ROCKBUSTER DATABASE

DATA DICTIONARY

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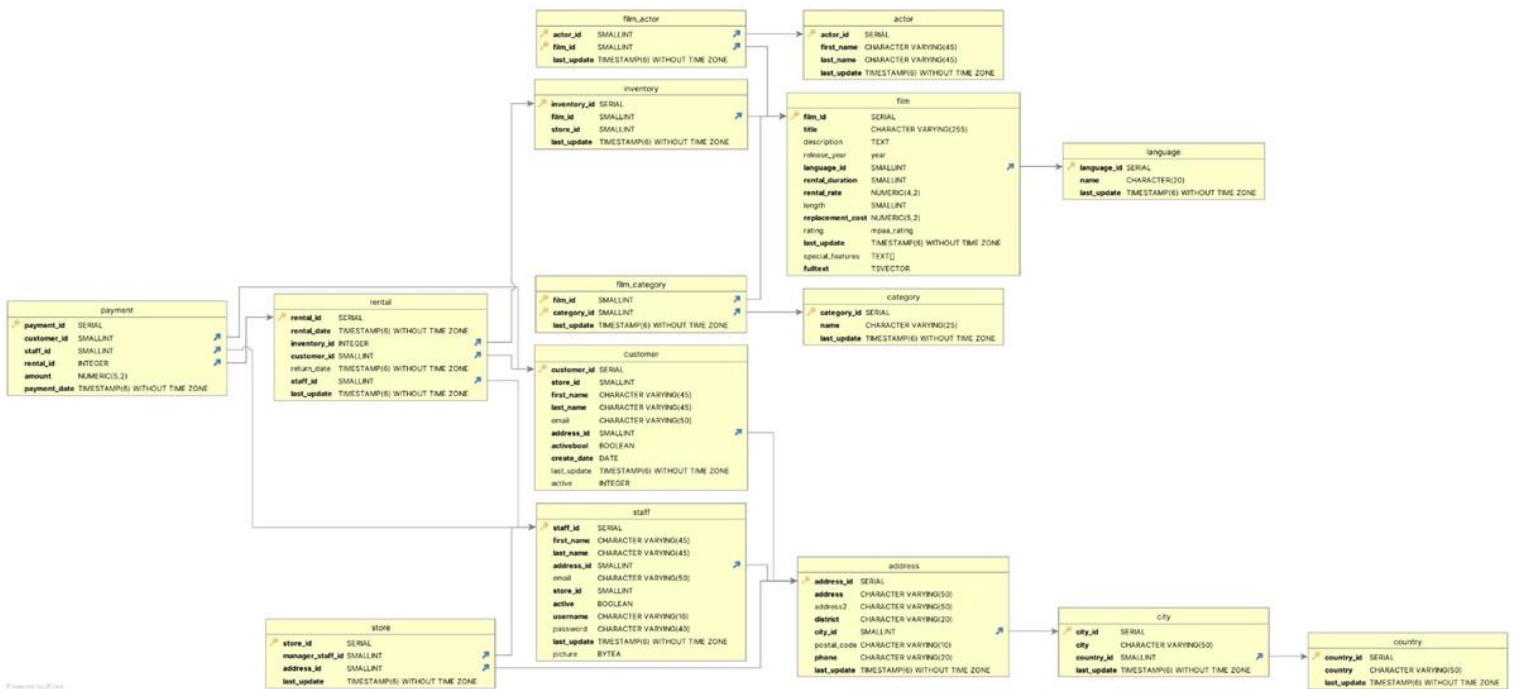# CONTENTS

PREFACE

PURPOSE OF THIS DOCUMENT

The purpose of this document is to assist data-literate people working with the Rockbuster database. It serves as a reference material about the structure of the database, including:
- Table names
- Table column names, and description of their contents and datatypes
- Primary and foreign keys
- Relations among tables

