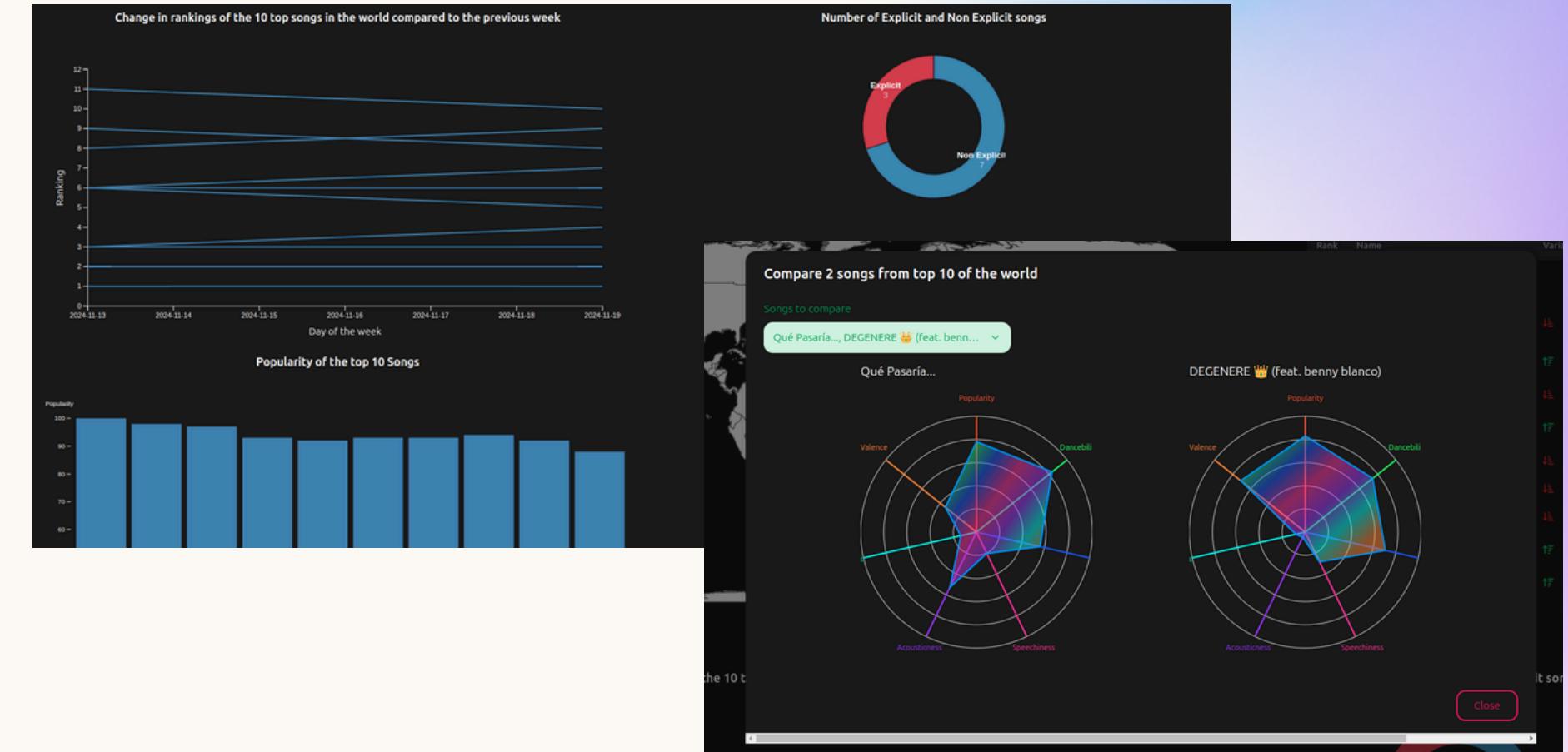
1st Usability Evaluation - Platform

4 participants

2 adults with 50-58 years

2 young people with 20-25 years

5 tasks



Results

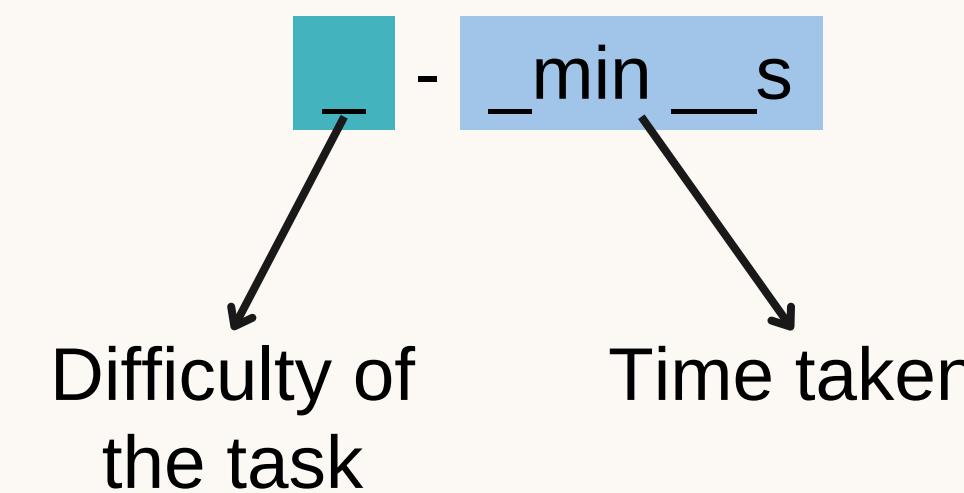
	Task 1	Task 2	Task 3	Task 4	Task 5
Participant 1	✓ 1 - 2min 9s	? 5 - 2min 40s	✓ 2 - 1min 15s	? 3 - 47s	? 2 - 2min 49s
Participant 2	✓ 1 - 1min 46s	? 4 - 2min 11s	✓ 1 - 1min 37s	? 1 - 1min 5s	✓ 1 - 1min 20s
Participant 3	✓ 2 - 55s	? 4 - 1min 6s	✓ 2 - 50s	✓ 1 - 34s	✓ 1 - 40s
Participant 4	✓ 1 - 52s	? 4 - 1min 23s	✓ 2 - 58s	✓ 1 - 25s	✓ 1 - 53s



