
ROCKBUSTER STEALTH LLC.



DATA DICTIONARY AND ERD

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ROCKBUSTER STEALTH, LLC.

EXECUTIVE SUMMARY

Objective

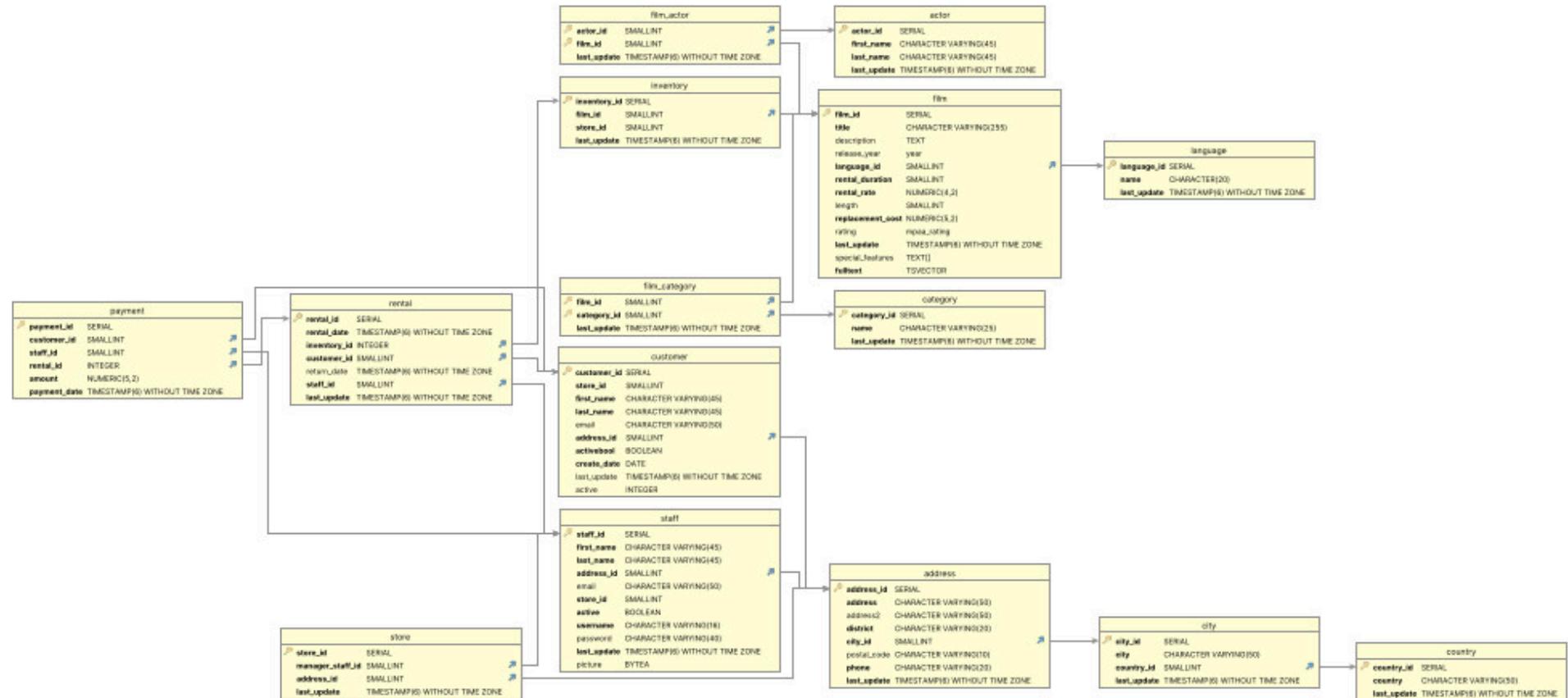
Rockbuster Stealth LLC is a movie rental company facing stiff competition from streaming services such as Netflix and Amazon Prime. The Rockbuster Stealth management team is planning to use its existing movie licenses to launch an online video rental service in order to stay competitive. This Data Dictionary will show relationships in the ERD (*Entity Relationship Diagram*) to better explain and understand the processes used to gather, refine and drill down in our data analysis.

Goals

This ERD will show the relationships between the tables used in our analysis using Primary and Foreign keys, Data types as well as the Joins (*connections*) to other tables in order to help clarify the methods used.

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ERD



FACT TABLE

Primary Key



Foreign key



(These colours will indicate the Keys for the various tables; Red being Primary, green being Foreign)

Payments

Column	Data Type	Description
payment_id	integer	Id number for payment
customer_id	smallint	Customer ID
staff_id	smallint	Staff ID
rental_id	integer	Rental ID
amount	numeric	Amount of Rental
payment_date	timestamp	Date paid

Links to:

Table	Join	Description
customer	payment.customer_id=customer.customer_id	Customer ID
staff	payment.staff_id=staff.staff_id	Staff ID
rental	payment.rental_id=rental.rental_id	Rental ID

Rentals

Column	Data Type	Description
rental_id	integer	Rental ID
rental_date	timestamp	Date of rental (out)
inventory_id	integer	Inventory number
customer_id	smallint	Customer ID
return_date	timestamp	Date of return
staff_id	smallint	Staff ID
last_update	timestamp	Date of last update

Links to:

Table	Join	Description
customer	rental.customer_id=customer.customer_id	Customer ID
staff	rental.staff_id=staff.staff_id	Staff ID
inventory	rental.inventory_id=inventory.inventory_id	Inventory ID

DIMENSION TABLE

(listed alphabetically for convenience)

Primary Key



Foreign key



(These colours will indicate the Keys for the various tables; Red being Primary, green being Foreign)

Actor

Column	Data Type	Description
actor_id	integer	ID numer for Actor (
first_name	character varying	First name of Actor
last_name	character varying	Last name of Actor
last_update	timestamp	Date of last update

