# Rockbuster Stealth Data Analysis

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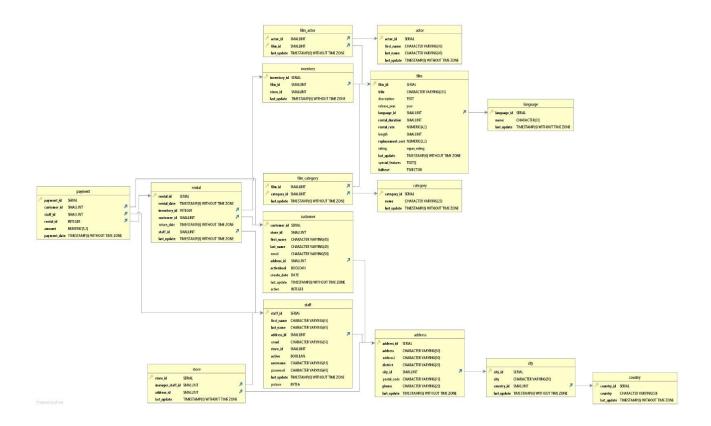
#### 1. Rockbuster Stealth LLC

Rocbuster Stealth LLC is a movie rental company that used to have stores around the world. Facing stiff competition from streaming services such as Netflix and Amazon Prime, the Rockbuster Stealth management team is planning to use its existing movie licenses to launch an online video rental service in order to stay competitive.

#### Legends

- Primary key
- Foreign key
- **?** Composite key
- **←** Links to
- → Linked from

## 2. Entity Relationship Diagram



#### 3.Tables

#### 3.1 Actor

Key	Column	Date Type	Description
7	actor_id	SERIAL	Number given to actors
	first_name	CHARACTER VARYING(45)	First name of actor
	last_name	CHARACTER VARYING(45)	Last name of actor
	last_update	TIMESTAMP(6) WITHOUT	Date/Time of last entry
		TIMEZONE	

#### Linked From

	Table	Join	Description
<b>→</b>	film_actor	film_actor.actor_id = actor.actor_id	Foreign key constraint referencing actor.actor_id

#### 3.2 Address

key	Column	Date Type	Description
7	address_id	SERIAL	Number given to address
	address	CHARACTER VARYING(50)	First line of address
	address2	CHARACTER VARYING(50)	Second line of address
	district	CHARACTER VARYING(20)	District name
•	city_id	SMALLINT	Number given to city
	postal_code	CHARACTER VARYING(10)	Postal code
	phone	CHARACTER VARYING(20)	Phone number
	last_update	TIMESTAMP(6) WITHOUT	Date/Time of last entry
		TIMEZONE	

# Linked From

	Table	Join	Description
<b>→</b>	customer	customer.address_id = address.address	Foreign key constraint referencing
		_id	address.address _id
-	staff	staff.address_id = address.address _id	Foreign key constraint referencing
			address.address _id
-	store	store.address_id = address.address _id	Foreign key constraint referencing
			address.address_id

## Links to

	Table	Join	Description
<b>—</b>	city	address.city _id = city.city _id	Foreign key constraint referencing city.city_id

## 3.3 Category

Key	Column	Date Type	Description
	category_id	SERIAL	Number given to category
	name	CHARACTER VARYING(20)	Category name
	last_update	TIMESTAMP(6) WITHOUT	Date/Time of last entry
		TIMEZONE	

#### Linked From

	Table	Join	Description
<b>→</b>	film_category	film_category. category _id = category.category_id	Foreign key constraint referencing
			category. category _id

# 3.4 City

key	Column	Date Type	Description
7	city_id	SERIAL	Number given to city
	city	CHARACTER VARYING(50)	City name
7	country_id	SMALLINT	Number given to country
	last_update	TIMESTAMP(6) WITHOUT	Date/Time of last entry
		TIMEZONE	

# Linked From

Ī		Table	Join	Description
ļ				
	<b>→</b>	address	address.city_id = city.city_id	Foreign key constraint
				referencing
				city.city_id

