Online Video Rental Company

Rockbuster Stealth LLC

Renu Balaji
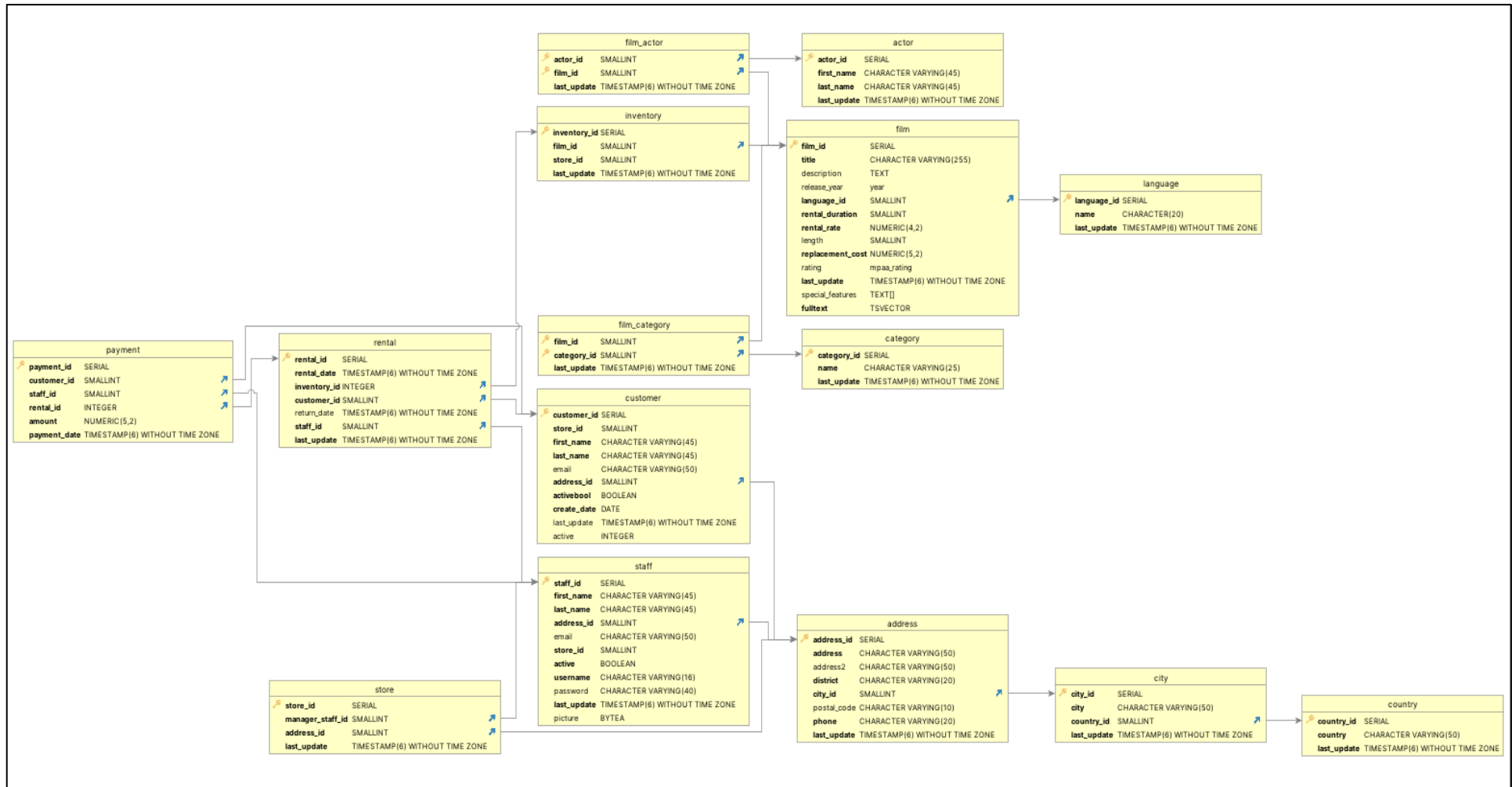
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EXERCISE 3.10

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1. ENTITY RELATIONSHIP DIAGRAM

DATA DICTIONARY:

2. DIMENSION TABLES

2.1 ACTORS

COLUMNS	DATA TYPE	DESCRIPTION
actor_id	[PK] integer	Primary key, identifies unique ids for every actor
first_name	character varying (45)	Name of the actor maximum 45 characters
last_name	character varying (45)	Name of the actor maximum 45 characters
last_update	timestamp without time zone	Date when the record was updated the last time

2.2. ADDRESS

COLUMNS	DATA TYPE	DESCRIPTION
address_id	[PK] integer	Primary key, identifies unique ids for every address
address	character varying (50)	Primary address
address2	character varying (50)	Any address that can be used as a secondary address
district	character varying (20)	District where the address lies in
city_id	[FK] smallint	Foreign key, unique identifier linking address to the city
postal_code	character varying (10)	Postal code of address max. 10 characters
phone	character varying (20)	Phone number
last_update	timestamp without time zone	Date when the record was updated the last time

2.3. CATEGORY

COLUMNS	DATA TYPE	DESCRIPTION
category_id	[PK] integer	Primary key, identifies unique ids for every category

name	character varying (25)	Name of the category/genre
last_update	timestamp without time zone	Date when the record was updated the last time

2.4. CITY

COLUMNS	DATA TYPE	DESCRIPTION
city_id	[PK] integer	Primary key, identifies unique ids for every city
city	character varying (50)	Name of the city
country_id	[FK] smallint	Foreign key, unique identifier linking city to the country
last_update	timestamp without time zone	Date when the record was updated the last time

