

PYTHON PROJECT REPORT

Spotify analysis



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Introduction

This project is based on an interesting Spotify dataset we found on the page www.kaggle.com provided by the professor. This dataset was released two months ago, and it comes from the Spotify package. The access to the database is [here](#).

Based on all the knowledge that we learned this semester, we focus our analysis in creating different comparisons in the data, regarding genre, artist, songs, energy, danceability, popularity and others that this database provides, to give to the user some recommendations, analysis, graphs and relevant information to help them take the best songs to listen to.

The main problem that we found as daily users of Spotify, is when we have too many options on the app and we do not know what playlist to choose or what songs to pick, as a result, sometimes users are bored and always end up listening to the same genre or artist. For this reason, we focus our work on providing to the user's information to consider at the time to listen to music in the Spotify app.

Libraries/Modules used on this project include:

- pandas
- openpyxl
- pyinputplus
- openpyxl.chart
- matplotlib.pyplot
- os
- xlwings
- docx
- random
- subprocess
- openpyxl.styles
- datetime
- time

Description

The code that we build will show to the user a welcome message and then a principal menu with six options:

1. Summary
2. Top 10 most popular songs Report
3. Top 10 most danceable songs Report
4. Top 10 most popular songs of each decade Report
5. Top 10 Artists Report
6. Top 10 workout Songs Report
7. Top genres Report
8. Exit

Our code will display a report for any option that the user chooses and implement graphics in it. We believe that in addition to creating a file and new table with the data, a chart will increase the view and experience of the user. For this functionality we decided to work with a worksheet to create a general report to show the user what the data is about and its content in the introduction function. Then, top ten most popular songs, top ten most danceable songs, Top 10 most popular songs of each decade Report, top ten artists, top ten workout songs, top genres report we use excel sheet and its library to analyze the data.

Finally, we believe that the implementation that we provided will help users make better decisions, to have a general view according to the trend and popularity that the data shows, and at the end, they can follow our recommendations to workout and danceability songs and suggest top ten songs.

Group Members

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