ROCKBUSTER STEALTH

Data Analysis Project

Data Dictionary

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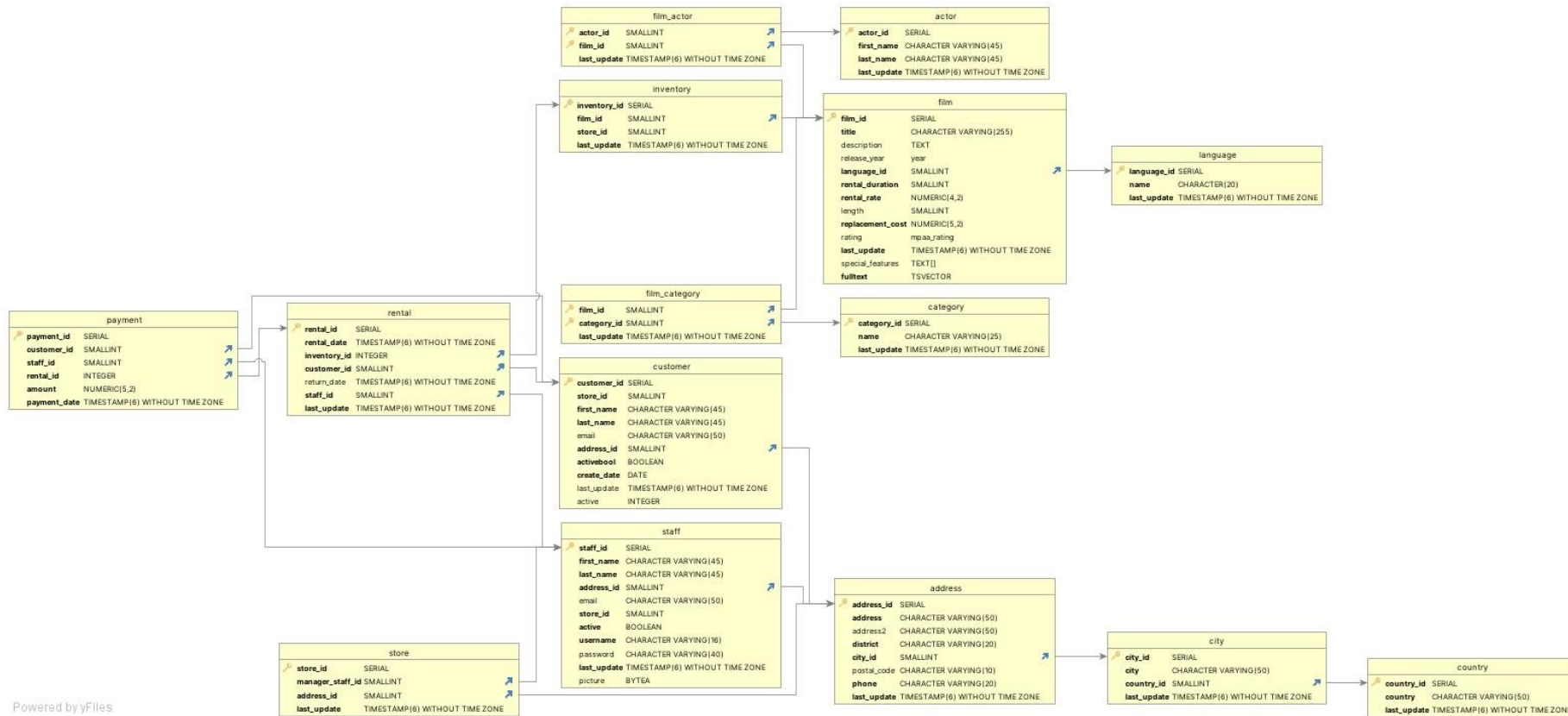spiroskasanja@gmail.com

Contents

1. Legend

PK - Primary Key

It's a column that acts as a unique identifier for each record in the table. It has to be unique for each entry and it can't be null.

FK - Foreign Key

It's a column that refers to the primary key in another table. They're used to establish relationships between tables.

2. Entity Relationship Diagram (ERD)

3. Tables

3.1 Fact Table

3.1.1 Table Name: payment

This table stores information about payments made by customers at Rockbuster.

Columns

Key	Name	Data Type	Description
🔑	Payment_id	Serial	Unique payment identifier
🔑	Customer_id	Small Int	Unique customer identifier
🔑	Staff_id	Small Int	Unique staff identifier
🔑	Rental_id	Integer	Unique rental identifier
	Amount	Numeric (5,2)	Amount of payment received
	Payment_date	Timestamp without Time Zone	Date of payment

Links to

Table Name	Join	Description
customer	payment.customer_id = customer.customer_id	Foreign key reference to customer table
staff	payment.staff_id = staff.staff_id	Foreign key reference to staff table
rental	payment.rental_id = rental.rental_id	Foreign key reference to rental table

3.1.2 Table Name: rental

This table captures transactional data related to rentals at Rockbuster and represents the central fact table in the schema.

