# **Enchanted Ears**

Assignment 3: SQL





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## Background

EnchantedEars was founded in 2024 by Virag Szabo for educational purposes and her improvement in the Netherlands (Haarlem). She wanted to create something unique besides Netflix or Spotify and something that is not too complicated to build, but hard enough to create. The student is going to work hard in the upcoming weeks on this final assignment, following the steps from the subject. This student needs to make a positive contribution to the implementation of this music streaming system.

### **Assignment**

Create the following DML queries to extract important information from the database. Test data must be added to obtain information.

#### Add test data

For every table, create several DML queries that place several test values in the database. Make sure you have enough data to work with. To make things easy for yourself, you can use tools like "Mockaroo", that generate actual test data for you. Several situations must be retrievable; see component "information needs". Deliver the DDL queries in a .sql file with the file name: week3-1.sql.

#### Information needs

The data analysts at EnchantedEars are interested in the information that the data in the database provides. Pay attention to efficiency: JOINS and SUBQUERY'S, EXISTS(), and IN(), etc. Develop the following information needs as DML queries. Deliver the DDL queries in a .sql file with the file name: week3-2.sql.

#### Example

```
-- 0. Example: total number of users

SELECT COUNT(Id) AS 'Total number of users' FROM Users

GO
```



#### As A Data Analyst

- 1. How many EnchantedEars users there are?
- 2. How many EnchantedEars artists there are?
- 3. How many EnchantedEars subscriptions there are?
- 4. How many songs there are?
- 5. What the average user age is?
- 6. What the combined age of all users is?
- 7. How many different playlists there are in the database?
- 8. How many single subscriptions there are?
- 9. How many family subscriptions there are?
- 10. How many items there are that users still want to listen?
- 11. Which preferences I can set up as a user?
- 12. How many people have a subscription?
- 13. How many people are currently listening for free?
- 14. How many minutes users have listened in total?
- 15. How often Hungarian songs has been listened?
- 16. How often English songs has been listened to?
- 17. How often German songs has been listened to?
- 18. How often Dutch songs has been listened to?
- 19. Which users have listened to the song "Stenden"?
- 20. How many users prefer metal?
- 21. Which users have not yet listened to any songs?
- 22. How many euros are earned per month?
- 23. How many extra euros can be earned per month when all users who do not subscribe would take out a subscription?
- 24. Which users who do not have a single subscription have listened to Dutch songs?
- 25. What the percentage is that has been used to listen to German songs?
- 26. What the most listened-to genre is for each user, excluding Dutch?
- 27. What the most listened-to genre is for each user, excluding English?
- 28. What the most listened-to genre is for each user, excluding German?
- 29. What the most listened-to genre is for each user, excluding Hungarian?
- 30. Which of the following songs are listened to most on Valentine's Day?
- 31. Which of the following playlists are listened to most on Valentine's Day?
- 32. Return a list ordered by amount of listenings descending; Romantic, Pop, Rock, Classic, Movie and KPOP.