Completed task without help



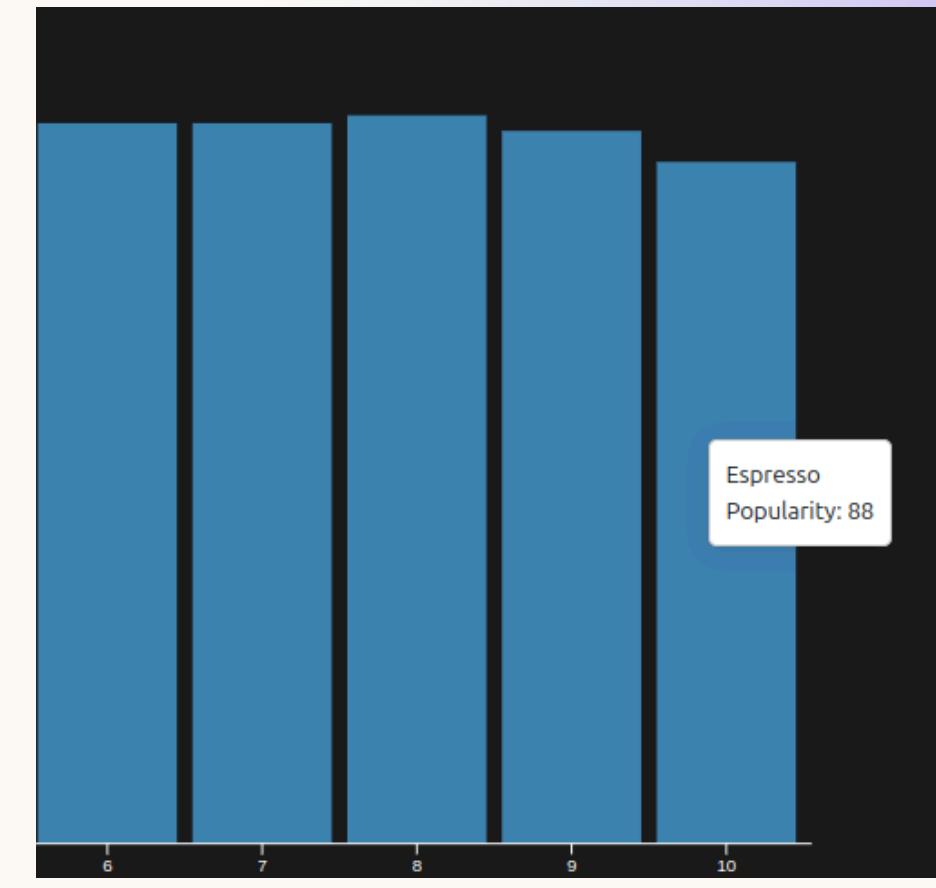
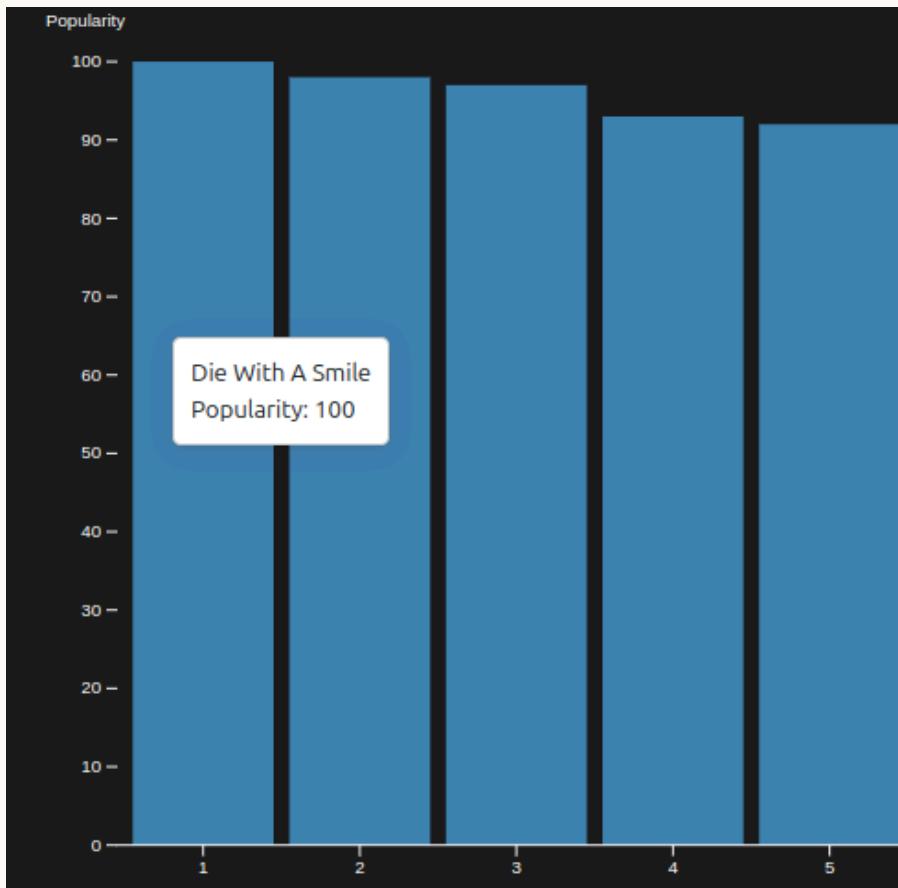
Completed task with help