SCHEMA

STRUCTURE OVERVIEW

The Rockbuster database follows a standard snowflake-schema, having 2 fact tables, **rental** and **payment**, a palette of dimension tables connected to the fact tables, and further dimension tables being connected to the initial ones. For on overview, please see Figure 1. below:

The **abbreviations** used in this document are **"PK" for Primary Key, "FK" for Foreign Key.**

FACT TABLES

PAYMENT

Key Type	Column name	Datatype	description
PK	payment_id	Serial	Unique ID of payments
FK	customer_id	Integer	Reference of customer
FK	staff_id	integer	Reference of staff
FK	rental_id	integer	Reference of rental
	amount	numeric	Amount of money paid
	payment_date	Time/date	Date of the payment

Links To	
Table	**Link**
customer	Payment.customer_id =customer.customer_id
staff	Payment.staff_id = staff.staff_id
rental	Payment.rental_id = rental.rental_id

Links From	
Table	**Link**
N/A	N/A

RENTAL

Key Type	Column name	Datatype	description
PK	rental_id	serial	Unique ID of rentals
	rental_date	Time/date	Date of the rental
FK	inventory_id	integer	Reference of inventory
FK	customer_id	integer	Reference of customer
	return_date	Time/date	Date of return
FK	staff_id	integer	Reference of staff
	last_update	Time/date	Last time entry was updated

Links To	
Table	**Link**
customer	rental.customer_id = customer.customer_id
staff	rental.staff_id = staff.staff_id
inventory	rental.inventory_id = inventory.inventory_id

Links From	
Table	**Link**
payment	Payment.rental_id = rental.rental_id

DIMENSION TABLES

ACTOR

Key Type	Column name	Datatype	description
PK	actor_id	serial	Unique ID of actor
	first_name	varchar	First name of the actor
	last_name	varchar	Last name of the actor
	last_update	Time/Date	Last time entry was updated

Links To	
Table	**Link**
N/A	N/A

Links From	
Table	**Link**
Film_actor	Film_actor.actor_id = actor.actor_id

ADDRESS

Key Type	Column name	Datatype	description
PK	address_id	serial	Unique ID of address
	address	varchar	Full address
	address2	varchar	Alternate address (optional)
	district	varchar	Name of district
FK	city_id	integer	Reference of city
	postal_code	varchar	Postal code
	phone	varchar	Phone number
	last_update	Time/date	Last time entry was updated

Links To	
Table	**Link**
city	Address.city_id = city.city_id

Links From	
Table	**Link**
store	Store.address_id = address.address_id
customer	Customer.address_id = address.address_id
staff	Staff.address_id = address.address_id

CATEGORY

Key Type	Column name	Datatype	description
PK	address_id	serial	Unique ID of address
	address	varchar	Full address
	address2	varchar	Alternate address (optional)
	district	varchar	Name of district

Links To	
Table	**Link**
N/A	N/A

Links From	
Table	**Link**
Film_category	Film_category.category_id = category.category_id

CITY

Key Type	Column name	Datatype	description
PK	city_id	serial	Unique ID of city
	city	varchar	Name of the city
FK	country_id	integer	Reference of country
	last_update	Time/date	Last time entry was updated

Links To	
Table	**Link**
country	City.country_id = country.country_id

Links From	
Table	**Link**
address	Address.city_id = city.city_id

COUNTRY

Key Type	Column name	Datatype	description
PK	country_id	serial	Unique ID of country
	country	varchar	Name of the country
	last_update	timestamp	Last time entry was updated

Links To	
Table	**Link**
N/A	N/A

Links From	
Table	**Link**
city	Country.country_id = city.country_id

CUSTOMER

Key Type	Column name	Datatype	description
PK	customer_id	serial	Unique ID of customer
FK	store_id	integer	Reference of store
	first_name	varchar	Customer's first name
	last_name	varchar	Customer's second name
	email	varchar	Customer's email address
FK	address_id	integer	Reference of address
	activebool	boolean	If customer is active or not
	create_date	date	Date of creation
	last_update	Time/date	Last time entry was updated
	active	integer	If user is active or not (1 or 0)

