Chinook database analysis to organize an International charity music festival

Abstract:

A benefit concert   is a type of musical benefit performance for a charitable purpose, often directed at a specific and immediate humanitarian crisis.Nevertheless Charities were affected by the Corona epidemic had become Income is limited. Therefore, Charities will be provided with data to help them organizing useful charity events. What is the most popular musics, what is the most popular artists, and which Country has the most fans.
The benefits of our study are relevant for many aspects including getting powerful sponsorships. Also, ticket Sales Selling admission tickets is a great way to cover start-up costs and generate advance publicity for your festival fundraiser, and vendor Booths Charge vendors an exhibitor fee to sell their merchandise at festival.

Business objective:

Which country has the best fans? I would like to throw Music Festival .I write a query that returns the top 5 country that has the highest and sum of invoice totals and number of customers in each country.

What is the most popular musics?
I linked the information from the Customer, Invoice, InvoiceLine, Track, and Genre tables, to returns the top 5 popular musics based on the best seller.

what is the most popular artists?
I linked the information from the Artist, Album, Track, and Genre tables, to returns the top 5 artists   provided that it is "Rock" or "Latin" or "Metal" or "Alternative & Punk" or "Jazz".

Data:

In this project, I use SQL to extract data from a database to answer questions.The Chinook Database holds information about a music store. The database includes several tables on invoice information, track, album, artist and genre data, and employee and customer information related to the store's sales.
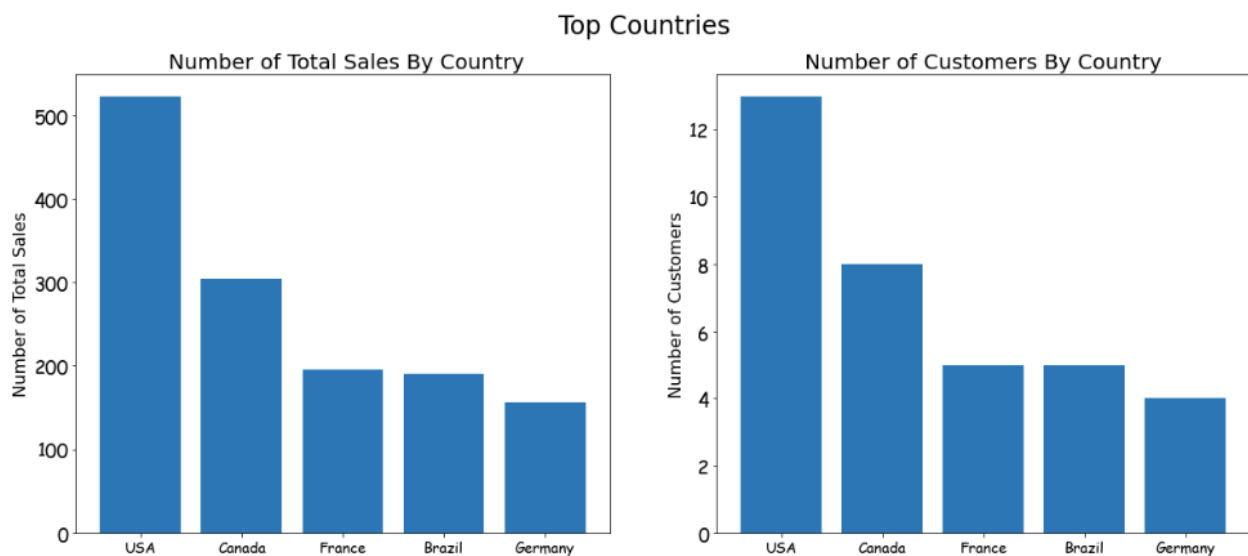
Data cleaning and Analysis:

First, querying from that database into Python (in jupyter notebook) . Then, exploratory data as a dataframe by using pandas library.Next, select the Table i need to help us extract the data analysis. I made sure all the data I needed was clean, with no duplicate rows, no missing values, and no errors
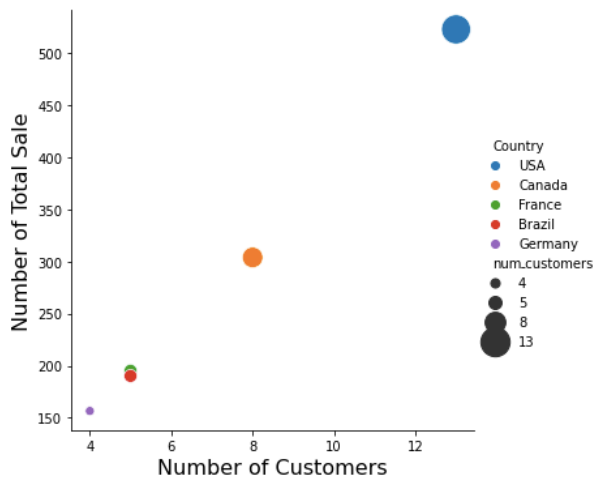
Finally, using visualization libraries matplotlib and seaborn, and use NumPy to do the analysis of the data easily.

