ACHIEVEMENT 3:
Rockbuster
Data Dictionary

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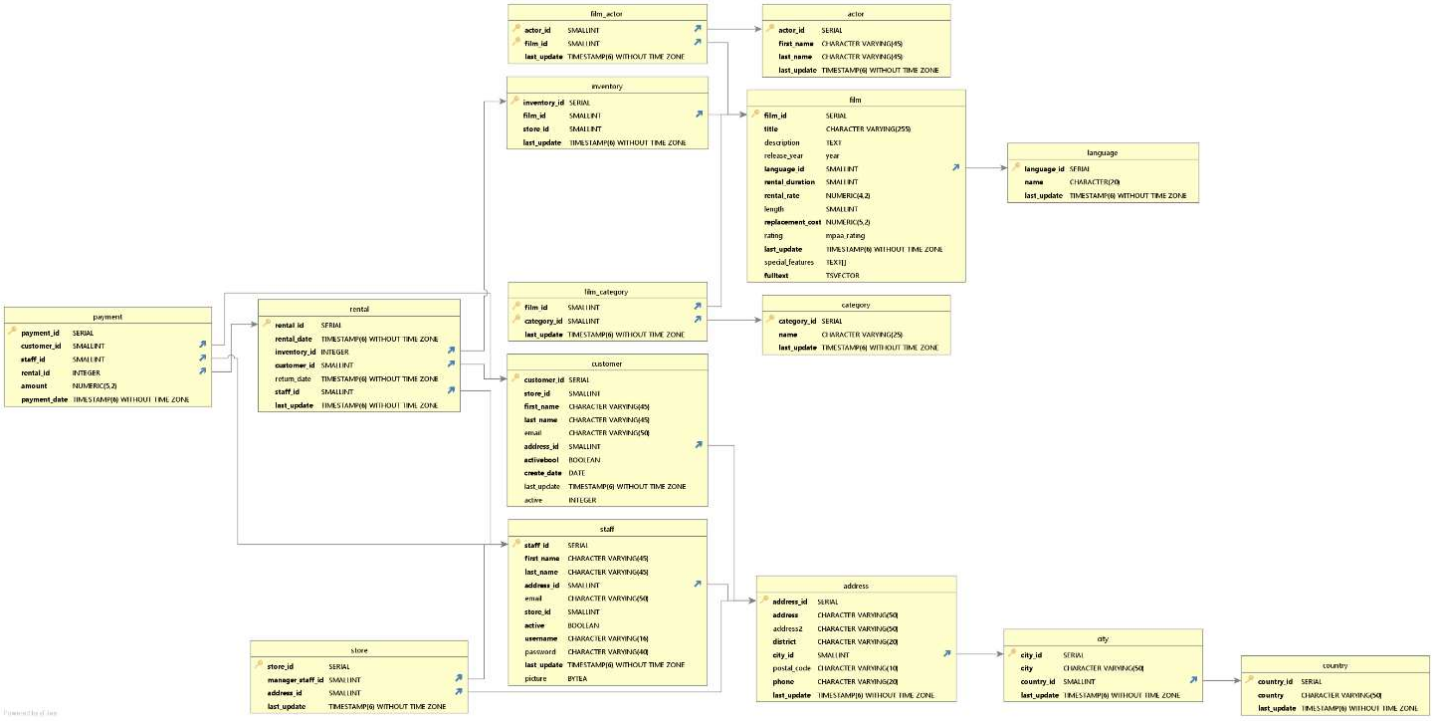
1. Legend

Primary key

 Unique key

2. Entity Relationship Diagram



3. Tables

The Rockbuster database has a snowflake schema, as evident by the many tables linking to other tables. The following sections list the fact and dimension tables with their columns, data types, and descriptions.

3.1. Fact Tables

3.1.1. Table: payment

Columns

Name		Data Type	Description
	payment_id	SERIAL	The unique payment identification number
	customer_id	SMALLINT	The unique customer identification number
	staff_id	SMALLINT	The unique staff identification number
	rental_id	INTEGER	The unique rental identification number
	amount	NUMERIC(5,2)	Cost of each payment
	payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of each payment

Links to

Table	Join	Description
customer	**payment**.customer_id = customer.customer_id	Foreign key constraint referencing customer
staff	**payment**.staff_id = staff.staff_id	Foreign key constraint referencing staff
rental	**payment**.rental_id = rental.rental_id	Foreign key constraint referencing rental

Unique Keys

Column		Name/Description
	payment_id	The unique payment identification number

3.1.2. Table: rental

Columns

Name		Data Type	Description
	rental_id	SERIAL	The unique rental identification number
	rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of each rental without time zone noted
	inventory_id	INETGER	The unique inventory identification number
	customer_id	SMALLINT	The unique customer identification number
	return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of each rental return without time zone noted
	staff_id	SMALLINT	The unique staff identification number
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when the entry was last updated

