Data Dictionary

RockBuster Database

2022-2023
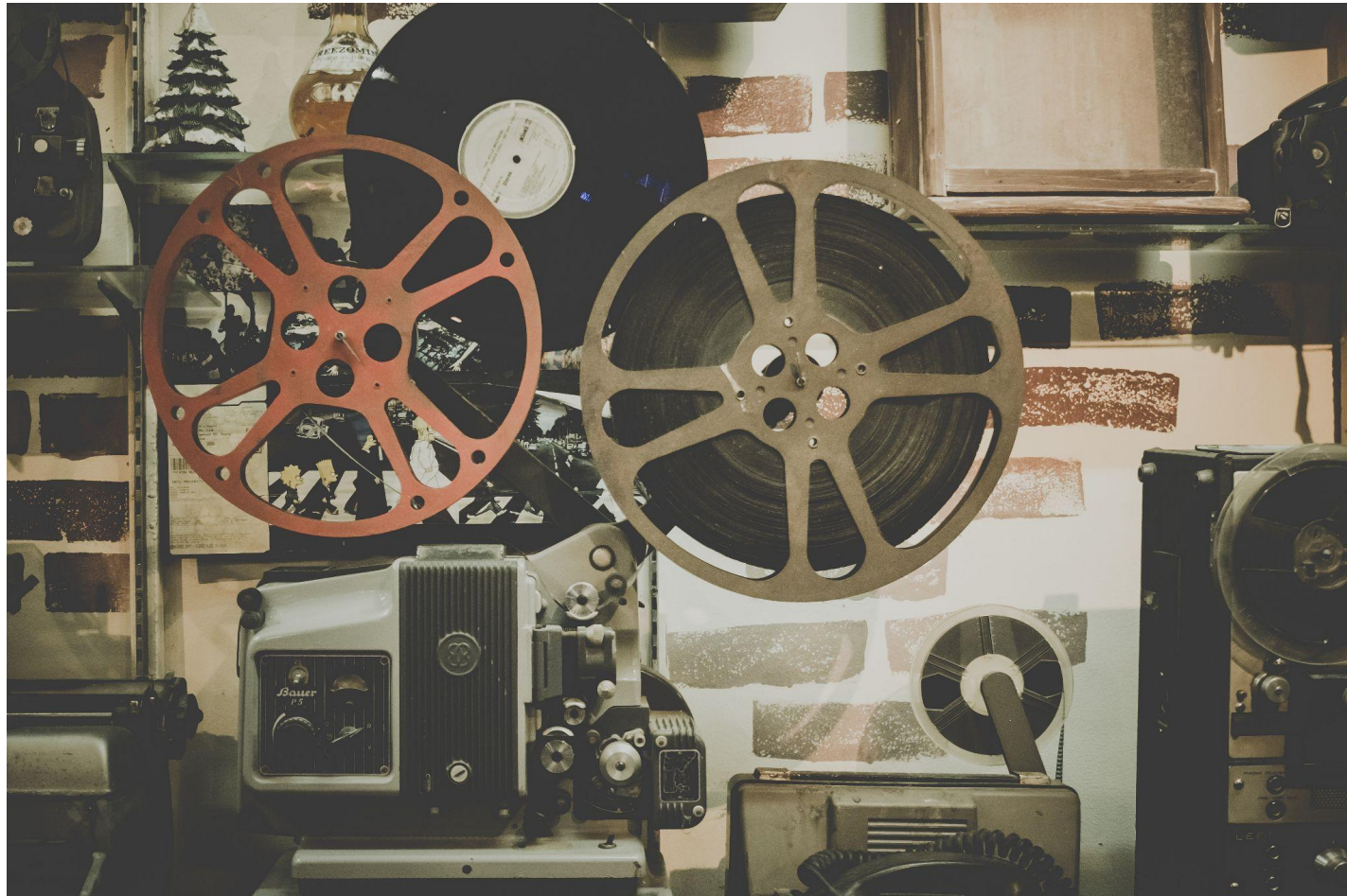
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Database Schema