Results:

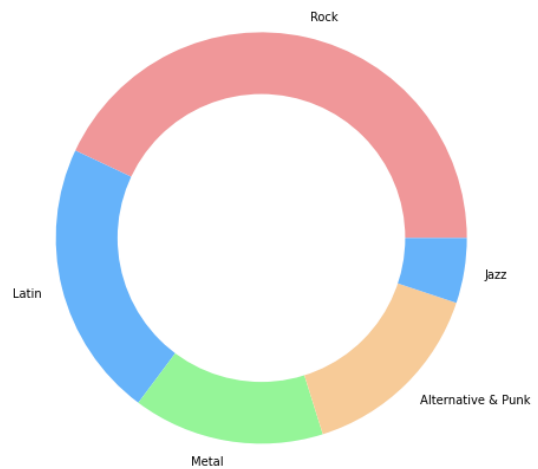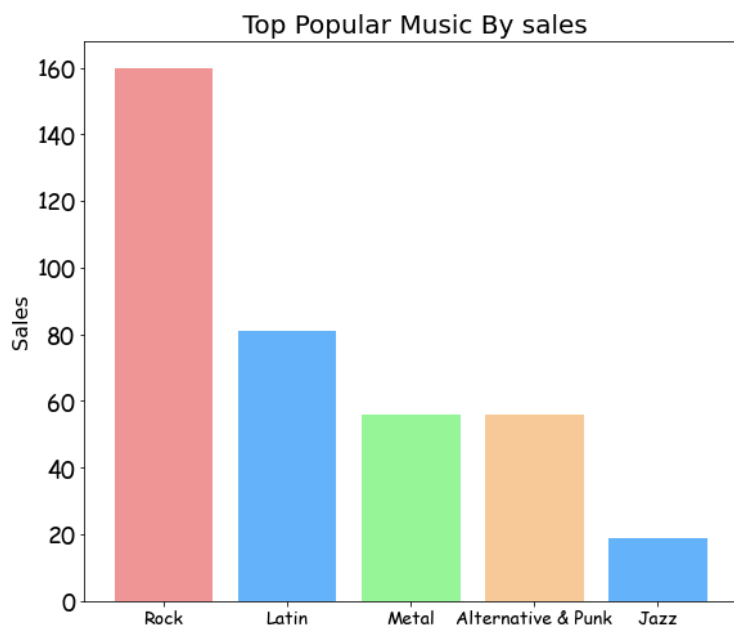- **Analyzing top countries by more customers and sales:**

    The USA in the top with 13 customers, next is Canada, France and Brazil and Germany.
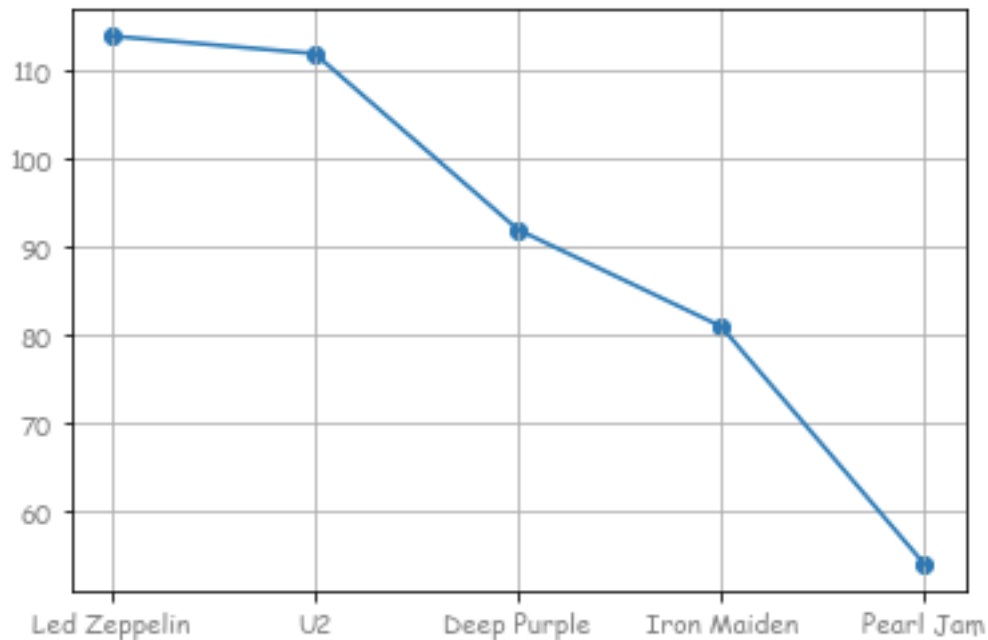
- Identifying Popular Music Genres:

The most popular genre sold is Rock where it reaches 160 of sales, next is Latin, Metal and Alternative and Punk and jazz. Then we can say that the top popular songs are rock music.

- Identifying Popular Artist by Top Music Genres

we can find the top five artists based on the five most popular music genres.

Recommendations:

- Looking at the previous data, it is preferable that the place of the festival be held in America, because it is the best in terms of sales and the most customers.

- The focus should also be a rock festival because it is the most popular and also because the top five artists are all rock singers.