Links to

Table	Join	Description

inventory	**rental**.inventory_id = inventory.inventory_id	Foreign key constraint referencing inventory
customer	**rental**.customer_id = customer.customer_id	Foreign key constraint referencing customer
staff	**rental**.staff_id = staff.staff_id	Foreign key constraint referencing staff

Links from

Table	Join	Description
payment	**rental**.rental_id = payment.rental_id	Foreign key constraint referencing paymetn

Unique Keys

Column		Name/Description
	rental_id	The unique rental identification number

3.1.3. Table: store

Columns

Name		Data Type	Description
	store_id	SERIAL	The unique store identification number
	manager_staff_id	SMALLINT	The unique staff manager identification number
	address_id	SMALLINT	The unique address identification number
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when the entry was last updated

Links to

Table	Join	Description
staff	**store**.manager_staff_id = staff.staff_id	Foreign key constraint referencing staff
address	**store**.address_id = address.address_id	Foreign key constraint referencing address

Unique Keys

Column		Name/Description
	store_id	The unique store identification number

3.1.4. Table: film_actor

Columns

Name		Data Type	Description
	actor_id	SMALLINT	The unique actor identification number
	film_id	SMALLINT	The unique film identification number
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when the entry was last updated

Links to

Table	Join	Description
actor	**film_actor**.actor_id = actor.actor_id	Foreign key constraint referencing actor
film	**film_actor**.film_id = film.film_id	Foreign key constraint referencing film

Unique Keys

Column		Name/Description
	actor_id	The unique actor identification number
	film_id	The unique film identification number

3.1.5. Table: inventory

Columns

Name		Data Type	Description
	inventory_id	SERIAL	The unique inventory identification number
	film_id	SMALLINT	The unique film identification number
	store_id	SMALLINT	The store identification number
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when the entry was last updated

Links to

Table	Join	Description
film	**inventory**.film_id = film.film_id	Foreign key constraint referencing film

Links from

Table	Join	Description
rental	**inventory**.inventory_id = rental.inventory_id	Foreign key constraint referencing rental

Unique Keys

Column		Name/Description
	inventory_id	The unique inventory identification number

3.1.6. Table: film_category

Columns

Name		Data Type	Description
	film_id	SMALLINT	The unique film identification number
	category_id	SMALLINT	The unique category identification number
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when the entry was last updated

Links to

Table	Join	Description
film	**film_category**.film_id = film.film_id	Foreign key constraint referencing film
category	**film_category**.category_id = category.category_id	Foreign key constraint referencing category

Unique Keys

Column		Name/Description
	film_id	The unique film identification number
	category_id	The unique category identification number

3.2. Dimension Tables

3.2.1. Table: customer

Columns

Name		Data Type	Description
	customer_id	SERIAL	Unique customer identification number
	store_id	SMALLINT	Identification number of the store the customer purchased from
	first_name	CHARACTER VARYING(45)	The customer's first name
	last_name	CHARACTER VARYING(45)	The customer's last name
	email	CHARACTER VARYING(45)	the customer's email address
	address_id	SMALLINT	The customer's unique address identification number
	activebool	BOOLEAN	Boolean value to represent whether the customers account is active
	create_date	DATE	Date the account was created
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last time the customer's information was updated
	active	INTEGER	values to represent whether the account is active

Links to

Table	Join	Description
address	**customer**.address_id = address.address_id	Foreign key constraint referencing address

Links from

Table	Join	Description
rental	**customer**.customer_id = rental.customer_id	Foreign key constraint referencing rental
payment	**customer**.customer_id = payment.customer_id	Foreign key constraint referencing payment

Unique Keys

Column		Name/Description
	customer_id	Unique customer identification number

3.2.2. Table: staff

Columns

Name		Data Type	Description
	staff_id	SERIAL	The unique staff identification number
	first_name	CHARACTER VARYING(45)	The company employee's first name
	last_name	CHARACTER VARYING(45)	The company employee's last name
	address_id	SMALLINT	The company employee's unique address identification number
	email	CHARACTER VARYING(50)	The company employee's email address
	store_id	SMALLINT	The company employee's store identification number
	active	BOOLEAN	Whether the company employee in currently employed
	username	CHARACTER VARYING(16)	The company employee's account username
	password	CHARACTER VARYING(60)	The company employee's account password
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The last time the company employee's information was updated
	picture	BYTEA	An image of the company employee

Links to

Table	Join	Description
address	**staff**.address_id = address.address_id	Foreign key constraint referencing address