film_actor

Column	Type
actor_id 🔑	SMALLINT
film_id 🔑	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

actor

Column	Type
actor_id 🔑	SERIAL
first_name	CHARACTER VARYING(45)
last_name	CHARACTER VARYING(45)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

inventory

Column	Type
inventory_id 🔑	SERIAL
film_id	SMALLINT
store_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

film

Column	Type
film_id 🔑	SERIAL
title	CHARACTER VARYING(255)
description	TEXT
release_year	year
language_id	SMALLINT
rental_duration	SMALLINT
rental_rate	NUMERIC(4,2)
length	SMALLINT
replacement_cost	NUMERIC(5,2)
rating	mpaa_rating
last_update	TIMESTAMP(6) WITHOUT TIME ZONE
special_features	TEXT[]
fulltext	TSVECTOR

language

Column	Type
language_id 🔑	SERIAL
name	CHARACTER(20)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

payment

Column	Type
payment_id 🔑	SERIAL
customer_id	SMALLINT
staff_id	SMALLINT
rental_id	INTEGER
amount	NUMERIC(5,2)
payment_date	TIMESTAMP(6) WITHOUT TIME ZONE

rental

Column	Type
rental_id 🔑	SERIAL
rental_date	TIMESTAMP(6) WITHOUT TIME ZONE
inventory_id	INTEGER
customer_id	SMALLINT
return_date	TIMESTAMP(6) WITHOUT TIME ZONE
staff_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

film_category

Column	Type
film_id 🔑	SMALLINT
category_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

category

Column	Type
category_id 🔑	SERIAL
name	CHARACTER VARYING(25)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

customer

Column	Type
customer_id 🔑	SERIAL
store_id	SMALLINT
first_name	CHARACTER VARYING(45)
last_name	CHARACTER VARYING(45)
email	CHARACTER VARYING(50)
address_id	SMALLINT
activebool	BOOLEAN
create_date	DATE
last_update	TIMESTAMP(6) WITHOUT TIME ZONE
active	INTEGER

staff

Column	Type
staff_id 🔑	SERIAL
first_name	CHARACTER VARYING(45)
last_name	CHARACTER VARYING(45)
address_id	SMALLINT
email	CHARACTER VARYING(50)
store_id	SMALLINT
active	BOOLEAN
username	CHARACTER VARYING(16)
password	CHARACTER VARYING(40)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE
picture	BYTEA

store

Column	Type
store_id 🔑	SERIAL
manager_staff_id	SMALLINT
address_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

address

Column	Type
address_id 🔑	SERIAL
address	CHARACTER VARYING(50)
address2	CHARACTER VARYING(50)
district	CHARACTER VARYING(20)
city_id	SMALLINT
postal_code	CHARACTER VARYING(10)
phone	CHARACTER VARYING(20)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

city

Column	Type
city_id 🔑	SERIAL
city	CHARACTER VARYING(50)
country_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

country

Column	Type
country_id 🔑	SERIAL
country	CHARACTER VARYING(50)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

Data Dictionary

The database has a snowflake schema because there table connections branching out in different directions from one table to the next without being connected to one central table as well.

Dimension Tables

Dimension Tables		
film_actor		
actor_id	smallint	A primary key to uniquely identify actors
film_id	smallint	A primary key to uniquely identify films
last_update	timestamp	When each entry on the table was last updated
inventory		
inventory_id	serial	A primary key to support the identification of rows in this table
film_id	smallint	A foreign key to uniquely identify films and connect to other tables
store_id	smallint	A record about the store each film can be found in
last_update	timestamp	When each entry on the table was last updated
film_category		