Task 1 - Result analysis

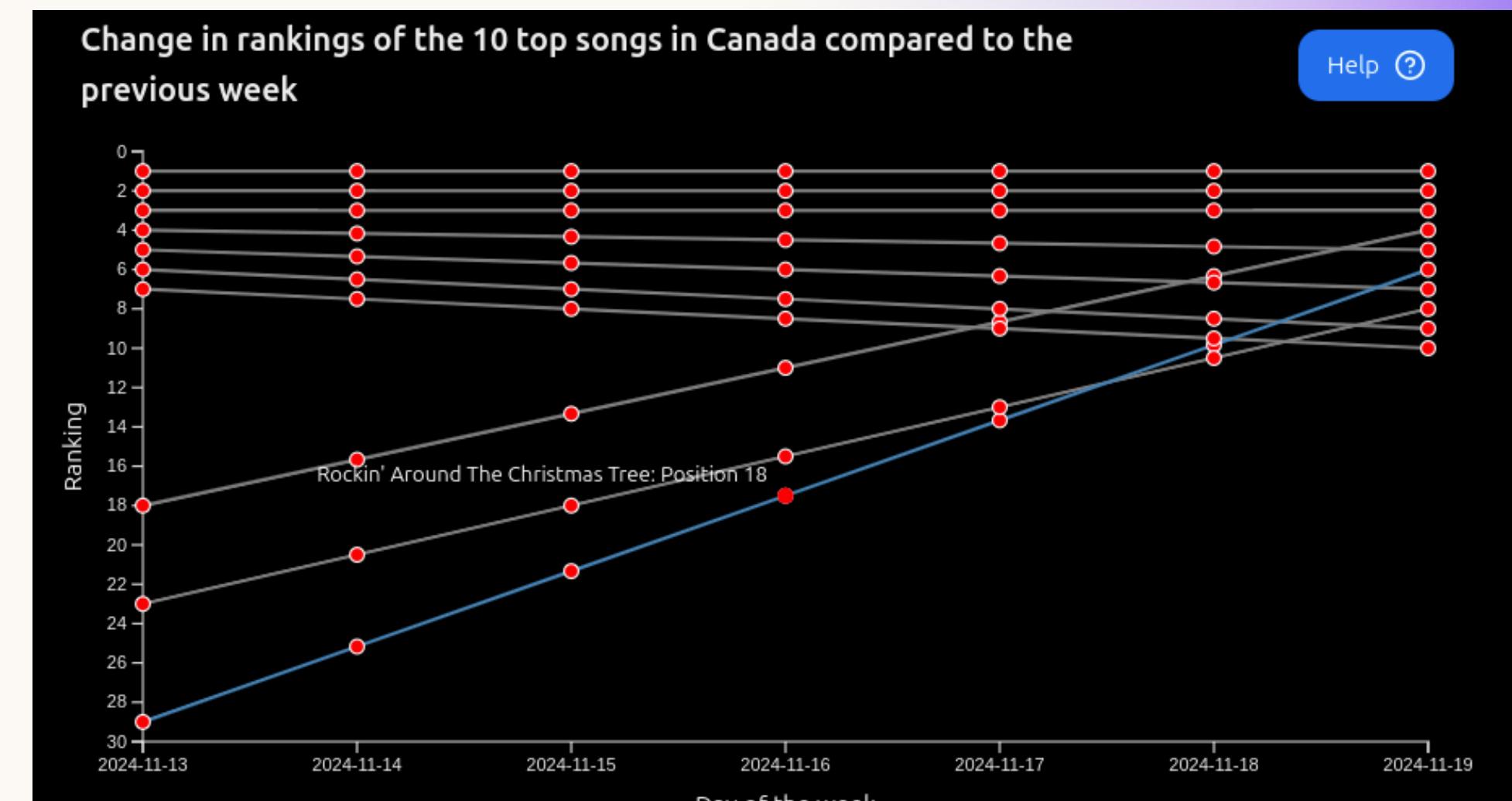
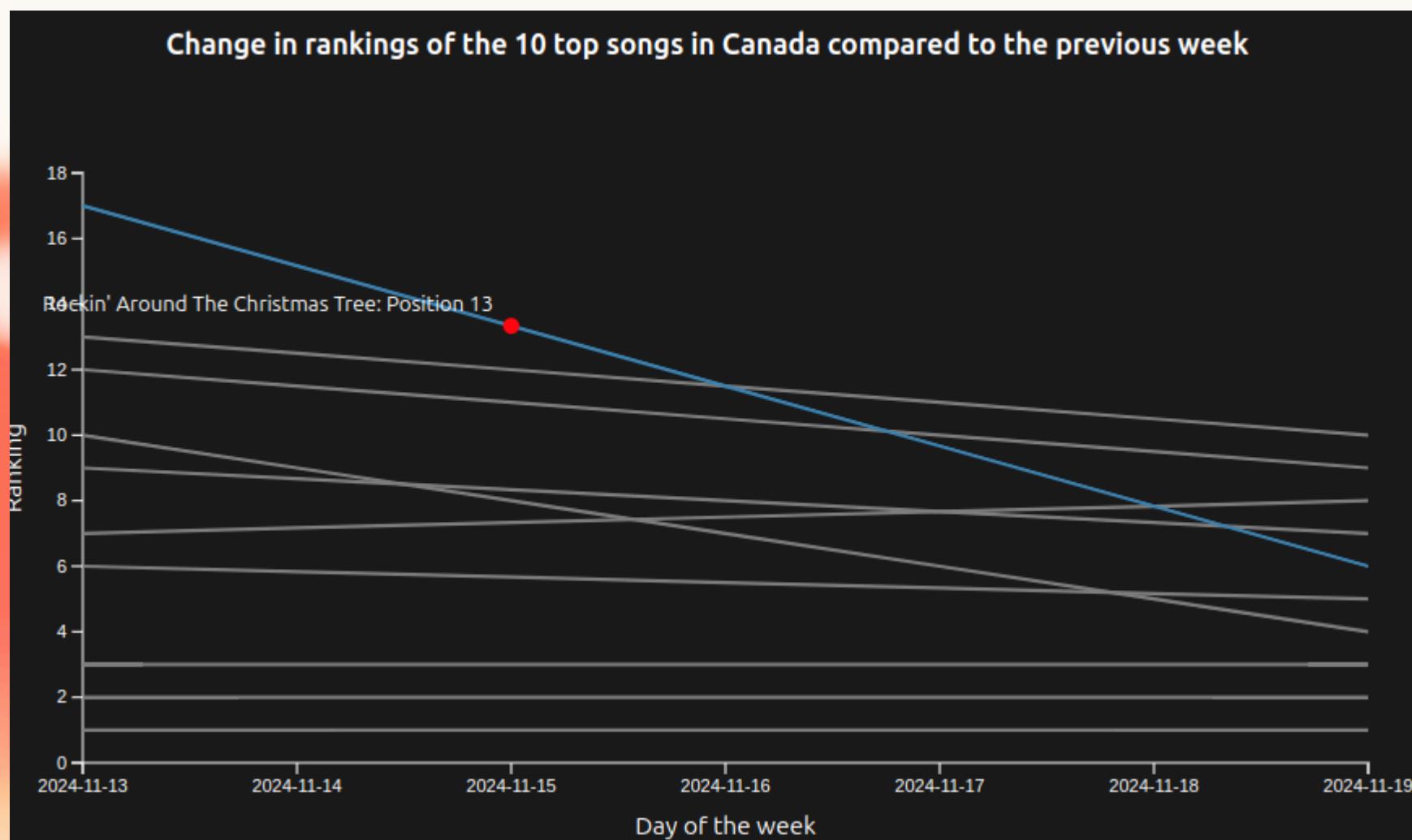
From the top 10 list, indicate the songs that are ranked with the first and last place and the popularity value for each one?

