# Ghent University - TELIN - DDCM 2021-2022

# SQL: Relational schemas

Below, you will find the relational database schemas of the radio and the rollsrobin databases. In these schemas, each relation is presented by a rectangle including the name of the relation as well as a list of all attributes and their corresponding datatypes. Besides that, all attributes which are part of the primary key (PK) are listed at the top of each rectangle and foreign keys (FK) are presented with an arrow that points from the attributes belonging to the foreign key to the attributes to which they refer. Additionally to the schema, all remaining constraints (optionality, CHECK-constraints,...) are listed.

#### 1 radio

The relational schema of the radio database can be found in Figure 1. This database describes the playlists of a radio station and contains the schema of the programs of the radio station, a list of songs that are in the catalogue as well as a registration of all the songs that were played.

#### Additional constraints:

- album
  - optional: year
- artist
  - optional: type
- radioprogram

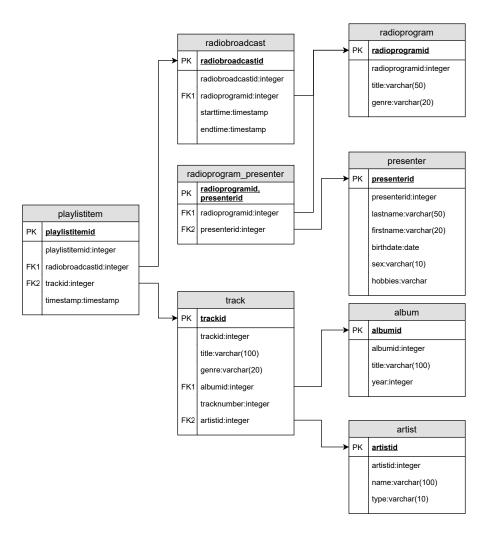


Figure 1: Relational schema of the radio database.

- UNIQUE: title

• track

- optional: tracknumber

## 2 rollsrobin

The relational schema of the rollsrobin database can be found in Figure 2. This database contains data related to rental cars of different branches of the Rolls Robin company, registrations of the rental cars and contracts of the employees working for the companies.

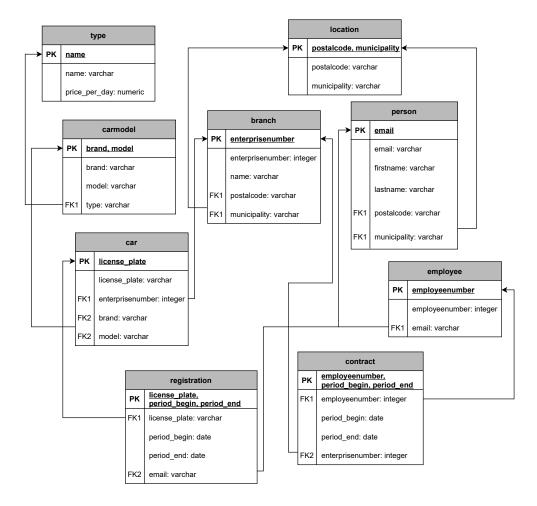


Figure 2: Relational schema of the rollsrobin database.

## Additional constraints:

- contract
  - CHECK: periode begin ≤ periode end
- registration
  - CHECK:  $periode_begin ≤ periode_end$
- type
  - CHECK:  $price_per_day > 0$