Columns

Key	Name	Data Type	Description
🔑	rental_id	Serial	Unique rental identifier
	rental_date	Timestamp w/o Time Zone	Date of rental
🔑	inventory_id	Integer	Unique inventory identifier
🔑	customer_id	Small Int	Unique customer identifier
	return_date	Timestamp w/o Time Zone	Date of return
🔑	staff_id	Small Int	Unique staff identifier
	last_update	Timestamp w/o Time Zone	Time of last update

Links to

Table Name	Join	Description
inventory	rental.inventory_id = inventory.inventory_id	Foreign key reference to inventory table
customer	rental.customer_id = customer.customer_id	Foreign key reference to customer table
staff	rental.staff_id = staff.staff_id	Foreign key reference to staff table

Linked from

Table Name	Join	Description
payment	payment.rental_id = rental.rental_id	Foreign key reference from payment table

3.2 Dimension Table

3.2.1 Table Name: store

This table represents the stores in the Rockbuster database.

Columns

Key	Name	Data Type	Description
🔑	store_id	Serial	Unique identifier of store
🔑	manager_staff_id	Small Int	Unique identifier for the staff manager
🔑	address_id	Small Int	Unique identifier of the address
	last_update	Timestamp w/o Time Zone	Time of last update

Links to

Table Name	Join	Description
staff	store.manager_staff_id = staff.staff_id	Foreign key reference to staff table
address	store.address_id = address.address_id	Foreign key reference to address table

3.2.2 Table Name: staff

This table stores information about staff members who work at Rockbuster.

Columns

Key	Name	Data Type	Description
🔑	staff_id	Serial	Unique identifier of staff member, primary key
	first_name	Character Varying(45)	First name of staff member
	last_name	Character Varying(45)	Last name of staff member
🔑	address_id	Small Int	Unique identifier of the address
	email	Character varying (50)	Staff member's email address
🔑	store_id	Small Int	Unique store identifier
	active	Boolean	Whether staff member is active
	username	Character Varying(16)	Staff member's username
	password	Character Varying(40)	Staff member's password
	picture	BYTEA	Picture of staff member

Links to

Table Name	Join	Description
address	staff.address _id = address.address_id	Foreign key reference to address table
store	staff.store _id = store.store_id	Foreign key reference to store table

Linked from

Table Name	Join	Description
rental	rental.staff_id = staff.staff_id	Foreign key reference from rental table
payment	payment.staff_id = staff.staff_id	Foreign key reference from payment table

3.2.3 Table Name: address

This table represents the addresses related to Rockbuster's movie collection.

Columns

Key	Name	Data Type	Description
🔑	address_id	Serial	Unique identifier of the address
	address	Character Varying(50)	Street address
	address2	Character Varying(50)	Additional address information
	district	Character varying (20)	Address district
🔑	city_id	Small Int	City unique identifier
	postal_code	Character Varying(10)	Postal code associated with address
	phone	Character Varying(20)	Phone number for the address
	last_update	Timestamp w/o Time Zone	Time of last update

Links to

Table Name	Join	Description
city	address.city_id = city. city _id	Foreign key reference to city table

Linked from

Table Name	Join	Description
store	store.address_id = address. address _id	Foreign key reference from store table
staff	staff. address _id = address . address _id	Foreign key reference from staff table
customer	customer. address _id = address . address _id	Foreign key reference from customer table

3.2.4 Table Name: city

This table represents the cities related to Rockbuster's movie collection.

Columns

Key	Name	Data Type	Description
🔑	city_id	Serial	Unique identifier of city
	city	Character Varying(50)	Name of city
🔑	country_id	Small Int	Unique identifier of country
	last_update	Timestamp w/o Time Zone	Time of last update

Links to

Table Name	Join	Description
country	city.country _id = country. country _id	Foreign key reference to country table

Linked from

Table Name	Join	Description
address	address.city_id = city.city_id	Foreign key reference from address table

3.2.5 Table Name: country

This table represents the countries related to Rockbuster's movie collection.

Columns

Key	Name	Data Type	Description
🔑	country_id	Serial	Unique identifier of country
	country	Character varying (50)	Name of country
	last_update	Timestamp without time zone	Date and time of latest update

Linked from

Table Name	Join	Description
city	city.country_id = country.country_id	Foreign key reference from city table

3.2.6 Table Name: customer

This table represents the customers associated with Rockbuster's movie collection.

Columns

Key	Name	Data Type	Description
🔑	customer_id	Serial	Unique customer identifier
🔑	store_id	Small Int	Unique store identifier
	first_name	Character Varying(45)	First name of customer
	last_name	Character Varying(45)	Last name of customer
	email	Character varying (50)	Customer's email address
🔑	address_id	Small Int	Unique identifier of the address
	activebool	Boolean	Categorize customers as true "active" and false "not active"
	create_date	Date	Date of customer profile creation
	last_update	Timestamp w/o Time Zone	Time of last update
	active	Integer	Code of the customer active use (1) for active and (0) for not active.