Top 10 List - Global			
Rank	Name	Variation	Artists
1º	Die With A Smile		Lady Gaga, Bruno Mars
2º	APT.		ROSÉ, Bruno Mars
3º	BIRDS OF A FEATHER		Billie Eilish
4º	That's So True	↓ ↗	Gracie Abrams
5º	Who	↑ ↗	Jimin
6º	Tu Boda	↓ ↗	Oscar Maydon, Fuerza Regida
7º	Sailor Song	↓ ↗	Gigi Perez
8º	Taste	↑ ↗	Sabrina Carpenter
9º	WILDFLOWER	↓ ↗	Billie Eilish
10º	Espresso	↑ ↗	Sabrina Carpenter



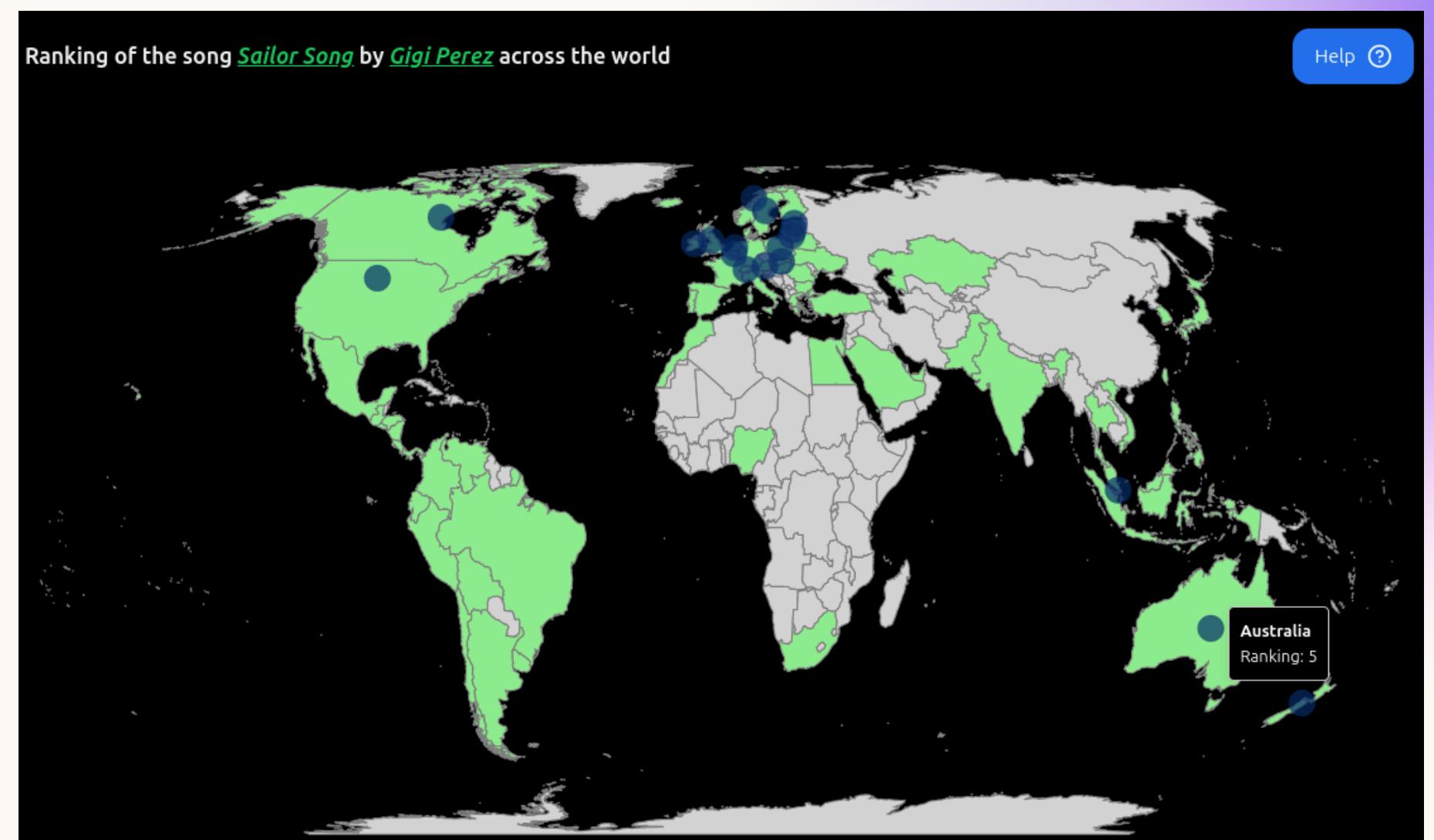
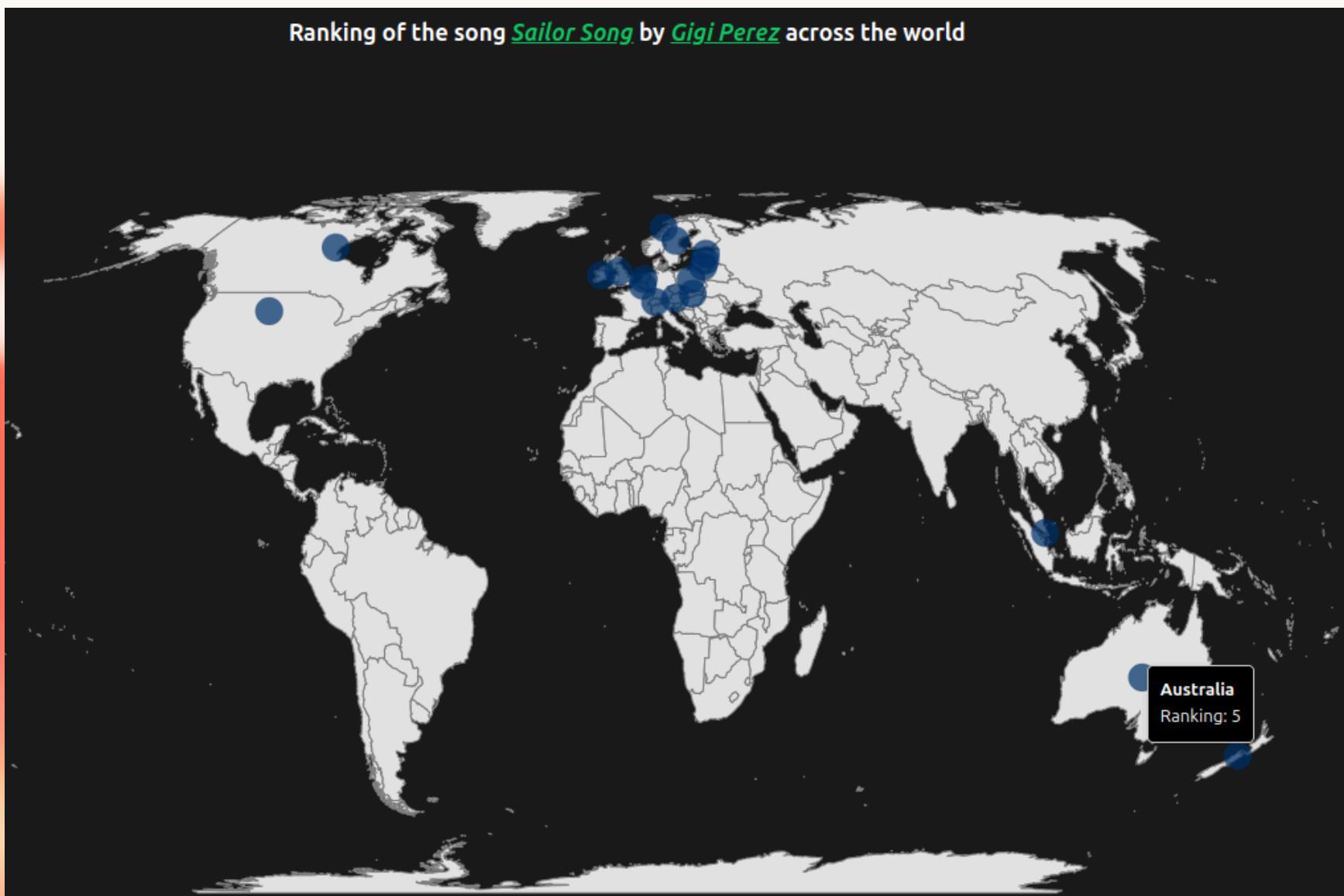
Task 2 -Result analysis

