

Rockbuster Stealth, LLC

Data Dictionary

Leo Finley
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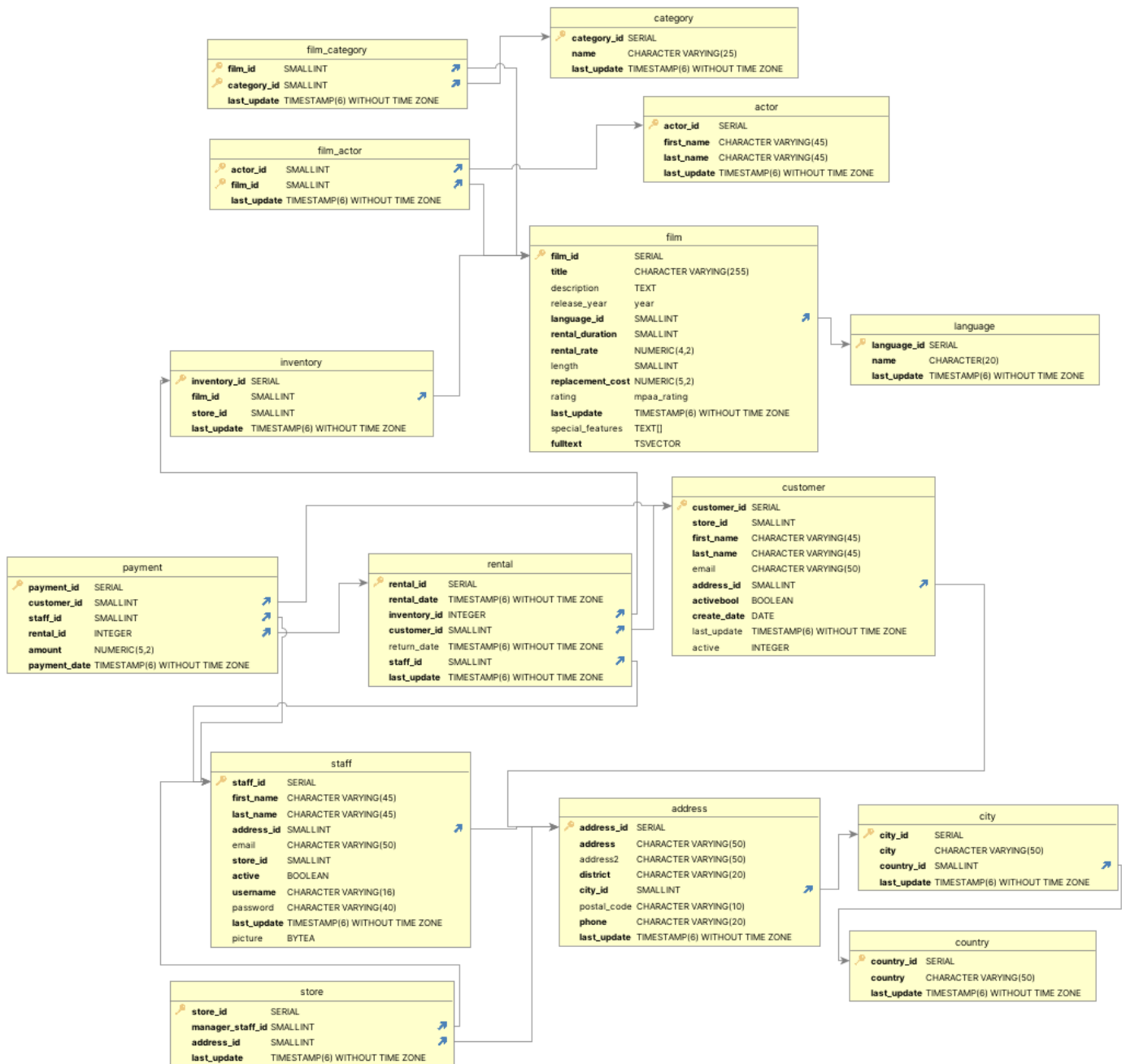
1. Rockbuster Stealth, LLC

Rockbuster Stealth, LLC is a global movie rental company. They are transitioning to online video rental services to compete against other streaming services.

Rockbuster has an inventory of 1,000 films. The database contains information about rentals, customers, employees, stores, films, payments and relevant addresses. The data from this database will be used to create a launch strategy for streaming services.

The database is available for download here: [Rockbuster Dataset](#)

2. Entity Relationship Diagram



Legend

 Primary Key 





 Foreign Key 

3. Fact Tables

3.1 Table: payment

Description: Payment transactions for all rentals including associated staff member.