Links to

Table Name	Join	Description
store	customer.store _id = store. store _id	Foreign key reference to store table
address	customer.address_id= address. address_id	Foreign key reference to address table

Linked from

Table Name	Join	Description
rental	rental.customer_id = customer. customer _id	Foreign key reference from rental table
payment	payment.customer_id = customer. customer _id	Foreign key reference from payment table

3.2.7 Table Name: inventory

This table represents the inventory of films in Rockbuster's stores.

Columns

Key	Name	Data Type	Description
🔑	inventory_id	Serial	Unique identifier of inventory, primary key
🔑	film_id	Small Int	Unique identifier of film
🔑	store_id	Small Int	Unique identifier of store
	last_update	Timestamp w/o Time Zone	Time of last update

Links to

Table Name	Join	Description
film	inventory.film _id = film. film _id	Foreign key reference to film table
store	inventory.store_id= store. store _id	Foreign key reference to store table

Linked from

Table Name	Join	Description
rental	rental.inventory_id = inventory. inventory _id	Foreign key reference from rental table

3.2.8 Table Name: film

This table represents the films in Rockbuster's movie collection.

Columns

Key	Name	Data Type	Description
🔑 (gold)	film_id	Serial	Unique identifier of film, primary key
	title	Character Varying(255)	Title of film
	description	Text	Description of film
	release_year	Year	Year of film release
🔑 (blue)	language_id	Small Int	Language of film
	rental_duration	Small Int	Duration of rental in days
	rental_rate	Numeric(4,2)	The Rate of the film rent
	length	Small Int	film length in min
	replacement_cost	numeric	cost of film replacement
	rating	Mpaa_rating	The Rate of the film, according the MPA rating system
	last_update	Timestamp w/o Time Zone	Time of last update
	special_features	Text[]	Special features of film
	fulltext	Tsvector	Film index; used for text search in the meaning of count of the key words in description

Links to

Table Name	Join	Description
language	film.language _id = language. language _id	Foreign key reference to language table

Linked from

Table Name	Join	Description
film_actor	film_actor.film _id = film.film_id	Foreign key reference from film_actor table
inventory	inventory.film _id = film.film_id	Foreign key reference from inventory table
film_category	film_category.film _id = film.film_id	Foreign key reference from film_category table

3.2.9 Table Name: language

This table stores information about the languages used in films at Rockbuster.

Columns

Key	Name	Data Type	Description
🔑	language_id	Serial	Language unique identifier
	name	Character(20)	Language name
	last_update	Timestamp without time zone	Date and time of latest update

Linked from

Table Name	Join	Description
film	film.language_id = language. language _id	Foreign key reference from film table

3.2.10 Table Name: actor

This table stores information about actors involved in Rockbuster's movie collection.

Columns

Key	Name	Data Type	Description
🔑	actor_id	Serial	Unique actor identifier
	first_name	Character Varying(45)	First name of actor
	last_name	Character Varying(45)	Last name of actor
	last_update	Timestamp without time zone	Date and time of latest update

Linked from

Table Name	Join	Description
film_actor	film_actor.actor_id = actor.actor_id	Foreign key reference from film_actor table

3.2.11 Table Name: film_actor

This table represents the association between actors and films in Rockbuster's movie collection.

Columns

Key	Name	Data Type	Description
🔑	actor_id	SMALLINT	Unique actor identifier
🔑	film_id	SMALLINT	Unique film identifier
	last_update	Timestamp without time zone	Date and time of latest update

Links to

Table Name	Join	Description
actor	actor_actor _id = film_actor. actor _id	Foreign key reference to actor table
film	film.film_id = film_actor.film_id	Foreign key reference to film table

3.2.12 Table Name: film_category

This table represents the association between films and categories in Rockbuster's movie collection.

Columns

Key	Name	Data Type	Description
🔑	language_id	Serial	Language unique identifier
🔑	category_id	Small Int	Unique category identifier
	last_update	Timestamp without time zone	Date and time of latest update

Links to

Table Name	Join	Description
language	film_category.language _id = language. language _id	Foreign key reference to language table
category	film_category.category_id = category.category_id	Foreign key reference to category table

3.2.13 Table Name: category

his table represents the categories associated with Rockbuster's movie collection.

Columns

Key	Name	Data Type	Description
🔑	category_id	Serial	Category unique identifier
	name	Character Varying(25)	Category name
	last_update	Timestamp without time zone	Date and time of latest update

Linked from

Table Name	Join	Description
film_category	film_category. category _id = category. category _id	Foreign key reference from film_ category table