#### Links to

	Table	Join	Description
<b>←</b>	country	city.country _id =country.country _id	Foreign key constraint referencing
			country_id

# 3.5 Country

key	Column	Date Type	Description
7	country_id	SERIAL	Number given to country
	country	CHARACTER VARYING(50)	Country name
	last_update	TIMESTAMP(6) WITHOUT	Date/Time of last entry
		TIMEZONE	

# Linked From

	Table	Join	Description
<b>→</b>	city	city.country_id = country.country_id	Foreign key constraint referencing country.country_id

#### 3.6 Customer

key	Column	Date Type	Description
7	customer_id	SERIAL	Number given to customer
P	store_id SMALLINT		Number given to store
	first_name	CHARACTER VARYING(50)	First name of customer
	last_name	CHARACTER VARYING(50)	Last name of customer
	email	CHARACTER VARYING(50)	Mail id of customer
•	address_id	SMALLINT	Number given to address
	activebool	BOOLEAN	Whether the customer is active or

		not?
create_date	DATE	Date when the entry is created
active	INTEGER	Whether the customer is active or
		not?
last_update	TIMESTAMP(6) WITHOUT	Date/Time of last entry
_	TIMEZONE	

## Linked From

	Table	Join	Description
<b>→</b>	payment	payment.customer_id = customer .customer_id	Foreign key constraint referencing customer .customer_id
<b>→</b>	rental	rental.customer_id = customer .customer_id	Foreign key constraint referencing customer .customer_id

## Links to

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

#### 3.7 Film

key	Column	Date Type	Description
<b>?</b>	film_id	SERIAL	Number given to
	title	CHARACTER VARYING(25)	Title of the film
	description	TEXT	Description about the film
	release_year	YEAR	Year when film is released
P	language_id	SMALLINT	Number given to language
	rental_duration	SMALLINT	How many days film is rented by customer
	rental_rate	NUMERIC(4,2)	Price of film
	length	SMALLINT	Length of film
	replacement_cost	NUMERIC(5,2)	Cost of replacement
	rating	MPAA RATING	Film rating
	last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date/Time of last entry
	special_features	TEXT()_	Special features
	fulltext	TSVECTOR	Text describing the film

#### Linked From

Table	Join	Description

-	film_category	film_category.film _id =	Foreign key constraint
		filmfilm _id	referencing
			filmfilm _id
-	film_actor	film_actor.film _id = filmfilm	Foreign key constraint
		_id	referencing
			filmfilm _id
	inventory	inventory.film _id = filmfilm	Foreign key constraint
		_id	referencing
			filmfilm _id

#### Links to

	Table	Join	Description
<b>←</b>	language	film.language_id =language.language_id	Foreign key constraint referencing language.language_id

#### 3.8 Film actor

key	Column	Date Type	Description
7	actor-id	SMALLINT	Number given to actor
•	film_id	SMALLINT	Number given to film
	last_update	TIMESTAMP(6)	Date/Time of last entry
		WITHOUT TIMEZONE	

## Links to

	Table	Join	Description
<b>←</b>	actor	film.actor.actor _id = actor.actor _id	Foreign key constraint referencing
			actor.actor _id
<b>←</b>	film	film.actor.film _id = film.film_id	Foreign key constraint referencing
			film.film_id

# 3.9 Film category

key	Column	Date Type	Description
7	film_id	SMALLINT	Number given to film
7	category_id	SMALLINT	Number given to category of film
	last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date/Time of last entry

## Links to

	Table	Join	Description
<b>←</b>	category	film.category. category_id = category. category_id	Foreign key constraint referencing category. category_id
<b>←</b>	film	film.category.film _id = film.film_id	Foreign key constraint referencing film.film_id

# 3.10 Inventory

key	Column	Date Type	Description
7	inventory_id	SERIAL	Number given to inventory
•	film_id	SMALLINT	Number given to film
	store_id	SMALLINT	Number given to store
	last_update	TIMESTAMP(6)	Date/Time of last entry
		WITHOUT TIMEZONE	