Find Canada and click on it to observe its statistics. In the change in the song's rankings, search for the song “Rockin' Around The Christmas Tree”, what's the ranking of this song on the 2024-11-13 and 2024-11-14?



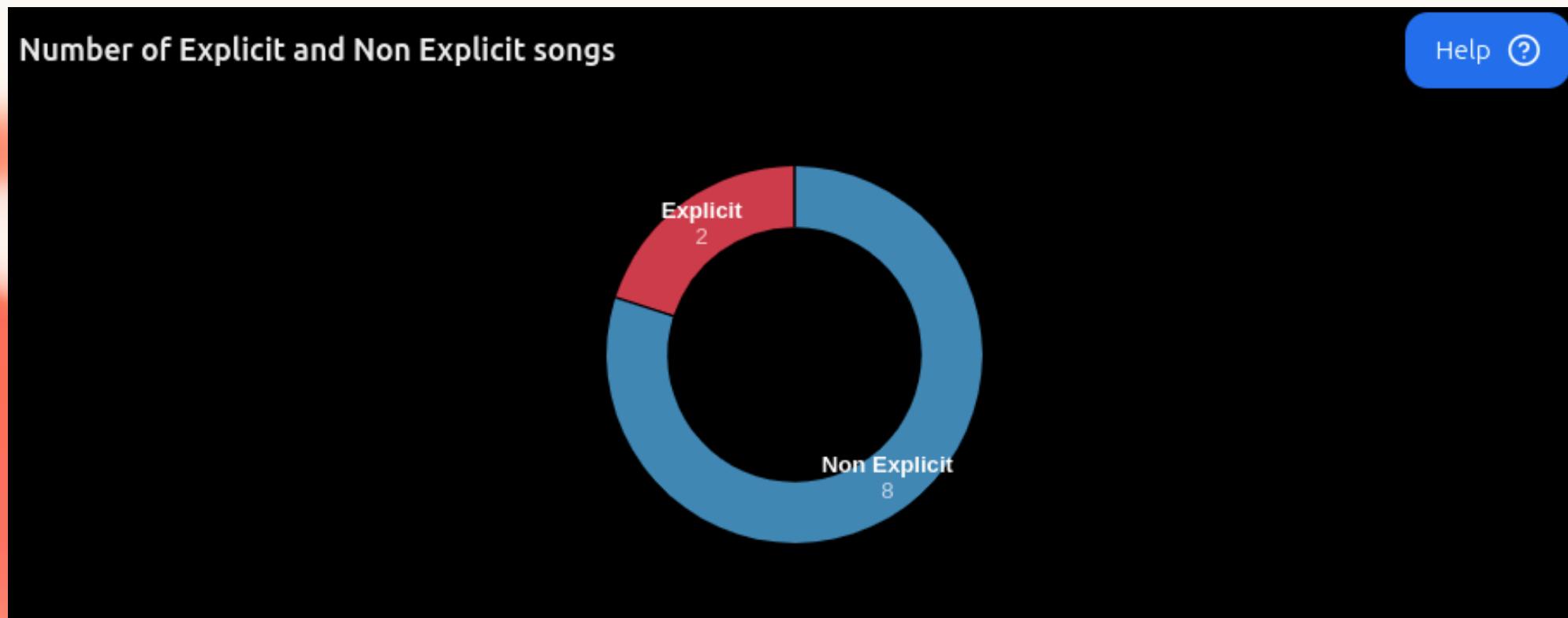
Task 3 -Result analysis

Clear the filters, find Sweden and click on it. From the top 10 list in Sweden select the song “Sailor Song” by “Gigi Perez”, whats the ranking of the song in Australia, Norway and Singapure?



Task 4 - Result analysis

Clear the filters again and select Turkey, how many songs are considered Explicit and Non Explicit?



