

Project Phase 3

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Some minor changes made

- Rather than storing derived attributes, we made views corresponding to them.
- We changed some minor data types. For example, we changed the attribute creation date's data type in the relation Bands from type date to year.

Database Information

The database contains 28 songs, 9 albums, 9 creators, and 15 users initially.

Supported Queries

Projection/Retrieval

1. `Select all songs of given creator.` - Retrieves all songs created by a specified creator.
2. `Select all users which have more than threshold plays of given genre.` - Retrieves users who have played a genre more than a specified threshold.
3. `Select Users having more than threshold plays.` - Retrieves users with a play count greater than a specified threshold.
4. `Select creators with less than given views, but which have won an award.` - Retrieves creators with views below a certain threshold who have also won an award.
5. `Select creators with less than given views.` - Retrieves creators with views below a specified threshold.
6. `Select all users whose name starts with given string.` - Retrieves users whose names start with a specified string.
7. `Calculate number of plays for an album.` - Computes the total number of plays for a given album.
8. `Select songs with more than X plays.` - Retrieves songs with more than a specified number of plays.
9. `Print all creators which have won an award.` - Prints a list of creators who have won an award.
10. `Find users which have joined a platform between given dates.` - Retrieves users who joined the platform within a specified date range.
11. `List bands which user listened this month.` - Lists the bands that a user has listened to in the current month.
12. `Print all users.` - Prints a list of all users.
13. `Print all songs.` - Prints a list of all songs.
14. `Print all creators.` - Prints a list of all creators.
15. `Get all playlists created by given user.` - Retrieves all playlists created by a specified user.

Analytics

General Report

Since the amount of data available is not significant, the general report is not based on any particular year but takes into account all the years.

Most Popular Song	Most Popular Artist	Most Popular Genre	Most Listened Album	Most Prestigious Artist	Most Prestigious Band
Under The Floor	Lana Del Rey	soft rock	Norman Fucking Rockwell	Lana Del Rey	The Beatles

Figure 1: General Report uptill so far

User Report

For user analysis, we considered the user **suyashyo**. To analyze another user, a single change to `WHERE Name = ""` will have to be made with the desired user.

Number of songs listened this year	Favourite Creator	Favourite Genre
22	Johnny Goth	soft rock

Figure 2: User Report for **suyashyo**

Creator Report

For creator analysis, we considered the creator **Lana Del Rey**. To analyze another creator, a single change to `WHERE Name = ""` will have to be made with the desired creator.

Total Number of Streams	Total Number of Songs	Total Number of different genres covered
36	6	4

Figure 3: Creator Report for **Lana Del Rey**