# Linked From

	Table	Join	Description
<b>→</b>	rental	rental.inventory_id = inventory. inventory_ id	Foreign key constraint referencing inventory. inventory_ id

## Links to

	Table	Join	Description
<b>←</b>	film	inventory .film_id =film.film _id	Foreign key constraint referencing film.film_id

# 3.11 Language

key	Column	Date Type	Description
<b>P</b>	language_id	SERIAL	Number given to language
	name	CHARACTERVARYING(20)	Name of the language
	last_update	TIMESTAMP(6) WITHOUT	Date/Time of last entry
		TIMEZONE	

# Linked From

	Table	Join	Description
<b>→</b>	film	film.language_id = language. language _id	Foreign key constraint referencing language. language _id

# 3.12 Payment

key	Column	Date Type	Description
P	payment_id	SERIAL	Number given to payment
•	customer_id	SMALLINT	Number given to customer
•	staff_id	SMALLINT	Number given to staff
	rental_id	INTEGER	Number given to rent
amount		NUMERIC(5,2)	Rental amount received
	payment_date	TIMESTAMP(6)	Date when payment is done
		WITHOUT TIMEZONE	

## Links to

	Table	Join	Description
<b>—</b>	customer	payment.customer_id =	Foreign key constraint referencing
		customer.customer _id	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

#### 3.13 Rental

key	Column	Date Type	Description
7	rental_id	SERIAL	Number given to rent
	rental_date	TIMESTAMP(6) WITHOUT TIMEZONE	Date when film is rented
•	inventory_id	INTEGER	Number given to inventory
•	customer_id	SMALLINT	Number given to customer
	return_date	TIMESTAMP(6) WITHOUT TIMEZONE	Date when film is returned
•	staff_id	SMALLINT	Number given to staff
	last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date/Time of last entry

#### Linked From

	Table	Join	Description
<b>→</b>	payment	payment.rental_id = rental.rental_id	Foreign key constraint referencing rental.rental_id

#### Links to

	Table	Join	Description
<b>—</b>	customer	rental.customer_id =	Foreign key constraint referencing
		customer.customer_id	customer.customer_id
	inventory	rental.inventory _id = inventory.	Foreign key constraint referencing
-		inventory _id	inventory. inventory _id
	staff	rental.staff _id =staff.staff _id	Foreign key constraint referencing
			staff.staff _id

#### 3.14 Staff

key	Column	Date Type	Description
•	staff_id	SERIAL	Number given to
	first_name	CHARACTERVARYING(45)	First Name of staff
	last_name	CHARACTERVARYING(45)	Last name of staff
•	address_id	SMALLINT	Number given to address
	email	CHARACTERVARYING(50)	Mail id of staff
	store_id	SMALLINT	Number given to store
	active	BOOLEAN	Is the staff active or not?
	username	CHARACTERVARYING(16)	Username of the staff
	password	CHARACTERVARYING(40)	Password of the staff
	last_update	TIMESTAMP(6) WITHOUT	Date/Time of last entry
		TIMEZONE	
	picture	BYTEA	Photo of the staff

## Linked From

	Table	Join	Description
<b>-</b>	payment	payment.staff _id = staff.staff_id	Foreign key constraint
			referencing
			staff.staff_id
<b>→</b>	store	store.staff_id =staff.staff_id	Foreign key constraint
			referencing
			staff.staff_id
-	rental	rental.staff_id =staff.staff_id	Foreign key constraint
			referencing
			staff.staff_id

#### Links to

	Table	Join	Description
<b>—</b>	address	staff.address_id= address .address_id	Foreign key constraint referencing address .address_id

#### 3.15 Store

Key	Column	Date Type	Description
7	store_id	SERIAL	Number given to store
7	manager_staff_id	SMALLINT	Number given to manager
•	address_id	SMALLINT	Number given to address
	last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date/Time of last entry

## Links to

	Table	Join	Description
<b>+</b>	address	store.address_id= address .address_id	Foreign key constraint referencing

			address_id
<b>←</b>	staff	store.staff_id=staff.staff_id	Foreign key constraint referencing
			staff.staff_id