Links from:

Table	Join	Description
film_actor	actor.actor_id=film_actor.actor.id	Reference to film_actor table

Address

Column	Data Type	Description
address_id	integer	ID number assigned to individual address
address	character_varying	Street name and number
address2	character_varying	Additional address info (optional)
district	character_varying	Region, State or District
city_id	smallint	ID number assigned to individual Cities
postal_code	character_varying	Postal code linked to Address
phone	character_varying	Telephone number
last_update	timestamp	Date of last update

Links to:

Table	Join	Description
city	address.city_id=city.city_id	Foreign key to city table

Links from:

Table	Join	Description
customer	address.address_id=customer.address_id	Foreign key to customer table
staff	address.address_id=staff.address_id	Foreign key to staff table
store	address.address_id=store.address_id	Foreign key to store table

Category

Column	Data type	Description
category_id	integer	ID assigned to categories
name	character varying	Name of category
last_update	timestamp	Date of last update

Links from:

Table	Join	Description
film_category	category.category_id=film_category.category_id	Foreign key to customer table

City

Column	Data type	Description
city_id	integer	ID assigned to Cities
city	character varying	Name of City
country_id	smallint	ID assigned to country
last_update	timestamp	Date of last update

Links to:

Table	Join	Description
country	city.country_id=country.country_id	Foreign key to country table

Links from:

Table	Join	Description
address	city.city_id=address.city_id	Foreign key to address table

Country

Column	Data type	Description
country_id	integer	ID assigned to country
country	character varying	Name of country
last_update	timestamp	Date of last update

Links from:

Table	Join	Description
city	country.country_id=city.country_id	Foreign key to address table

Customer

Column	Data type	Description
customer_id	integer	Unique customer ID
store_id	smallint	ID of store
first_name	character varying	First name of customer
last_name	character varying	Last name of customer
email	character varying	Customer email
address_id	smallint	Customer address
activebool	boolean	Boolean indicating if account is active (True/False)
create_date	date	Creation of account
last_update	timestamp	Date of last update
active	integer	Account status (1=active, 0=inactive)

Links to:

Table	Join	Description
address	customer.address_id=address.address_id	Foreign key to address table

Links from:

Table	Join	Description
payment	customer.customer_id=payment.customer_id	Foreign key to payment table

Table	Join	Description
rental	customer.customer_id=rental.customer_id	Foreign key to rental table

Film

Column	Data type	Description
film_id	integer	Unique film ID
title	character varying	Title of film
description	text	Description of film
release_year	integer	Year of release
language_id	smallint	Unique ID for language (English, Spanish, etc)
rental_duration	smallint	Days rented
rental_rate	numeric	Cost of renting the film
length	smallint	Running length (Minutes)
replacement_cost	numeric	Cost to replace film
rating	mpaa_rating	MPAA rating (G, PG, PG-13, R, NC-17)
last_update	timestamp	Date of last update
special_features	text	Special features of film (Trailers, Commentary, etc...)
fulltext	tsvector	Keywords used in search queries for customers

Links to:

Table	Join	Description
language	film.language_id=language.language_id	Foreign key to language table

Links from:

Table	Join	Description
film_actor	film.film_id=film_actor.film_id	Foreign key to film_actor table
inventory	film.film_id=inventory.film_id	Foreign key to inventory table
film-category	film.film_id=film_category.film_id	Foreign key to film_category table

Film Actor

Column	Data type	Description
actor_id	smallint	Unique ID for Actor
film_id	smallint	Unique ID for Film
last_update	timestamp	Date of last update

Links to:

Table	Join	Description
actor	film_actor.actor_id=actor.actor_id	Foreign key to actor table
film	film_actor.film_id=film_actor.id	Foreign key to film table

Film Category

Column	Data type	Description
film_id	smallint	Unique ID for film
category_id	smallint	Unique ID for category
last_update	timestamp	Date of last update

Links to:

Table	Join	Description
film	film_category.film_id=film.film_id	Foreign key to film table
category	film_category.category_id=category.category_id	Foreign key to category table

Inventory

Column	Data type	Description
inventory_id	integer	Unique inventory ID
film_id	smallint	Unique film ID
store_id	smallint	Unique store ID
last_update	timestamp	Date of last update

Links to:

Table	Join	Description
film	film_category.film_id=film.film_id	Foreign key to film table

Links from:

Table	Join	Description
rental	inventory.inventory_id=rental.inventory_id	Foreign key to rental table

Language

Column	Data type	Description
language_id	integer	Unique Language ID
name	character	Primary language of film
last_update	timestamp	Date of last update

Links from:

Table	Join	Description
film	language.language_id=film.language_id	Foreign key to film table

Staff

Column	Data type	Description
staff_id	integer	Unique staff ID
first_name	character varying	First name of Employee
last_name	character varying	Last name of Employee
address_id	smallint	Address of employee
email	character varying	Email of employee
store_id	smallint	Unique store ID
active	boolean	Is active employee (True/False)
username	character varying	Employee username
password	character varying	Employee password
last_update	timestamp	Date of last update
picture	bytea	Image (Used for Employee ID badge)

Links to:

Table	Join	Description
address	staff.address_id=address.address_id	Foreign key to customer table

Links from:

Table	Join	Description
rental	payment.rental_id=rental.rental_id	Foreign key to rental table

Store

Column	Data type	Description
store_id	integer	Unique store ID
manager_staff_id	smallint	Unique ID for manager
address_id	smallint	Unique address ID (used for Stores)
last_update	timestamp	Date of last update

Links to:

Table	Join	Description
address	store.address_id=address.address_id	Foreign key to address table
staff	store.manager_staff_id=address.address_id	Foreign key to staff table