

1 Database

Note: The original movies and series dataset contains the id's with the format `tt#####`, since all the id's contains the "tt" string at the start, in this dummy system, for sake of simplicity we will omit that and assume the id is only the numerical characters in the string, hence the id's for some tables is no AutoIncremental. Also, no indexes or partitions will be created for the same reason.

Conventions

- **Naming Conventions:**
 - *Tables:* All tables are named as follows `TableName.Role` where `TableName` is PascalCase and `Role` can take one of the following values Catalog, Master or Detail depending on the kind of data and relationships the table has.
 - *Columns:* All columns are named as follows `column_name[_id]` where `column_name` is snake_case and `_id` is included just in case the column is either a Primary Key or a Foreign Key.
- **Acronyms and abbreviations.** Let it be understood by:
 - *PK:* Primary Key
 - *NN:* Not Null
 - *I:* Index
 - *UQ:* Unique
 - *AI:* Auto incremental
 - *UN:* Unsigned
 - *D:* Default
- **FK column** The FK column contains the following information, in that order and style:
`Table name.Referenced column in the table`

System CRUD operations

- INSERT: NOT ALLOWED (only AND only when inserting all the data)
- DELETE: NOT ALLOWED
- SELECT: ALLOWED, on any table at any time
- UPDATE: ALLOWED, just when updating movie or episode rating (and the corresponding cascade updates such as updating serie or season rating)

1.1 Movie_Detail

Column	Data type	Value range	FK	D	PK	NN	I	UQ	AI	UN	Description
id	INT	default			✓	✓	✓	✓		✓	The ID of the movie
rating	DECIMAL(3,1)	0.0 - 10.0		5.0		✓					The rating of the movie
duration	SMALLINT	default		NULL						✓	The duration (in seconds) of the movie
year	SMALLINT	default				✓				✓	The year of the movie
name	VARCHAR(100)					✓					The name of the movie
cover	VARCHAR(255)			NULL							The file of the cover of the movie
date_inserted	TIMESTAMP					✓					The <i>CURRENT_TIMESTAMP</i> when inserted (default)

rating is Index 'cause we expect to query movies of certain rating, same goes for *duration* and *year*.
The default value of rating is just arbitrary and can be changed.
The default value of duration isn't arbitrary and SHOULD NOT be changed.

1.2 Genre_Catalog

Column	Data type	Value range	FK	D	PK	NN	I	UQ	AI	UN	Description
id	TINYINT	default			✓	✓	✓	✓	✓	✓	The ID of the genre
genre	VARCHAR(50)					✓		✓			The name of the genre (e.g. horror)

1.3 Serie_Detail

Column	Data type	Value range	FK	D	PK	NN	I	UQ	AI	UN	Description
id	INT	default			✓	✓	✓	✓		✓	The ID of the serie
year_start	SMALLINT	default				✓				✓	The year the tv serie started
year_end	SMALLINT	default								✓	The year the tv serie ended, NULL if it hasn't ended yet
rating	DECIMAL(3,1)	0.0 - 10.0		5.0		✓					The overall (average) rating of the seasons in this serie
name	VARCHAR(100)					✓					The name of the serie
cover	VARCHAR(255)			NULL							The file of the cover of the serie
date_inserted	TIMESTAMP					✓					The <i>CURRENT_TIMESTAMP</i> when inserted (default)

1.4 Episode_Detail

Column	Data type	Value range	FK	D	PK	NN	I	UQ	AI	UN	Description
id	INT	default			✓	✓	✓	✓		✓	The ID of the episode
serie_id	INT	default	Serie_Detail.id			✓				✓	The id of the serie of that episode
n_episode	SMALLINT	default				✓				✓	The number of the episode in the season
n_season	SMALLINT	default				✓				✓	Number of the season, 0 is reserved for episodes with no season
rating	DECIMAL(3,1)	0.0 - 10.0		5.0		✓					The rating of the episode
duration	SMALLINT	default		NULL						✓	The duration (in seconds) of the episode
name	VARCHAR(100)					✓					The name of the episode
cover	VARCHAR(255)			NULL							The file of the cover of the episode
date_inserted	TIMESTAMP					✓					The <i>CURRENT_TIMESTAMP</i> when inserted (default)

rating is Index 'cause we expect to query episodes of certain rating, same goes for *duration*.
The default value of rating is just arbitrary and can be changed.
The default value of duration isn't arbitrary and SHOULD NOT be changed.