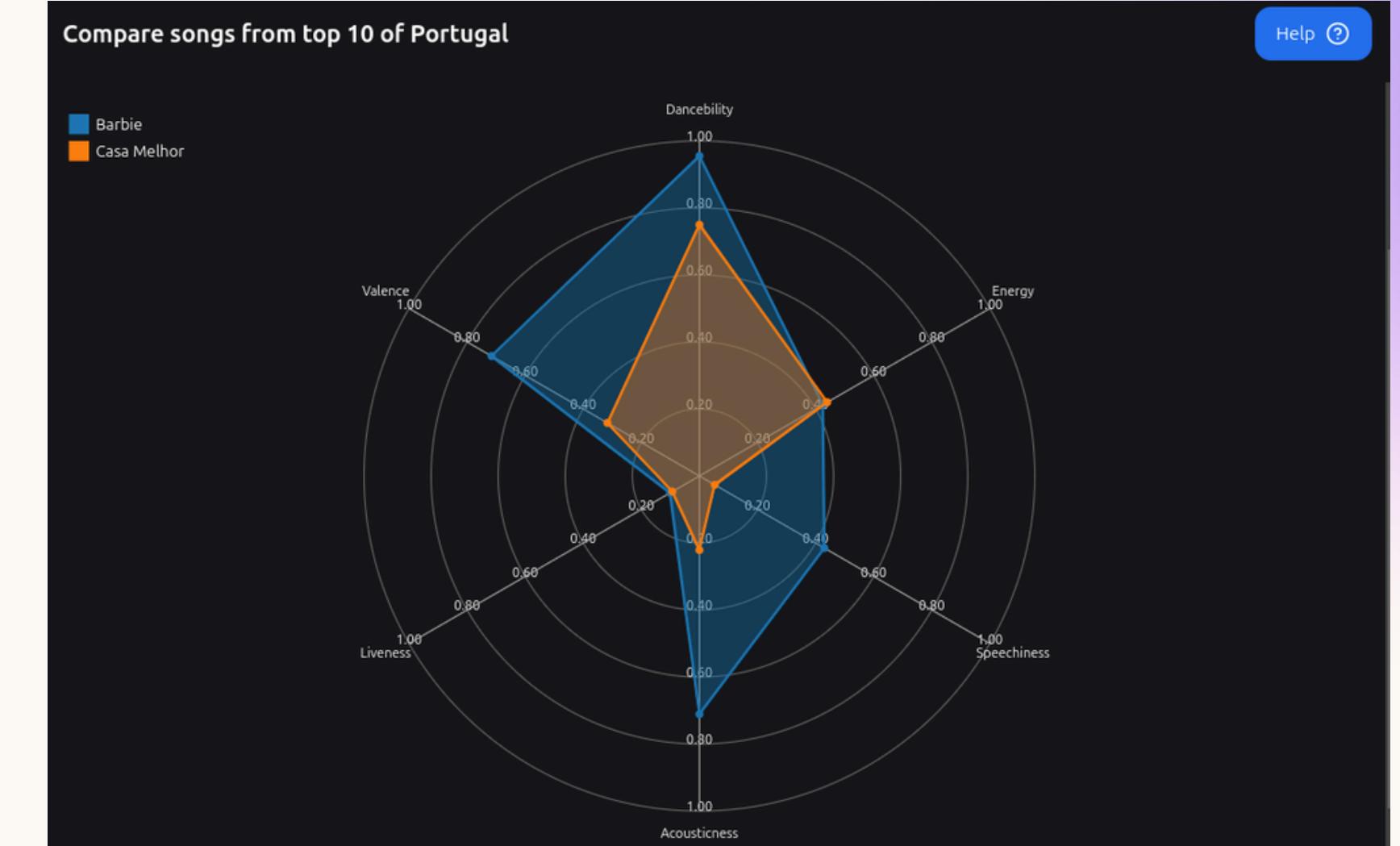
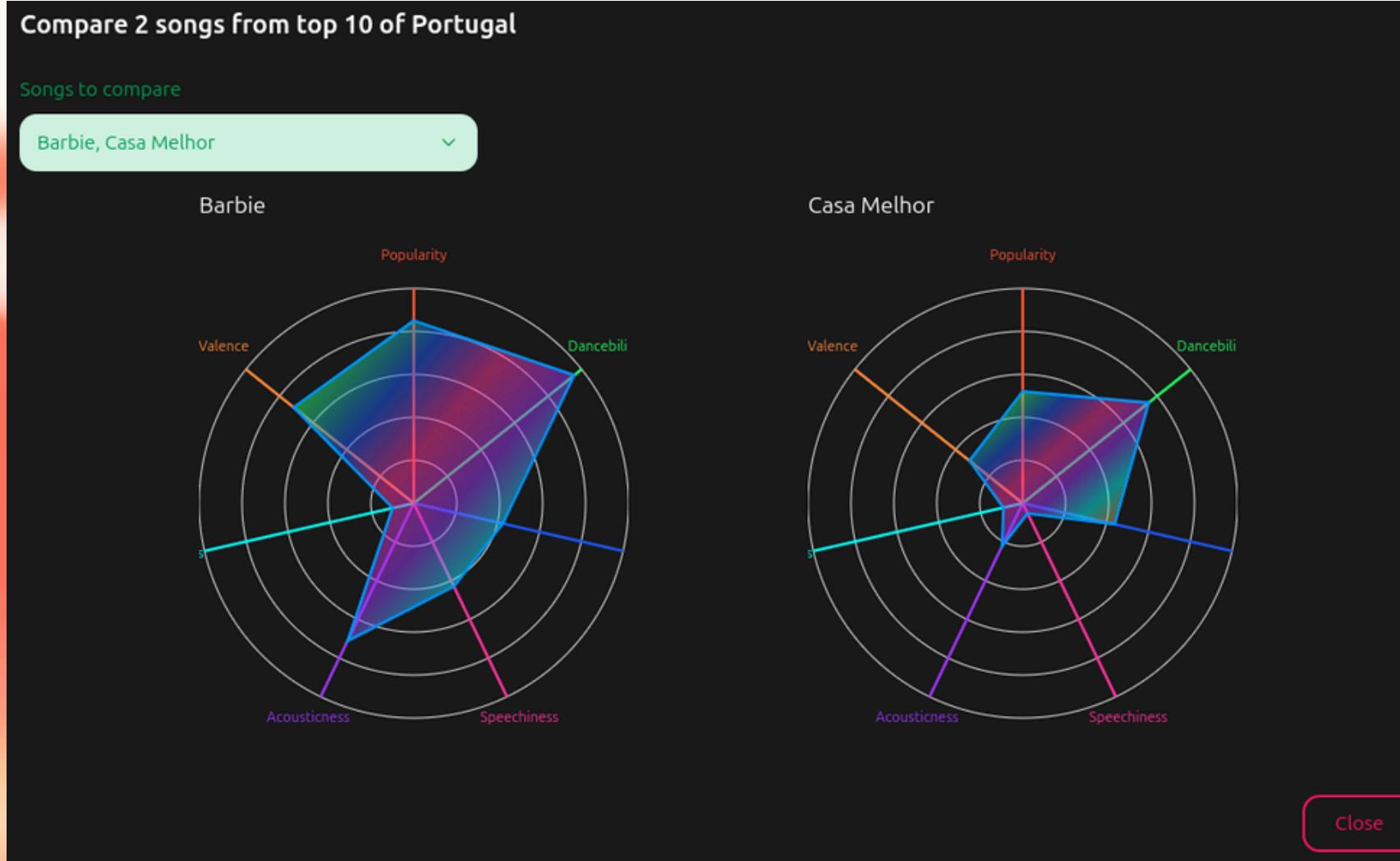
Top 10 List - Turkey

