Rockbuster Stealth

Sales Analysis 2023

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1. Entity Relationship Diagram
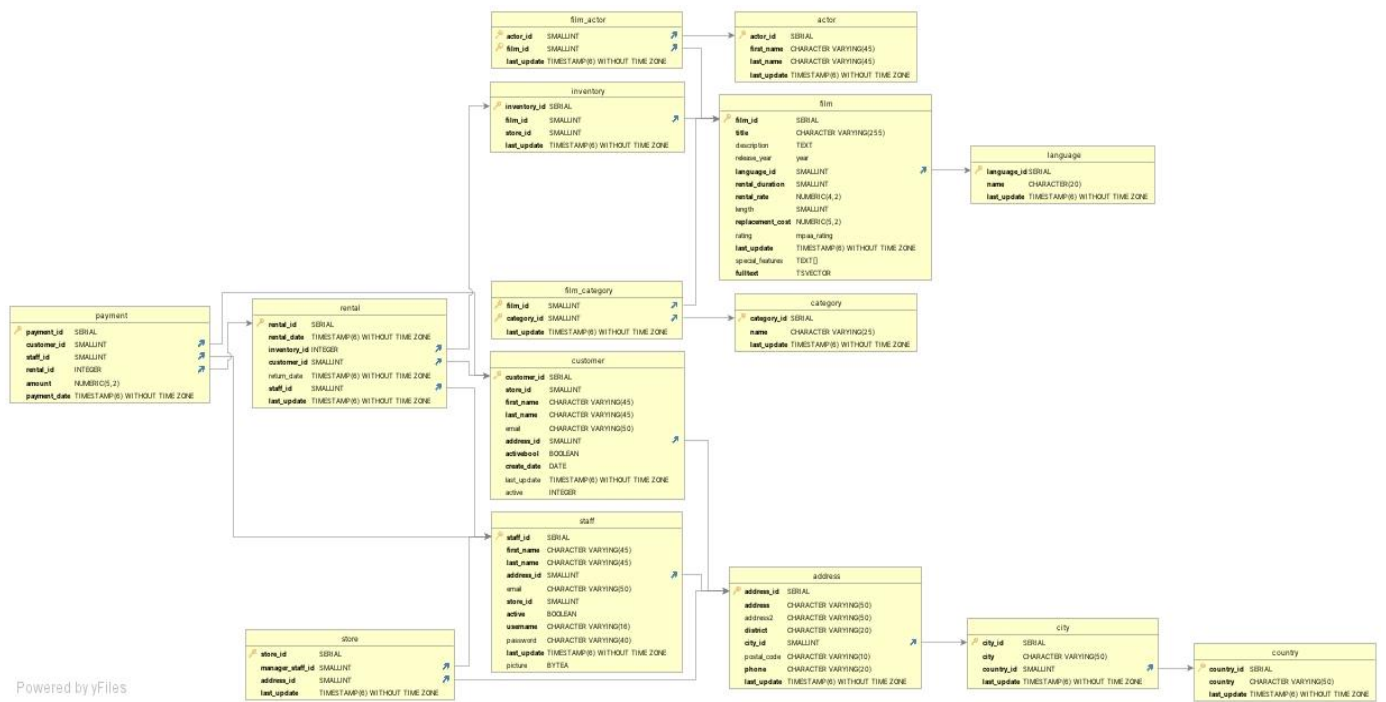
PK: Primary Key
FK: Foreign Key

2. Dimension tables

Dimension tables			

Table_Actor	Columns	Data_type	Description
Linked to: language	actor_id (PK)	integer	unique identifier of actor
	first_name	character varying(45)	actor's first name
	last_name	character varying(45)	actor's last name
	last_update	timestamp without time zone	date and time of the last update

Address	Columns	Data_type	Description
Linked to: city, customer staff, store	address_id (PK)	integer	unique identifier of address
	address	character varying (50)	address information
	address2	character varying (50)	extra details about address
	district	character varying (50)	address location (city, state)
	city_id (FK)	smallint	unique identifier of city
	postal_code	character varying (10)	postal code number
	phone	character varying (20)	phone number of the customer
	last_update	timestamp without time zone	date and time of the last update

Category	Columns	Data_type	Description
Linked to: Film_category	category_id (PK)	integer	unique identifier of category
	name	character varying (50)	genre name
	last_update	timestamp without time zone	date and time of the last update