3.1 Columns

Column Name	Data Type	Description
 payment_id	SERIAL	Unique payment identifier
 customer_id	SMALLINT	Unique customer identifier
 staff_id	SMALLINT	Unique staff member identifier
 rental_id	INTEGER	Unique rental identifier
amount	NUMERIC(5,2)	Amount paid written as x.xx (USD)
payment_date	TIMESTAMP(6_ WITHOUT TIME ZONE	Date of payment

Links to

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

Links from

This table does not link from any tables.





Unique Keys

Column	Key Type	Description
payment_id	Primary key	Unique identifier for payment
customer_id	Foreign key	Unique identifier for customer
staff_id	Foreign key	Unique identifier for staff
rental_id	Foreign key	Unique identifier for rental

3.2 Table: rental

Description: Customer movie rentals and returns

Columns

Column Name	Data Type	Description
 rental_id	SERIAL	Unique rental identifier
rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date of rental
 inventory_id	INTEGER	Unique inventory id
 customer_id	SMALLINT	Unique customer id
return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date of rental return
 staff_id	SMALLINT	Unique staff identifier
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last rental update

Links to

Table	Join	Description
inventory	rental.inventory_id = inventory.inventory_id	Foreign key constraint referencing inventory.inventory_id
customer	rental.customer_id = customer.customer_id	Foreign key constraint referencing customer.customer_id
staff	rental.staff_id = staff.staff_id	Foreign key constraint referencing staff.staff_id

Links from

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

Unique Keys


Column	Key Type	Description
rental_id	Primary key	Unique identifier for rental
inventory_id	Foreign key	Unique identifier for inventory
customer_id	Foreign key	Unique identifier for customer
staff_id	Foreign key	Unique identifier for staff member

4. Dimension Tables

4.1 Table: actor

Description: Information identifying actors from each of the films.

Columns

Column Name	Data Type	Description
 actor_id	SERIAL	Unique identifier for actor
first_name	CHARACTER VARYING(45)	Actor first name
last_name	CHARACTER VARYING(45)	Actor last name
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update of actor

Links to

This table does not link to any other tables.

Links from

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



Unique Keys

Column	Key Type	Description
actor_id	Primary	Unique identifier for actor

4.2 Table: address

Description: Customer, store, and staff address details.

Columns

Column Name	Data Type	Description
 address_id	SERIAL	Unique identifier for address
address	CHARACTER VARYING(50)	Street number of address
address2	CHARACTER VARYING(50)	Second line of address, usually a suite number
district	CHARACTER VARYING(50)	District of address
 city_id	SMALLINT	Unique identifier for city
postal_code	CHARACTER VARYING(50)	Address postal code
phone	CHARACTER VARYING(50)	Phone number for address
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update for address

Links to

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

Links from

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


Unique Keys

Column	Key Type	Description
address_id	Primary key	Unique identifier for address
city_id	Foreign key	Unique identifier for city

4.3 Table: category

Description: Film category (genre) of each film.

Columns

Column Name	Data Type	Description
 category_id	SERIAL	Unique identifier for category (genre)
name	CHARACTER VARYING(25)	Category (genre) name
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update for category

Links to

The category table does not link to any other tables.

Links from

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



Unique Keys

Column	Key Type	Description
category_id	Primary key	Unique identifier for film category

4.4 Table: city

Description: City names of each address entry.

Columns

Column Name	Data Type	Description
 city_id	SERIAL	Unique identifier for city
city	CHARACTER VARYING(50)	Name of city
 country_id	SMALLINT	Unique identifier for country of the city
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update for city

Links to

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

Links from

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


Unique Keys

Column	Key Type	Description
city_id	Primary key	Unique identifier for city
country_id	Foreign key	Unique identifier for country

4.5 Table: country

Description: Country names of each address

Columns

Column Name	Data Type	Description
 country_id	SERIAL	Unique identifier for country
country	CHARACTER VARYING(50)	Name of country
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update for country

Links to

The country table does not link to any other tables.

Links from

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



Unique Keys

Column	Key Type	Description
country_id	Primary key	Unique identifier for country

4.6 Table: customer

Description: Customer personal information including names, emails, address ids, account creation date, and account status

Columns

Column Name	Data Type	Description
 customer_id	SERIAL	Unique identifier for customer
store_id	SMALLINT	Unique identifier for store
first_name	CHARACTER VARYING(45)	First name of customer
last_name	CHARACTER VARYING(45)	Last name of customer
email	CHARACTER VARYING(50)	Email of customer
 address_id	SMALLINT	Unique identifier for customer address
activebool	BOOLEAN	Active account (true/false/null)
create_date	DATE	Date of customer account creation
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update for customer
active	INTEGER	Active account 0 or 1

Links to

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

Links from

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



Unique Keys

Column	Key Type	Description
customer_id	Primary key	Unique identifier for customer
address_id	Foreign key	Unique identifier for address

4.7 Table: film

Description: Each film's title, description, release year, language id, length, rental rate, rental duration, rating, replacement cost, and special features.