Help ?

Rank	Name	Variation	Artists
1º	Sana Güvenmiyorum - Dedub Sessions		Dedublüman, Aleyna Tilki
2º	Italy Forma	E	Ati242
3º	CISTAK	E	Era7capone, BatuFlex, Narco
4º	SEVMESİ DENEMEDİN	↑F	BLOK3
5º	Değişmene Rağmen	↑F	Ati242
6º	Canın Beni Çekti	↓E	Melike Şahin
7º	Sen Bilmezsin	↑F	Dedublüman
8º	İNTİHAR	↑F	Era7capone, NASTEISHA
9º	Yasemen	↓E	Afra
10º	Düşmez Kalkmaz	↑F	Canbay & Wolker

Task 5 -Result analysis

Select now Portugal and click in the compare songs button. Pick the songs “Barbie” and “Casa Melhor”. In your opinion, which one do you think that its the most popular and why, based on the charts presented?

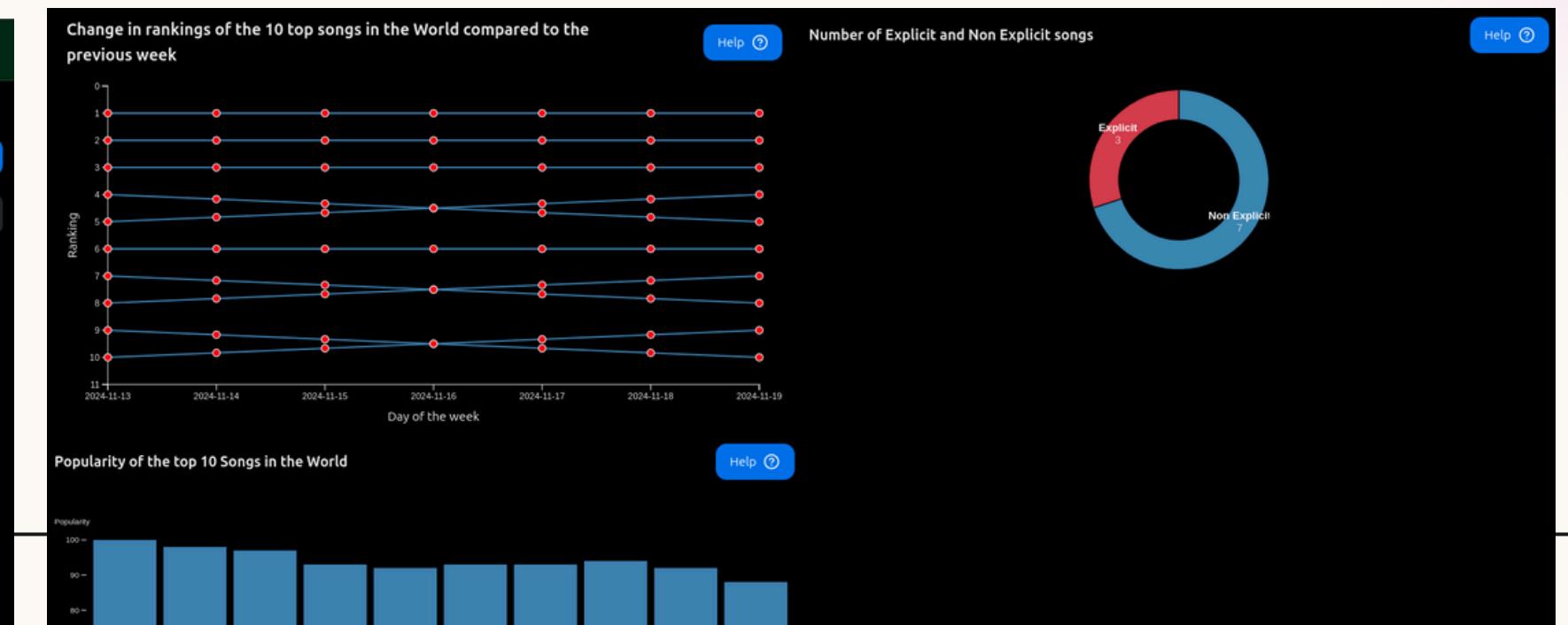
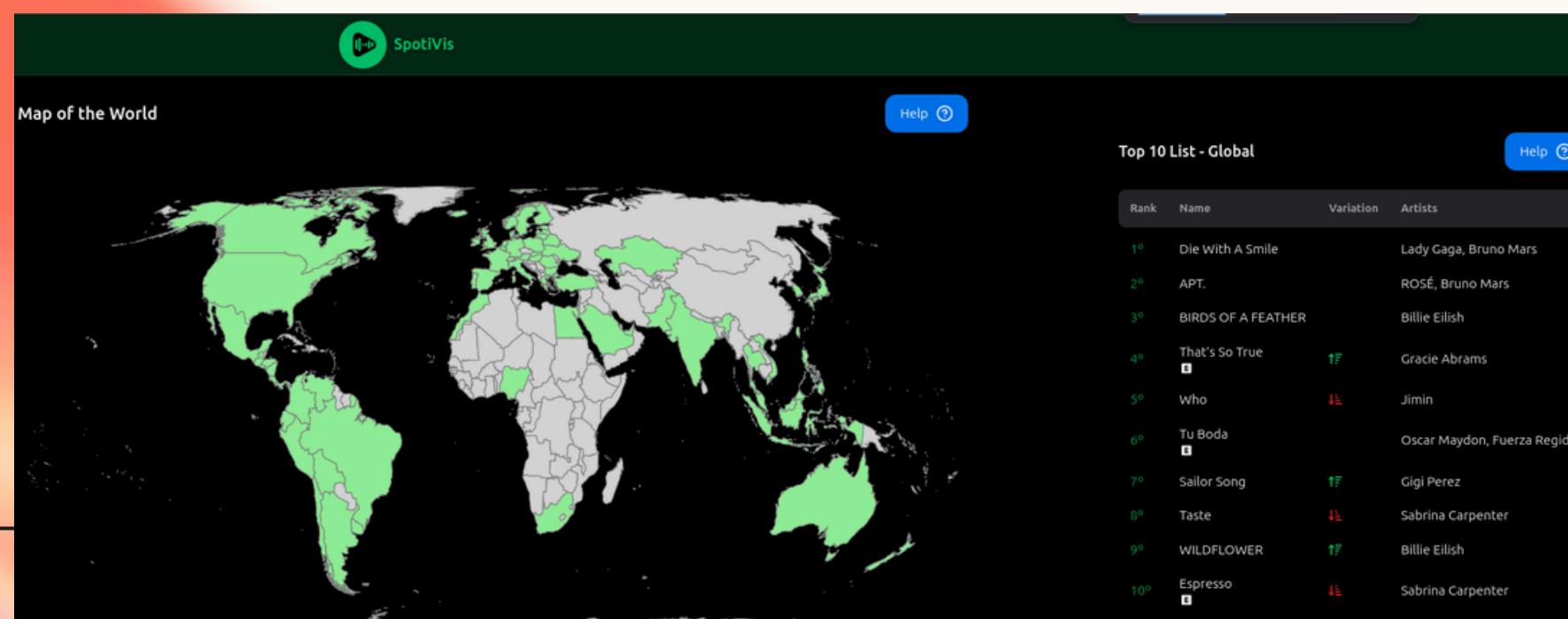