City	Columns	Data_type	Description
Linked to: Country, address	city_id (PK)	integer	unique identifier of city
	city	character varying (50)	name of the city
	country_id (FK)	smallint	unique identifier of country
	last_update	timestamp without time zone	date and time of the last update

Country	Columns	Data_type	Description
Linked to: city	country_id (PK)	integer	unique identifier of country
	country	character varying (50)	name of the country
	last_update	timestamp without time zone	date and time of the last update

Customer	Columns	Data_type	Description
Linked to: address, inventory, payment	customer_id (PK)	integer	unique identifier of customer
	store_id (FK)	smallint	unique identifier of store
	first_name	character varying (45)	details of the customer's name
	last_name	character varying (45)	details of the customer's last name
	email	character varying (50)	customer's email
	address_id (FK)	smallint	unique identifier of address
	activebool	boolean	boolean for active or inactive customer (true/false)
	create_date	date	date when the customer account was created
	last_update	timestamp without time zone	last time the information was updated
	active	integer	active/inactive customer 1,0

Film	Columns	Data_type	Description
Linked to: inventory, language, film_category	film_id (PK)	integer	unique identifier of customer
	title	character varying (255)	Film's name
	description	text	film's general description
	release_year	integer	year when the film was released
	language_id (FK)	smallint	unique identifier of language
	rental_duration	smallint	rental duration for that film
	rental_rate	numeric	cost of film's rent
	length	smallint	movie length in minutes
	replacement_cost	numeric	cost of the film in case it has to be replaced
	rating	USER-DEFINED	film rate by the customer
	last_update	timestamp without time zone	last time the information was updated
	special_features	ARRAY	additional features
	fulltext	tsvector	additional details

Film_actor	Columns	Data_type	Description
Linked to: Film_category language	actor_id (PK)	smallint	unique identifier of actor
	film_id (FK)	smallint	unique identifier of film
	last_update	timestamp without time zone	date and time of the last update

Film_category	Columns	Data_type	Description
Linked to: category, film	film_id (FK)	smallint	unique identifier of actor
	category_id (PK)	smallint	unique identifier of category
	last_update	timestamp without time zone	date and time of the last update

Inventory	Columns	Data_type	Description
Film, rental	inventory_id (PK)	integer	unique identifier of inventory
	film_id (FK)	smallint	unique identifier of film
	store_id (FK)	smallint	unique identifier of store
	last_update	timestamp without time zone	date and time of the last update

Language	Columns	Data_type	Description
Linked to: actor, film	language_id (PK)	integer	unique identifier of language
	name	character (20)	language name
	last_update	timestamp without time zone	date and time of the last update

Payment	Columns	Data_type	Description
Linked to: customer, rental, staff	payment_id (PK)	inter	unique identifier of payment
	customer_id (FK)	smallint	unique identifier of customer
	staff_id (FK)	smallint	unique identifier of staff
	rental_id (FK)	integer	unique identifier of rental
	amount	numeric	payment registered
	payment_date	timestamp without time zone	date and time of the last update

Staff	Columns	Data_type	Description
Linked to: payment, rental, address, store	staff_id (PK)	inter	unique identifier of staff
	first_name	character varying (45)	staff person first name
	address_id (FK)	smallint	unique identifier of address
	email	character varying (50)	staff person email
	store_id (FK)	smallint	unique identifier of store
	active	boolean	true/false staff is active
	username	character varying (16)	staff's username
	password	character varying (40)	staff's account password
	last_update	timestamp without time zone	date and time of the last update
	picture	bytea	picture of the person (staff)

Store	Columns	Data_type	Description
Linked to: staff, address	store_id (PK)	integer	unique identifier of store
	manager_staff_id (FK)	smallint	unique identifier of staff
	address_id (FK)	smallint	unique identifier of address
	last_update	timestamp without time zone	date and time of the last update

Fact tables

Rental	Columns	Data_type	Description
Linked to: customer, inventory, staff, payment	rental_id (PK)	integer	unique identifier of rental
	rental_date	timestamp without time zone	the date when the film was rented
	inventory_id (FK)	integer	unique identifier of inventory (item rented)
	customer_id (FK)	smallint	unique identifier of customer
	return_date	timestamp without time zone	date when the film was returned
	staff_id (FK)	smallint	unique identifier of staff
	last_update	timestamp without time zone	date and time of the last update