

Database Schema and Query Descriptions

UIBK - Music Streaming Service

Prof. Fedeli Massimo - IIS Fermi Sacconi Cpia

Schema Definition

The database contains the following relations:

- **Artist**(*ArtistId*, *Name*)
- **Album**(*AlbumId*, *Title*, *ArtistId*)
- **Track**(*TrackId*, *Name*, *AlbumId*, *GenreId*, *Milliseconds*, *Bytes*, *UnitPrice*)
- **PlaylistContent**(*PlaylistId*, *TrackId*)
- **Playlist**(*PlaylistId*, *Name*)
- **Genre**(*GenreId*, *Name*)
- **Invoice**(*InvoiceId*, *CustomerId*, *InvoiceDate*, *Total*)
- **InvoiceParts**(*InvoicePartId*, *InvoiceId*, *TrackId*, *UnitPrice*, *Quantity*)
- **Customer**(*CustomerId*, *FirstName*, *LastName*, *Address*, *City*, *Country*, *PostalCode*, *Email*)

Queries (Natural Language)

1. Find the name of all artists.
2. Find the title of all albums by the artist with ArtistId = 1.
3. Find the name of all tracks belonging to the "Rock" genre.
4. Find the name of all tracks included in the playlist with PlaylistId = 5.
5. Find the name of all customers who have purchased at least one track.
6. Find the full name (FirstName + LastName) of all customers residing in Italy.
7. Find the total number of tracks in the database.
8. Find the name of all playlists that contain tracks of the "Jazz" genre.
9. Find the name of all tracks that have been purchased at least once.
10. Find the average unit price of all tracks.
11. Find the name of all artists who have released at least one album.
12. Find the name of all tracks with a duration longer than 300,000 milliseconds.
13. Find the name of all customers who made a purchase on 2026-01-11.

14. Find the name of all tracks included in any playlist.
15. Find the name of all tracks that have never been purchased.
16. Find the name of all artists who have not released any album.
17. Find the name of all playlists containing more than 10 tracks.
18. Find the name of all tracks in the "Classical" genre with a unit price lower than 1.00.
19. Find the name of all customers who have spent more than 10 euros in total.
20. Find the name of all tracks that belong to albums by Italian artists (assuming an artist is Italian if their name contains "Italy"—for example only).
21. Find the name of all tracks purchased by customers residing in Vienna.
22. Find the name of all playlists that contain tracks from more than one genre.
23. Find the name of all tracks that appear in at least two different playlists.
24. Find the name of all customers who have purchased tracks from every genre present in the database.
25. Find the name of all tracks that have never been included in any playlist.