	Links To	
Table		**Link**
address		Customer.address_id = address.address_id

	Links From	
Table		**Link**
Payment		Payment.customer_id = customer.customer_id
rental		Rental.customer_id = customer.customer_id

FILM

Key Type	Column name	Datatype	description
PK	film_id	serial	Unique ID of film
	title	varchar	Film title
	description	text	Films description
	release_year	year	Films release year
FK	language_id	integer	Reference of language
	rental_duration	integer	For how many days it was rented
	rental_rate	numeric	Rental cost
	length	integer	Duration of film (mins)
	replacement_cost	numeric	how much does a replacement copy cost
	rating	mpaa_rating (Varchar)	Age restriction
	last_update	Time/date	Last time entry was updated
	special_features	_text (object?)	Extra features aside from the film itself
	fulltext	Tsvector (key-value pairs)	keywords/preferences

	Links To	
Table		**Link**
language		Film.language_id =language.language_id

Links From	
Table	**Link**
Inventory	Inventory.film_id = film.film_id
Film_actor	Film_actor.film_id = film.film_id
Film_category	Film_category.film_id = film.film_id

FILM_ACTOR

Key Type	Column name	Datatype	description
FK	actor_id	actor_id	reference of actor
FK	film_id	film_id	reference of film
	last_update	last_update	Last time entry was updated

Links To	
Table	**Link**
actor	Film_actor.actor_id = actor.actor_id
film	Film_actor.film_id = film.film_id

Links From	
Table	**Link**
N/A	N/A

FILM_CATEGORY

Key Type	Column name	Datatype	description
FK	film_id	Integer	reference of film
FK	category_id	Integer	reference of category
	last_update	Time/date	Last time entry was updated

Links To	
Table	**Link**
category	Film_category.category_id = category.category_id
film	Film_category.film_id = film.film_id

Links From	
Table	**Link**
N/A	N/A

INVENTORY

Key Type	Column name	Datatype	description
PK	inventory_id	serial	Unique ID of inventory
FK	film_id	integer	Reference of film
FK	store_id	Integer	Reference of store
	last_update	Time/date	Last time entry was updated

Links To	
Table	**Link**
store	Inventory.store_id = store.store_id
film	Inventory.film_id = fil.film_id

Links From	
Table	**Link**
rental	Rental.inventory_id = inventor.inventory_id

LANGUAGE

Key Type	Column name	Datatype	description
PK	language_id	serial	Unique ID of language
	name	Blank padded char	Name of the language
	last_update	Time/date	Last time entry was updated

Links To	
Table	**Link**
N/A	N/A

	Links From	
Table		**Link**
film		Film.language_id = language.language_id

STAFF

Key Type	Column name	Datatype	description
PK	staff_id	serial	Unique ID of staff
	first_name	varchar	First name of the person
	last_name	varchar	Last name of the person
FK	address_id	integer	Reference of address
	email	varchar	Email address
FK	store_id	integer	Reference of store
	active	boolean	If staff is active now
	username	varchar	Username of the person
	password	varchar	Password of the person
	last_update	Time/date	Last time entry was updated
	picture	Binary string	image stored in binary form of the person

	Links To	
Table		**Link**
store		Staff.store_id = store.store_id
address		Staff.address_id = address.address_id

	Links From	
Table		**Link**
Payment		Payment.staff_id = staff.staff_id
Rental		Rental.staff_id = staff.staff_id
Store		Store.manager_staff_id = staff.staff_id

Key Type	Column name	Datatype	description
PK	store_id	serial	Primary key of store
FK	manager_staff_id	integer	Reference of staff
FK	address_id	integer	Foreign key of address
	last_update	timestamp	Last time entry was updated

Links To	
Table	**Link**
staff	Store.manager_staff_id = staff.staff_id
address	store.address_id = address.address_id

Links From	
Table	**Link**
store	Staff.store_id = store.store_id