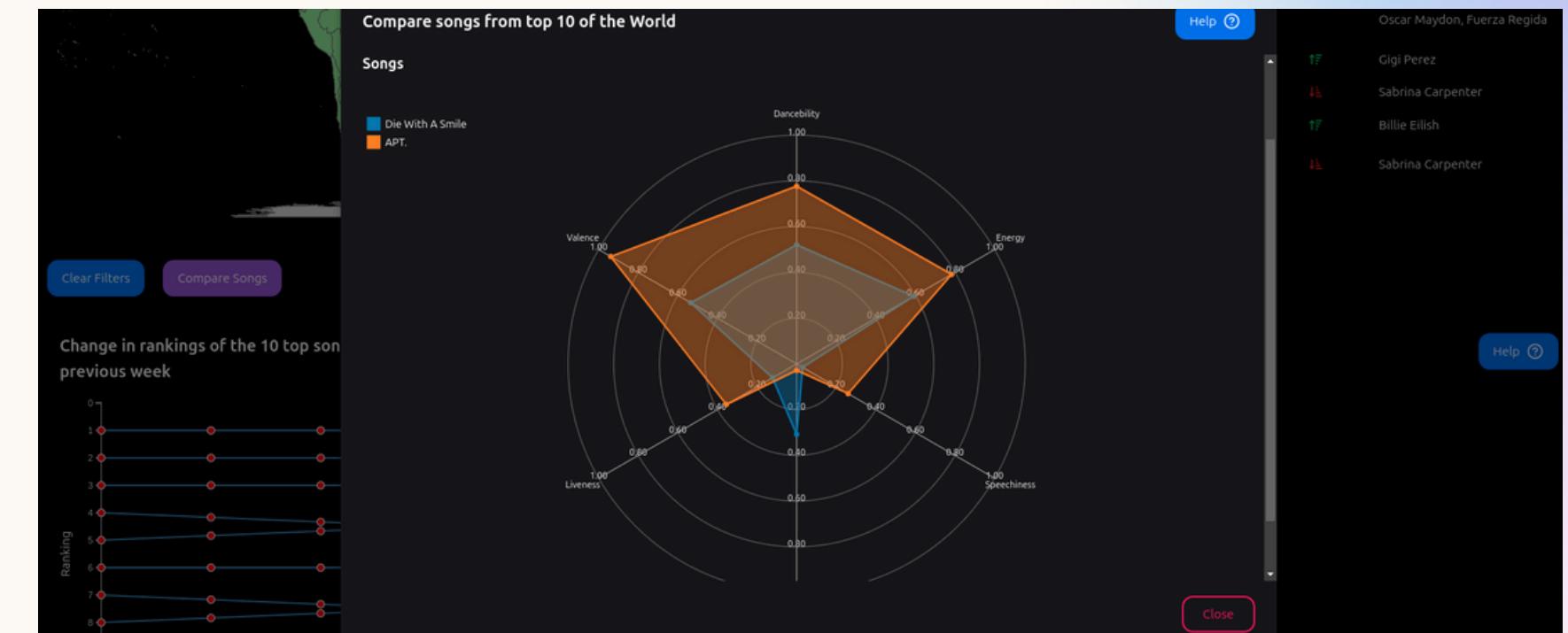


2nd Usability Evaluation - Improve Platform

2 participants

2 women with age between 20 - 22 years

5 tasks



Results

	Task 1	Task 2	Task 3	Task 4	Task 5
Participant 1	✓ 2 - 1min 43s	? 3 - 1min 55s	✓ 2 - 1min 36s	✓ 1 - 33s	✓ 1 - 1min 30s
Participant 2	✓ 1 - 1min 35s	? 2 - 1min 9s	✓ 2 - 1min 28s	✓ 1 - 27s	✓ 3 - 1min 3s

?

Completed task without help

✓

Completed task with help

— - min — s

Difficulty of the task Time taken

Future Work and Conclusion

- Improve the Line Chart with the change in rankings;
- Add support to multiple languages;
- Add animations;
- Add more filtering options.



Thanks

Does anyone have any questions?

