Graph Databases A.Y. 2024-2025

Task 1 – Domain and data selection

Master Degree in Computer Engineering

Deadline: 25 October, 2025

Group Acronym	MELODY	
Github	`https://github.com/ludovicodimartino/MELODY`	
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1 Description, domain and challenges

The goal of our project is to create a graph database containing information about the most popular weekly songs from 1962 to 2018. Therefore, the domain of our project is the songs and the evolution of their characteristics and genres over time. Furthermore, we aim to explore any correlation between Grammy-winning songs and albums and those that appear on the Top 100 charts. To achieve this, we began by gathering several datasets that will be used to populate our database:

- **Grammy dataset**: contains all the Grammy Awards and categories from 1959 to 2019.
- **MusicOSet dataset**: This dataset, compiled using the Spotify API in 2019 along with other methods described in [SRM19], provides valuable information about songs, albums, and artists featured in the Billboard Top 100. For each song, the dataset includes attributes such as key, liveness, loudness, tempo, and more. For artists, it provides data on their followers, genres, and popularity. Regarding albums, the dataset contains information on the album's name, the total number of tracks, and the relationships between the album, artist(s), and the songs it includes.

Finally, we would like to find out some interesting insights about the number of featurings over time and the changing popularity of specific Grammy categories.

2 Dataset URLs

- **Grammy dataset**: `https://www.kaggle.com/code/rajnaruka0698/the-grammy-arwards-analysis/input`
- **MusicOSet dataset**: `https://marianaossilva.github.io/DSW2019/#tables`

References

[SRM19] Mariana O Silva, Laıs M Rocha, and Mirella M Moro. "MusicOSet: An enhanced open dataset for music data mining". In: *XXXII Simpósio Brasileiro de Banco de Dados: Dataset Showcase Workshop, SBBD*. 2019, pp. 8–17.