

# **Rockbuster Stealth LLC**

**AN ONLINE VIDEO RENTAL COMPANY**

**DATA DICTIONARY**

**BLESSING OSIMAHON**

# TABLE OF CONTENTS

1. Entity Relationship Diagram (ERD).....	2
2. Fact Table.....	3
2.1 Payment.....	3
2.2 Rental.....	4
3. Dimension Table.....	5
3.1 Actor.....	5
3.2 Category.....	5
3.3 City.....	6
3.4 Country.....	6
3.5 Customer.....	7
3.6 Film_actor.....	8
3.7 Film_category.....	8
3.8 Inventory.....	9
3.9 Language.....	9
3.11 Staff.....	10
3.11 Store.....	11
4. Sub_dimension Table.....	12
4.1 Film.....	12
4.2 Address.....	13

# ENTITY RELATIONSHIP DIAGRAM



The Entity Relationship Diagram shows a snowflake schema. In a snowflake schema, we have fact tables, dimension tables, and sub-dimension tables. We can see that the *payment* and *rental* represent the fact table surrounded by *inventory*, *customer*, and *staff* dimension tables. The dimension tables are further surrounded by sub-dimension tables such as the *film* and *address* tables.

# FACT TABLES

## Payment

Column	Data type	Description
Payment_id	Serial	Primary key
Customer_id	Smallint	ID of customer who made the payment (Foreign key) and links to the customer table
Staff_id	Smallint	ID of the staff that processed the payment (Foreign key) and links to the staff table
Rental_id	Integer	ID of the rental linked with the payment (Foreign key) links to the rental table
Amount	Numeric (5,2)	The amount of the payment
Payment_date	Timestamp (6) without time zone	The date and time when the payment was made

# FACT TABLES

## Rental

Column	Data type	Description
Rental_id	Serial	Primary key representing a unique identifier for each rental transaction and links from the payment table
Rental_date	Timestamp (6) without time zone	Date and time when the rental transaction occurred
Inventory_id	Integer	ID of the inventory item rented out (Foreign key) and links to the inventory table
Customer_id	Smallint	ID of the customer who rented the inventory item (Foreign key) and links to the customer table
Return_date	Timestamp (6) without time zone	Date and time when the rented item was returned
Staff_id	Smallint	ID of the staff member who processed the rental transaction (Foreign key) and links to the staff table

# DIMENSION TABLES

## Actor

Column	Data type	Description
Actor_id	Serial	Unique ID for each actor (Primary key) and links from film_actor table
First_name	VARCHAR	First name of the actor
Last_name	VARCHAR	Last name of the actor
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated

## Category

Column	Data type	Description
Category_id	Serial	ID of a genre category linked with a film (Primary key) links from film_category
Name	VARCHAR	Name of a particular film category
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated

# DIMENSION TABLES

## City

Column	Data type	Description
City_id	Serial	Unique ID for each city (Primary key) and links from address table
City	VARCHAR	Name of city
Country_id	Smallint	ID of the county to which the city belongs (Foreign key) and links to country table
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated

## Country

Column	Data type	Description
Country_id	Serial	ID for each country (Primary key) and links from city table
Country	VARCHAR	Name of country
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated

# DIMENSION TABLES

## Customer

COLUMN	DATA TYPE	DESCRIPTION
Customer_id	Serial	ID of the customer who rented the inventory item (Primary key) and links from rental table
Store_id	Smallint	ID of the store linked with the staff (Foreign key) and links from payment table
First_name	VARCHAR	First name of the customer
Last_name	VARCHAR	Last name of the customer
Email	VARCHAR	Email address of the customer
Address_id	Samallint	ID of the address linked with the customer (Foreign key) and links to address table
Active_bool	Boolean	Active status of the customer
Create_date	Date	Date when the customer record was created
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated
Active	Integer	Active status of the customer



# DIMENSION TABLES

## Film\_actor

Column	Data type	Description
Actor_id	Smallint	ID of an actor (Foreign key) and links to actor table
Film_id	Smallint	ID of a film (Foreign key) and links to film table
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated

## Film\_category

Column	Data type	Description
Film_id	Smallint	Represents ID of a particular film (Foreign key) and links to film table
Category_id	Smallint	ID of a genre category linked with a film (Foreign key) and links to category table
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated

# DIMENSION TABLES

## Inventory

Column	Data type	Description
Inventory_id	Serial	ID for each inventory item (Primary key) and links from rental table
Film_id	Smallint	ID of the film associated with the inventory item (Foreign key) and links to film table
Store_id	Smallint	ID of the store where the inventory item is located (Foreign key) and links to store table
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated

## Language

Column	Data type	Description
Language_id	Serial	Unique ID for each language (Primary key) and links from film table
Name	VARCHAR	Name of language
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated

# DIMENSION TABLES

## Staff

Column	Data type	Description
Staff_id	Serial	Unique ID for each staff member (Primary key) and links from rental, payment, and store tables
First_name	VARCHAR	First name of the customer
Last_name	VARCHAR	Last name of the customer
Address_id	Smallint	ID of the address linked with the customer (Foreign key) and links to address table
Email	VARCHAR	Email address of the customer
Store_id	Smallint	ID of the store where the staff is assigned (Foreign key) and links to store table
Active	Boolean	Active status of the staff
Username	VARCHAR	Username used by the staff member
Password	VARCHAR	Password used by the staff member for authentication
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated

# DIMENSION TABLES

## Store

Column	Data type	Description
Store_id	Serial	Unique ID for each store (Primary key) and links from inventory and staff tables)
Manager_staff_id	Smallint	ID of the staff who manages the store (Foreign key) and links to staff table
Address_id	Smallint	ID of the address linked with the store (Foreign key) and links to address table
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated

# SUB-DIMENSION TABLES

## Film

Column	Data type	Description
Film_id	Serial	Unique ID for each film (Primary key) and links from film_actor, film_category, and inventory tables
Title	VARCHAR	Title of a particular film
Description	TEXT	Text field describing a film
Release_year	Year	Release year of the film
Language_id	Smallint	ID of the language used in a film (Foreign key) and links to language table
Rental_duration	Smallint	Rental duration of a movie
Rental_rate	Numeric (4,2)	Rental rate of a film
Length	Smallint	Length in minutes of a film
Replacement_cost	Numeric (5,2)	Replacement cost of a film
Rating	Mpaa_rating	An MPAA rating representing the film's rating

# SUB-DIMENSION TABLES

## Address

Column	Data type	Description
Address_id	Serial	Unique ID for each address (Primary key) and links from customer, store, and staff tables
Address	VARCHAR	Main address line
Address 2	VARCHAR	Additional address information
District	VARCHAR	District or neighborhood
City_id	Smallint	ID of the city linked with the address (Foreign key) and links to city table
Postal_code	VARCHAR	Represents postal code or ZIP code
Phone	VARCHAR	Phone number linked with the address
Last_update	Timestamp (6) without time zone	Date and time when the record was last updated