ROCKBUSTER DATA DICTIONARY

July 2022 Analysis

Abstract
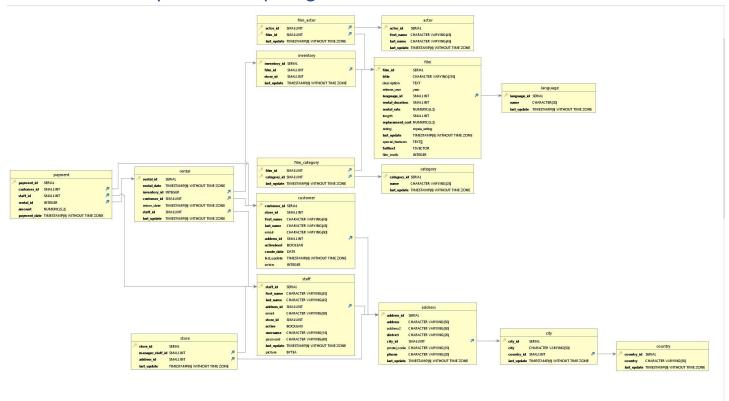
Data dictionary for online rental strategy planning insight analysis

Falguni Chaudhari

Contents

1. Entity Relationship Diagram

film_actor

actor_id	SMALLINT
film_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

actor

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

inventory

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

film

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
film_imdb	INTEGER

language

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

payment

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

rental

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

film_id	SMALLINT
category_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

category

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

customer

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

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

address

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

store

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

city

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

country

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

2. Fact Table
2.1   Rental Table

Column ID	Data type	Description	Key	Links to	Links From
Rental_id	SERIAL	Unique identifier for rental column	Primary		Payment
Rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date of rental			
Inventory_id	INTEGR	Unique identifier for the inventory	Foreign	Inventory	
Customer_id	SMALLINT	Unique identifier for the customer	Foreign	Customer	
Return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date rental returned		Staff	
Staff_id	SMALLINT	Unique identifier for the staff	Foreign		
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			

3. Dimension Tables
3.1   Payment

Column ID	Data type	Description	Key	Links to	Links From
Payment_id	SERIAL	Unique identifier for the payment	Primary		
Customer_id	SMALLINT	Unique identifier for the customer	Foreign		Customer
Staff_id	SMALLINT	Unique identifier for the staff	Foreign		Staff

Rental_id	INTEGR	Unique identifier for the rental	Foreign		Rental
Amount	Numeric	Amount paid			
Payment date	TIMESTAMP(6) WITHOUT TIME ZONE	Date of payment			

3.2   Store

Column ID	Data type	Description	Key	Links to	Links From
Store_id	SERIAL	Unique identifier for the store	Primary		
Manager_staff_id	SMALLINT	Unique identifier for the staff	Foreign	Staff	
Address_id	SMALLINT	Unique identifier for the address	Foreign	Address	
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			

3.3   Film_actor

Column ID	Data type	Description	Key	Links to	Links From
Actor_id	SMALLINT	Unique identifier for the actor	Primary,Foreign	Actor	

| Film_id | SMALLINT | Unique identifier for the film | Primary, Foreign | Film |
| **Last_update** | TIMESTAMP(6) WITHOUT TIME ZONE | Date of last entry update | | |

3.4 Inventory

Column ID	Data type	Description	Key	Links to	Links From
Inventory_id	SERIAL	Unique identifier for inventory	Primary		Rental
Film_id	SMALLINT	Unique identifier for the film	Foreign	Film	
Store_id	SMALLINT	Unique identifier for the store			
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			

3.5 Film_Category

Column ID	Data type	Description	Key	Links to	Links From
Film_id	SMALLINT	Unique identifier for the film	Primary, Foreign	Film	
Category_ID	SMALLINT	Unique identifier for the category	Primary, Foreign	Category	

Column ID	Data type	Description		
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update		

3.6   Customer

Column ID	Data type	Description	Key	Links to	Links From
Customer_id	serial	Unique identifier for the customer	Primary		Rental,Payment
Store_id	SMALLINT	Unique identifier for the store			
First_name	CHARACTER VARYING	Customer first name			
Last name	CHARACTER VARYING	Customer last name			
email	CHARACTER VARYING	Customer email			
Address_id	SMALLINT	Unique identifier for the address	Foreign	Address	
activebool	BOOLEAN	Customer active status			
create_date	DATE	Date entry created			
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			
Active	INTEGR	Customer active status			

3.7   Staff

Column ID	Data type	Description	Key	Links to	Links From
staff_id	SERIAL	Unique identifier for the staff	Primary		Payment,store,rental
First_name	CHARACTER VARYING	staff first name			
Last name	CHARACTER VARYING	staff last name			
Address_id	SMALLINT	Unique identifier for the address	Foreign	Address	
email	CHARACTER VARYING	STAFF email			
Store_id	SMALLINT	Unique identifier for the store			
active	BOOLEAN	STAFF active status			
USERNAME	CHARACTER VARYING	STAFF USERNAME			
PASSWORD	CHARACTER VARYING	STAFF PASSWORD			
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			
PICTURE	BYTEA	STAFF PICTURE			

3.8   Actor

Column ID	Data type	Description	Key	Links to	Links From
Actor_id	SERAL	Unique identifier for the actor	Primary		Film_actor
First_name	CHARACTER VARYING	ACTOR first name			
Last name	CHARACTER VARYING	ACTOR last name			
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			

3.9   Film

Column ID	Data type	Description	Key	Links to	Links From
Film_id	SERIAL	Unique identifier for the film	Primary		Film_category,film_actor, inventory
Title	CHARACTER VARYING	Title of film			
Description	CHARACTER VARYING	Movie description			
Release_year	Year	Year released			
Language_id	SMALLINT	Unique identifier for the language	Foreign	language	
Rental_duration	SMALLINT	TIME FILM WAS RENTED			
Rental_rate	NUMERIC(4,2)	COST OF RENTAL			
Length	SMALLINT	FILM LENGTH			
Replacement_cost	NUMERIC(5,2)	COST TO REPLACE			
Rating	mpaa_rating	RATING OF THE FILM			
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			
Special features	TEXT[]	Special features			
Fulltext	TSVECTOR	Film keyword identifier			

3.10 Category

Column ID	Data type	Description	Key	Links to	Links From
Category_ID	SERIAL	Unique identifier for the category	Primary		Film_category
Name	CHARACTER VARYING	GENRE			
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			

3.11 Address

Column ID	Data type	Description	Key	Links to	Links From
Address_id	SERIAL	Unique identifier for the address	Primary		Customer, staff, store
Address	CHARACTER VARYING	Main street addtess			
Address2	CHARACTER VARYING	Line 2 (apt etc)			
District	CHARACTER VARYING	District			
City_id	SMALLINT	Unique identifier for the city	Foreign	City	
Postal_code	CHARACTER VARYING	Zipcode			
phone	CHARACTER VARYING	phonenumber			
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			

3.12 Language

Column ID	Data type	Description	Key	Links to	Links From
Language_id	serial	Unique identifier for the language	Primary		Film
Name	CHARACTER VARYING	Language type			
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			

3.13 City

Column ID	Data type	Description	Key	Links to	Links From
City_id	SERIAL	Unique identifier for the city	Primary		Address
City	CHARACTER VARYING	City name			
COUNTRY_id	SMALLINT	Unique identifier for the COUNTRY	Foreign	Country	
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			

3.14 Country

Column ID	Data type	Description	Key	Links to	Links From
COUNTRY id	SERIAL	Unique identifier for the COUNTRY	Primary		City
Country	CHARACTER VARYING	Country name			
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date of last entry update			