film_id	smallint	A primary key to uniquely identify films
category_id	smallint	A primary key to identify the category of each film
last_update	timestamp	When each entry on the table was last updated
payment		
payment_id	serial	A primary key identifying each unique record in the table
customer_id	smalint	A foreign key connecting the table to information about the customer completing the payment
staff_id	smalint	A foreign key connecting the table to information about the staff member involved in the payment
rental_id	integer	A foreign key connecting information about payment to the relevant rental even in the fact table
amount	numeric(5,2)	Amount of payment for each rental
payment _date	timestamp	When the payment was processed
store		
store_id	serial	A primary key identifying each unique record in the table
manager_staff_id	smallint	A foreign key that I cannot find which table it connects to
address_id	smallint	A foreign key that connects to information regarding the staff
last_update	timestamp	When each entry on the table was last updated
customer		
customer_id	serial	A primary key identifying each unique record in the table

store_id	smallint	A foreign key connecting to information about the store
first_name	Character varying (45)	The first name of the customer
last_name	Character varying (45)	The last name of the customer
email	Character varying (50)	The email address of the customer
address_id	smallint	The store' address (where the rental event took place)
activebool	boolean	Whether the customer is currently active
create_date	date	When the customer signed up to Rockbuster
last_update	timestamp	When each entry on the table was last updated
active	integer	Record on customer's activity
staff		
staff_id	serial	A primary key identifying each unique record in the table
first_name	Character varying (45)	The first name of the staff member
last_name	Character varying (45)	The last name of the staff member
address_id	smallint	A foreign key that shows the address of the store the rental event took place
email	Character varying (50)	The staff member's email address
store_id	smallint	Which store the rental event took place
active	boolean	Whether the staff member is still active
username	Character varying (16)	Login details for staff member

password	Character varying (40)	Login details for staff member
last_update	timestamp	When each entry on the table was last updated
picture	BYTEA	Picture of the staff member
actor		
actor_id	serial	A primary key identifying each unique record in the table
first_name	Character varying (45)	The first name of the actor
last_name	Character varying (45)	The last name of the actor
last_update	timestamp	When each entry on the table was last updated
film		
film_id	serial	A primary key identifying each unique record in the table
title	Character varying (255)	Film's title
description	text	Film's description
release_year	year	Film's release year
language_id	smallint	A foreign key relating to the table about the film's language
rental_duration	smallint	How long the film has been rented for (I presume cumulatively by all customers who have rented the film)
rental _rate	numeric(4,2)	Film's rental rate
length	smallint	Film's length
replacement _cost	Numeric (5,2)	The cost of any replacements bought due to unreturned films

Rating	mpaa_rating	Film's rating
last_update	timestamp	When each entry on the table was last updated
special_features	text	Film's special features - if any
fulltext	tsvector	Full description of the film
category		
category_id	serial	A primary key identifying each unique record in the table
Name	Character varying(25)	Film's category name
last_update	timestamp	When each entry on the table was last updated
address		
address_id	serial	A primary key identifying each unique record in the table
address	Character varying (50)	first line of store's address
address2	Character varying (50)	Second line of store's address
district	Character varying (20)	District the store is located
city_id	smallint	ID of the city the store is located connecting to the city table
Postal code	Character varying (10)	Store's postcode
phone	Character varying (20)	Store's phone number
last_update	timestamp	When each entry on the table was last updated
language		

language_id	serial	A primary key identifying each unique record in the table
name	character(20)	Language for each film
last_update	timestamp	When each entry on the table was last updated
city		
city_id	serial	A primary key identifying each unique record in the table
city	Character varying (50)	City the store is located
country_id	smallint	ID of the country the store in located
last_update	timestamp	When each entry on the table was last updated
country		
country_id	serial	A foreign key identifying each unique record in the table
county	Character varying (50)	Country the store is located in
last_update	timestamp	When each entry on the table was last updated

Fact Table

Fact Table		
rental		
rental_id	serial	A primary key that helps identify each rental event in the table
rental _date	timestamp	When the rental took place

inventory_id	integer	A foreign key that connects rentals to information regarding in which store the rental took place
customer_id	smallint	A foreign key that connects the rental event to information about the customer that were involved in each event
return_date	timestamp	When the movie was return by the customer - allows to compute key descriptive statistics about duration of rental events
staff_id	smallint	A foreign key that connects the rental event to information about the staff member involved in each event
last_update	timestamp	When each entry on the table was last updated