2.5. COUNTRY

COLUMNS	DATA TYPE	DESCRIPTION
country_id	[PK] integer	Primary key, identifies unique ids for every country
country	character varying (50)	Name of the country
last_update	timestamp without time zone	Date when the record was updated the last time

2.6. CUSTOMER

COLUMNS	DATA TYPE	DESCRIPTION
customer_id	[PK] integer	Primary key, identifies unique ids for every customer
store_id	[FK] smallint	Foreign key, unique identifier linking customer to the store
first_name	character varying (45)	First name of the customer
last_name	character varying (45)	Last name of the customer
email	character varying (50)	Email id of the customer
address_id	[FK] smallint	Foreign key, unique identifier linking address to the customer

activebool	boolean	True or False to indicate customer's account status
create_date	date	Date of creation of the item
last_update	timestamp without time zone	Date when the record was updated the last time
active	integer	Indicates whether a customer is active or not

2.7. FILM

COLUMNS	DATA TYPE	DESCRIPTION
film_id	[PK] integer	Primary key, identifies unique ids for every film
title	character varying (255)	Title of the movie
description	text	Description of the movie
release_year	integer	Year of the release of the film
language_id	[FK] smallint	Foreign key, unique identifier linking film to the language
rental_duration	smallint	Small integer indicating number of days the film was rented for
rental_rate	numeric (4,2)	Rating of the movie in decimal upto 2 places and 4 digits
length	smallint	Small integer indicating length of the film in minutes
replacement_cost	numeric (5,2)	Cost incase a customer damages or loses the film
rating	mpaa_rating	Movie rating introduced by the film association
last_update	timestamp without time zone	Date when the record was updated the last time
special_features	text	Any extra features of videos present in the film
fulltext	tsvector	Text-searchable data where we can use a word as an index

2.8. FILM ACTOR

COLUMNS	DATA TYPE	DESCRIPTION
actor_id	[FK] smallint	Foreign key connecting linked to Actor table.
film_id	[FK] smallint	Foreign key connecting linked to Film table.
last_update	timestamp without time zone	Date when the record was updated the last time

2.9. FILM CATEGORY

COLUMNS	DATA TYPE	DESCRIPTION
film_id	[FK] smallint	Foreign key connecting linked to Film table.
category_id	[FK] smallint	Foreign key connecting linked to Category table.
last_update	timestamp without time zone	Date when the record was updated the last time

2.10. LANGUAGE

COLUMNS	DATA TYPE	DESCRIPTION
language_id	[PK] integer	Primary key, unique number used to identify the language in this database
name	character	Name of the language
last_update	timestamp without time zone	Date when the record was updated the last time

2.11. STAFF

COLUMNS	DATA TYPE	DESCRIPTION
staff_id	[PK] integer	Primary key, unique number used to identify the staff in this database
first_name	character varying (45)	First name of the staff
last_name	character varying (45)	Last name of the staff
address_id	[FK] smallint	Foreign key, unique number used to identify the address in this database.

email	character varying (50)	Email ids of the staff
store_id	[FK] smallint	Foreign key, unique number used to identify the store in this database.
active	boolean	True/False indicates if the staff is present or not
username	character varying (16)	Username of staff
password	character varying (40)	Password of the staff
last_update	timestamp without time zone	Date when the record was updated the last time
picture	bytea	Employee's picture

2.12. STORE

COLUMNS	DATA TYPE	DESCRIPTION
store_id	[PK] integer	Primary key, unique number used to identify the store in this database
manager_staff_id	smallint	Foreign key, unique number used to identify the manager staff in this database.
address_id	smallint	Foreign key, unique number used to identify the address in this database.
last_update	timestamp without time zone	Date when the record was updated the last time

3. FACT TABLES

3.1. INVENTORY

COLUMNS	DATA TYPE	DESCRIPTION
inventory_id	[PK] smallint	Primary key, unique number used to identify the inventory in this database
film_id	[FK] smallint	Foreign key, unique number used to identify the film in this database. It links the inventory to the Film table.

COLUMNS	DATA TYPE	DESCRIPTION
store_id	[FK] smallint	Foreign key used to identify the store. Links the inventory table to the store table.
last_update	timestamp without time zone	Date when the record was updated the last time

3.2. PAYMENT

COLUMNS	DATA TYPE	DESCRIPTION
payment_id	[PK] integer	Primary key, unique number used to identify the payment in this database
customer_id	[FK] smallint	Foreign key, unique number used to identify the customer in this database.
staff_id	[FK] smallint	Foreign key, unique number used to identify the staff in this database.
rental_id	integer	Foreign key, unique number used to identify the rental in this database.
amount	numeric (5,2)	Cost of the film up to 5 digits and 2 decimal places
payment_date	timestamp without time zone	Date when the payment was updated the last time

3.3. RENTAL

COLUMNS	DATA TYPE	DESCRIPTION
rental_id	[PK] integer	Primary key, unique number used to identify the rental in this database
rental_date	timestamp without time zone	Date when the rental was updated the last time
inventory_id	integer	Foreign key, unique number used to identify the inventory in this database.
customer_id	[FK] smallint	Foreign key, unique number used to identify the customer in this database.
return_date	timestamp without time zone	Date when the return was updated the last time

staff_id	[FK] smallint	Foreign key, unique number used to identify the staff in this database.
last_update	timestamp without time zone	Date when the record was updated the last time