Columns

Column Name	Data Type	Description
 film_id	SERIAL	Unique film identifier
title	CHARACTER VARYING(255)	Name of film
description	TEXT	Description of film
release_year	year	Film release year
 language_id	SMALLINT	Unique language identifier
rental_duration	SMALLINT	Number of days rented
rental_rate	NUMERIC(4,2)	Cost of rental (in USD, x.xx)
length	SMALLINT	Length of film (in minutes)
replacement_cost	NUMERIC(5,2)	Cost to replace film (in USD, x.xx)
rating	mpaa_rating	Rating P, PG, PG-13, NC-17, R
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update for film

Links to

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

Links from

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



Unique Keys

Column	Key Type	Description
film_id	Primary key	Unique identifier for each film
language_id	Foreign key	Unique identifier for each language

4.8 Table: film_actor

Description: Information about each actor from all of the films in the inventory

Columns

Column Name	Data Type	Description
 actor_id	SMALLINT	unique actor identifier
 film_id	SMALLINT	unique film identifier
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update film actor

Links to

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

Links from

The film_actor table does not link from any other table.



Unique Keys

Column	Key Type	Description
actor_id	Primary & Foreign	Unique identifier for actor
film_id	Primary & Foreign	Unique identifier for film

4.9 Table: film_category

Description: Table connecting films to their category(genre).

Columns

Column Name	Data Type	Description
 film_id	SMALLINT	Unique film identifier
 category_id	SMALLINT	Unique category (genre) identifier
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update for film category

Links to

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

Links from

The film_category table does not link from any other tables.



Unique Keys

Column	Key Type	Description
film_id	Primary & Foreign	Unique identifier for film
category_id	Primary & Foreign	Unique identifier for category

4.10 Table: inventory

Description: Contains store and inventory identifiers for all of the films in the inventory

Columns

Column Name	Data Type	Description
 inventory_id	SERIAL	Unique inventory identifier
 film_id	SMALLINT	Unique film identifier
store_id	SMALLINT	Unique store identifier
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update inventory

Links to

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

Links from

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


Unique Keys

Column	Key Type	Description
inventory_id	Primary key	Unique identifier for inventory
film_id	Foreign key	Unique identifier for film

4.11 Table: language

Description: Identifies the languages of each of the films

Columns

Column Name	Data Type	Description
 language_id	SERIAL	Unique language identifier
name	CHARACTER(20)	Name of language
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update language

Links to

The language table does not link to any other table in the database.

Links from

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



Unique Keys

Column	Key Type	Description
language_id	Primary key	Unique identifier for language

4.12 Table: staff

Description: Personal information about staff including names, addresses, emails, stores, passwords, ids, and pictures.

Columns

Column Name	Data Type	Description
 staff_id	SERIAL	Unique staff identifier
first_name	CHARACTER VARYING(45)	First name of staff member
last_name	CHARACTER VARYING(45)	Last name of staff member
 address_id	SMALLINT	Staff member unique address identifier
email	CHARACTER VARYING(50)	Staff member email address
store_id	SMALLINT	Unique store identifier
active	INTEGER	Active staff member true/false
username	CHARACTER VARYING(16)	Staff username
password	CHARACTER VARYING(40)	Staff password
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update staff
picture	BYTEA	Picture of staff member

Links to

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

Links from

Table	Join	Description
payment	payment.staff_id = staff.staff_id	Foreign key constraint referencing payment.staff_id
rental	rental.staff_id = staff.staff_id	Foreign key constraint referencing rental.rental_id
store	store.store_id = staff.store_id	Foreign key constraint referencing store.store_id




Unique Keys

Column	Key Type	Description
staff_id	Primary key	Unique identifier for staff member
address_id	Foreign key	Unique identifier for address

4.13 Table: store

Description: Store manager and store address information

Columns

Column Name	Data Type	Description
 story_id	SERIAL	Unique store identifier
 manager_staff_id	SMALLINT	Unique manager identifier
 address_id	SMALLINT	Unique store address identifier
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update store

Links to

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

Links from

The store table does not link from any other tables in the database.

Unique Keys

Column	Key Type	Description
story_id	Primary key	Unique identifier for store
manager_staff_id	Foreign key	Unique identifier for manager staff
address_id	Foreign key	Unique identifier for store address