1.5 MovieGenres_Master

Column	Data type	Value range	FK	D	PK	NN	I	UQ	AI	UN	Description
movie_id	INT	default	Movie_Catalog.id			✓	✓			✓	The ID of the movie with certain genre
genre_id	TINYINT	default	Genre_Catalog.id			✓	✓			✓	Id of the genre of the movie

1.6 SerieGenres_Master

Column	Data type	Value range	FK	D	PK	NN	I	UQ	AI	UN	Description
serie_id	INT	default	Serie_Catalog.id			✓	✓			✓	The ID of the serie with certain genre
genre_id	TINYINT	default	Genre_Catalog.id			✓	✓			✓	Id of the genre of the serie

In the Figure 1 its shown the relational diagram for the database described above

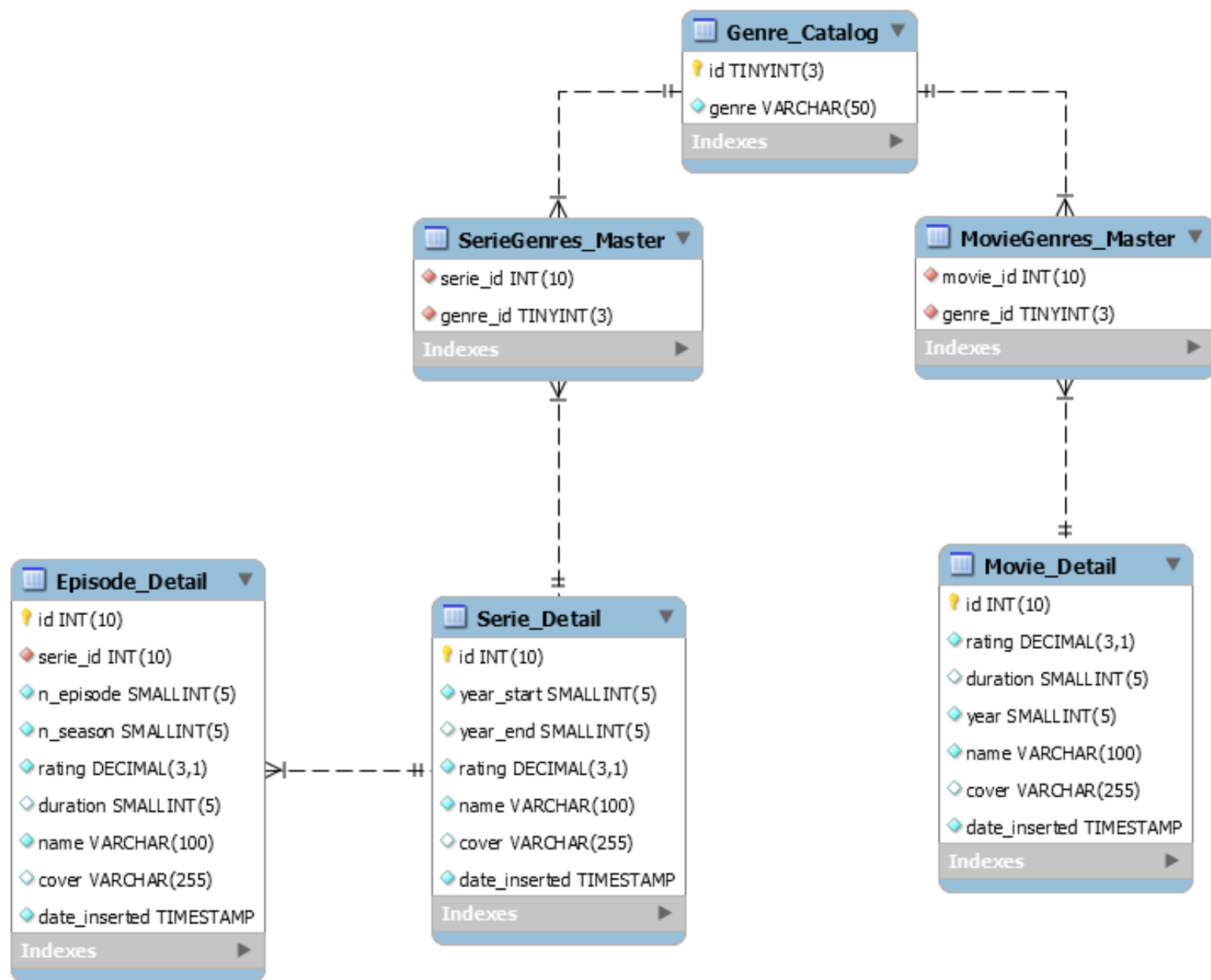


Figure 1: Database relational diagram