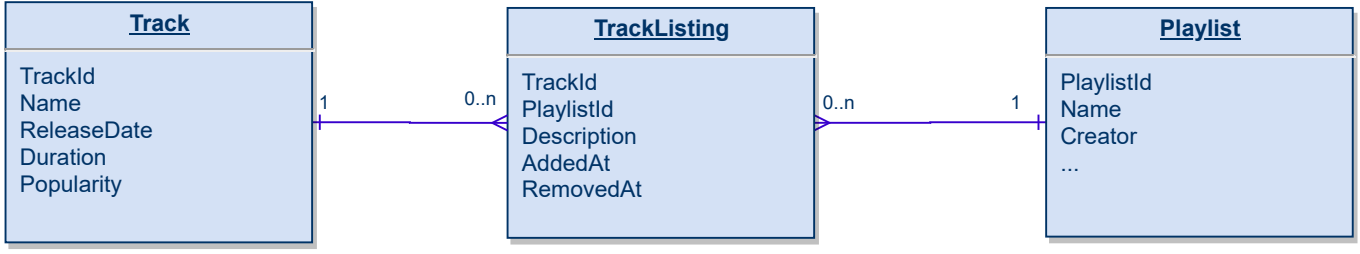

As there is an existing many-to-many relationship between Tracks and Playlists, TrackListing acts as a junction/join table. This way, the many-to-many is replaced by two one-to-many relationships. Each record in the join table contains a foreign key to both tables, Track and Playlist, referencing their primary keys (IDs).
The join table can be queried for the two questions

- What tracks have been in a playlist during a specific time period.
- In which playlists a given track has been and during what periods of time.

and additional data can always be joined in case it is needed (e.g. name of a track, or creator of a playlist).

```
SELECT TrackId
FROM TrackListing
WHERE PlaylistID = 'xyz'
AND AddedAt > '2020-08-08'
AND (RemovedAt < '2020-08-10'
OR RemovedAt IS NULL)
```

Returns all trackIds that where assigned to playlist 'xyz' on 2020-08-09. RemovedAt could be defaulted to a date in the future, to be able to remove the additional OR statement.

```
SELECT *
FROM TrackListing
WHERE TrackID = 'xyz'
```

Returns all assignments of the track with trackId= 'xyz'.