Links from

Table	Join	Description
payment	**staff**.staff_id = staff.staff_if	Foreign key constraint referencing payment
rental	**staff**.staff_id = rental.staff_id	Foreign key constraint referencing rental
store	**staff**.staff_id = store.manager_staff_id	Foreign key constraint referencing store

Unique Keys

Column		Name/Description
	staff_id	The unique staff identification number

3.2.3. Table: actor

Columns

Name		Data Type	Description
	actor_id	SERIAL	The film actor's unique identification number
	first_name	CHARACTER VARYING(45)	The film actor's first name
	last_name	CHARACTER VARYING(45)	The film actor's last name
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The last time the film actor's information was updated

Links from

Table	Join	Description
film_actor	**actor**.actor_id = film_actor.actor_id	Foreign key constraint referencing film actor

Unique Keys

Column		Name/Description
	actor_id	The film actor's unique identification number

3.2.4. Table: film

Columns

Name		Data Type	Description
	film_id	SERIAL	The unique film identification number
	title	CHARACTER VARYING(255)	The title of the film
	description	TEXT	The film's description
	release_year	year	The year the film was released
	language_id	SMALLINT	The language identification number
	rental_duration	SMALLINT	The number of days the film was rented
	rental_rate	NUMERIC(4,2)	Cost to rent the film in USD
	length	SMALLINT	Length of the film in minutes
	replacement_cost	NUMERIC(5,2)	Cost to replace the film
	rating	mpaa_rating	The film's maturity rating
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The last time the entry was updated
	special_features	TEXT[]	Special features of the film such as commentaries of deleted scenes
	fulltext	TSVECTOR	A list of the most used words in reviews of the film

Links to

Table	Join	Description
language	**film**.language_id = language.language_id	Foreign key constraint referencing language

Links from

Table	Join	Description
film_actor	**film**.film_id = film_actor.film_id	Foreign key constraint referencing film_actor
inventory	**film**.film_id = inventory.film_id	Foreign key constraint referencing inventory
film_category	**film**.film_id = film_category.film_id	Foreign key constraint referencing film_category

Unique Keys

Column		Name/Description
	film_id	The unique film identification number

3.2.5. Table: category

Columns

Name	Data Type	Description
category_id	SERIAL	The unique category identification number
name	CHARACTER VARYING(25)	The category name
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The last time the category information was updated

Links from

Table	Join	Description
film_category	**category**.category_id = film_category.category_id	Foreign key constraint referencing film_category

Unique Keys

Column	Name/Description
category_id	The unique category identification number

3.2.6. Table: address

Columns

Name	Data Type	Description
address_id	SERIAL	The unique address identification number
address	CHARACTER VARYING(50)	The address
address2	CHARACTER VARYING(50)	The second line of the address
district	CHARACTER VARYING(20)	The district in which the address is located
city_id	SMALLINT	The address's city's identification number Foreign key for the city table
postal_code	CHARACTER VARYING(10)	The address's postal code
phone	CHARACTER VARYING(20)	The phone number associated with the address
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The last time the address information was updated

Links to

Table	Join	Description
city	**address**.city_id = city.city_id	Foreign key constraint referencing city

Links from

Table	Join	Description
customer	**address**.address_id = customer.address_id	Foreign key constraint referencing customer

staff	**address.**address_id = staff.address_id	Foreign key constraint referencing staff
store	**address.**address_id = store.address_id	Foreign key constraint referencing store

Unique Keys

Column		Name/Description
	address_id	The unique address identification number

3.2.7. Table: language

Columns

Name		Data Type	Description
	language_id	SERIAL	The unique language identification number
	name	CHARACTER(20)	The languages name
	last_update	TIMESAMP(6) WITHOUT TIME ZONE	The last time the language information was updated

Links from

Table	Join	Description
film	**language.**language_id = film.language_id	Foreign key constraint referencing film

Unique Keys

Column		Name/Description
	language_id	The unique language identification number

3.2.8. Table: city

Columns

Name		Data Type	Description
	city_id	SERIAL	The unique city identification number
	city	CHARACTER VARYING(50)	The name of the city
	country_id	SMALLINT	The country in which the city is located
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The last time the city information was updated

Links to

Table	Join	Description
country	**city.**country_id = country.country_id	Foreign key constraint referencing country

Links from

Table	Join	Description
address	**city.**city_id = address.city_id	Foreign key constraint referencing address

Unique Keys

Column		Name/Description
	city_id	The unique city identification number

3.2.9. Table: country

Columns

Name		Data Type	Description
	country_id	SERIAL	The unique country identification number
	country	CHARACTER VARYING(50)	The name of the country
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The last time the country information was updated

Links from

Table	Join	Description
city	**country**.country_id = city.country_id	Foreign key constraint referencing country

Unique Keys

Column		Name/Description
	country_id	The unique country identification number