

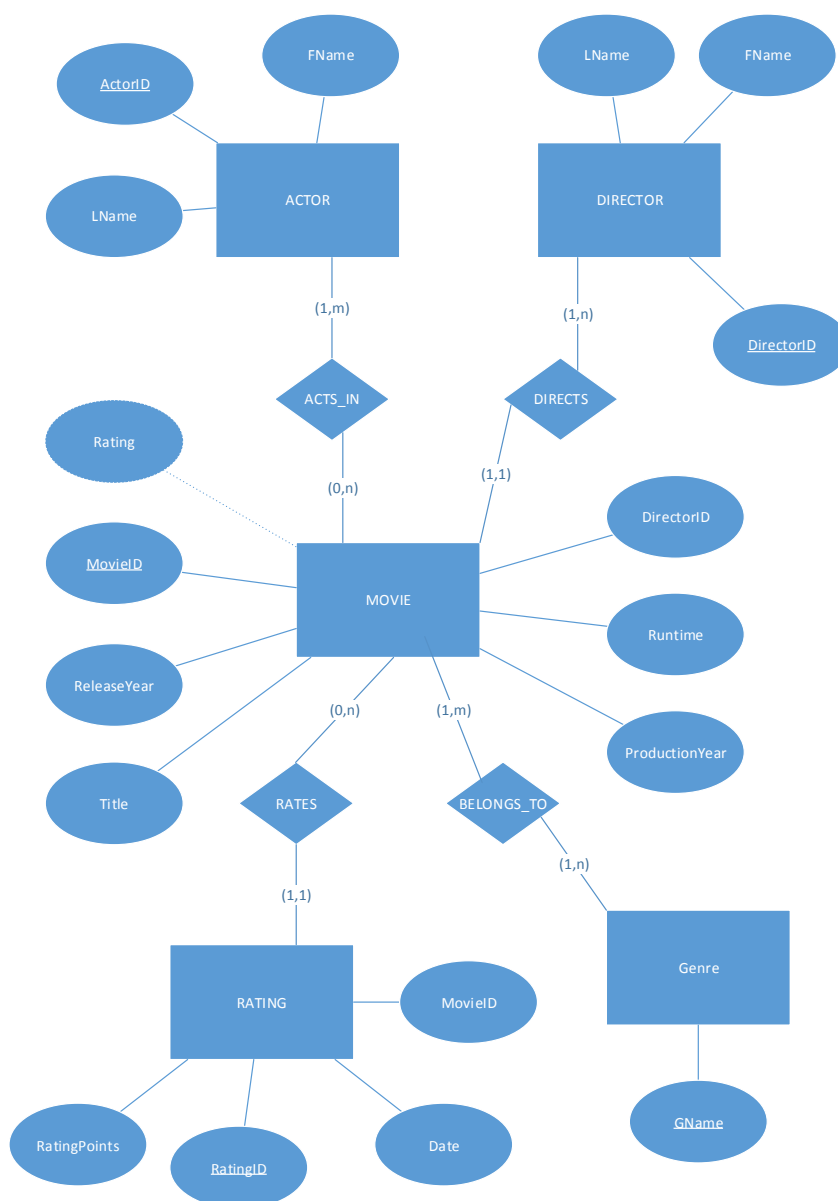
Dokumentation zum Datenbankprojekt

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Iteration 1: Modellierung

1. Entity-Relationship-Modell



2. Relationales Modell

MOVIE (Title: varchar(255); MovieID: int8; ReleaseYear: interval YEAR; ProductionYear: interval YEAR; Runtime: int4; DirectorID: int8; Rating: float4)

ACTOR (ActorID: int8; FName: varchar(255); LName: varchar(255))

DIRECTOR (DirectorID: int8; FName: varchar(255); LName: varchar(255))

RATING (RatingID: int8; Date: date; RatingPoints: int4; MovieID: int8)

GENRE (GName: varchar(255))

ACTS_IN (MovieID: int8; ActorID: int8)

BELONGS_TO (GName: varchar(255); MovieID: int8)

3. CREATE-Statements

```
CREATE TABLE MOVIE
( Title                                varchar(255) NOT NULL,
  MovieID                             int8 NOT NULL,
  ReleaseYear                         interval YEAR,
  ProductionYear                      interval YEAR,
  Runtime                             int4 ,
  DirectorID                          int8 NOT NULL,
  Rating                             float4 ,
PRIMARY KEY (MovieID) ,
FOREIGN KEY (DirectorID) REFERENCES DIRECTOR (DirectorID)
);
```

```
CREATE TABLE ACTOR
( ActorID                             int8 NOT NULL,
  FName                               varchar(255) ,
  LName                               varchar(255) ,
PRIMARY KEY (ActorID)
);
```

```
CREATE TABLE DIRECTOR
( DirectorID                          int8 NOT NULL,
  FName                               varchar(255) ,
  LName                               varchar(255) ,
PRIMARY KEY (DirectorID)
);
```

```
CREATE TABLE RATING
( RatingID                            int8 NOT NULL,
  Date                               date ,
  RatingPoints                        int4 ,
  MovieID                            int8 NOT NULL,
PRIMARY KEY (RatingID) ,
FOREIGN KEY (MovieID) REFERENCES MOVIE (MovieID)
```

);

```
CREATE TABLE GENRE
(GName                                varchar(255) NOT NULL,
PRIMARY KEY (GName)
);
```

```
CREATE TABLE ACTS_IN
(MovieID                             int8 NOT NULL,
ActorID                             int8 NOT NULL,
PRIMARY KEY (MovieID, ActorID),
FOREIGN KEY (MovieID) REFERENCES MOVIE(MovieID),
FOREIGN KEY (ActorID) REFERENCES ACTOR (ActorID)
);
```

```
CREATE TABLE BELONGS_TO
(GName                                varchar(255) NOT NULL,
MovieID                             int8 NOT NULL,
PRIMARY KEY (GName, MovieID),
FOREIGN KEY (GName) REFERENCES GENRE (GName),
FOREIGN KEY (MovieID) REFERENCES MOVIE (MovieID)
);
```