



Rockbuster Stealth LLC

Data Dictionary

Angus Berry
JUNE 2023

Table of Contents

1 Entity Relationship Diagram	2
2.1 Fact Tables	3
2.1.1 Payment table	3
2.1.2 Rental table	3
2.2 Dimension Tables	4
2.2.1 Store table.....	4
2.2.2 Film_actor table	5
2.2.3 Inventory table.....	6
2.2.4 Film_category table	6
2.2.5 Customer table.....	7
2.2.6 Staff table.....	8
2.2.7 Actor table	9
2.2.8 Film table	9
2.2.9 Category table.....	10
2.2.10 Address table	11
2.2.11 Language table.....	12
2.2.12 City table	12
2.2.13 Country table	13

1. ENTITY RELATIONSHIP DIAGRAM



There are 2 fact tables (payment, rental) linked to numerous dimension tables that detail film, actor, customer and staff information

Legend



Primary Key



Foreign Key

2.1 FACT TABLES

2.1.1 Payment

Information regarding payments, who paid and who took payment along with dates.

	Column	Data Type	Description
	Payment_id	SERIAL	Unique identifier for payment
	Customer_id	SMALLINT	Unique identifier for customer
	Staff_id	SMALLINT	Unique identifier for staff member
	Rental_id	INTEGER	Unique identifier for rental
	Amount	NUMERIC (5,2)	Cost of transaction
	Payment_Date	TIMESTAMP (6) WITHOUT TIME ZONE	Date payment taken

Links to





Table	Join	Description
customer	payment.customer_id = customer.customer_id	Foreign key link to customer table
staff	payment.staff_id = staff.staff_id	Foreign key link to staff table
rental	payment.rental_id = rental.rental_id	Foreign key link to rental table

Unique Key Columns

Key	Column Name	Description
	payment_id	Unique identifier for payment
	customer_id	Unique identifier for customer
	staff_id	Unique identifier for staff member
	rental_id	Unique identifier for rental

2.1.2 Rental

Information regarding individual rentals, with dates, customer and staff id's

	Column	Data Type	Description
	Rental_id	SERIAL	Unique identifier for rental
	Rental_date	TIMESTAMP (6) WITHOUT TIME ZONE	Date of rental
	Inventory_id	INTEGER	Unique identifier for inventory
	Customer_id	SMALLINT	Unique identifier for customer
	Return_date	TIMESTAMP (6) WITHOUT TIME ZONE	Date rental returned
	Staff_id	SMALLINT	Unique identifier for staff member
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated





Links to

Table	Join	Description
inventory	rental.inventory_id = inventory.inventory_id	Foreign key link to inventory table
customer	rental.customer_id = customer.customer_id	Foreign key link to customer table
staff	rental.staff_id = staff.staff_id	Foreign key link to staff table

Links from

Table	Join	Description
payment	payment.rental_id = rental.rental_id	Primary key link from payment table

Unique Key Columns




Key	Column Name	Description
	rental_id	Unique identifier for rental
	inventory_id	Unique identifier for inventory
	customer_id	Unique identifier for customer
	staff_id	Unique identifier for staff member

2.2 DIMENSION TABLES

2.2.1 Store

Information regarding store and management id's




	Column	Data Type	Description
--	--------	-----------	-------------

	Store_id	SERIAL	Unique identifier for store
	Manager_staff_id	SMALLINT	Unique identifier for management staff
	Address_id	SMALLINT	Unique identifier for address
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated

Links to



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

Unique Key Columns

Key	Column Name	Description
	store_id	Unique identifier for store
	manager_staff_id	Unique identifier for management staff
	address_id	Unique identifier for address

2.2.2 Film_actor

Information including actor id's and film id's





	Column	Data Type	Description
	Actor_id	SMALLINT	Unique identifier for actor
	Film_id	SMALLINT	Unique identifier for film
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated

Links to

Table	Join	Description
actor	film_actor.actor_id = actor.actor_id	Primary key link to actor table
film	film_actor.film_id = film.film_id	Primary key link to film table



Unique Key Columns

Key	Column Name	Description
-----	-------------	-------------

 	actor_id	Unique identifier for actor
 	film_id	Unique identifier for film

2.2.3 Inventory

Information regarding inventory, film and store id's

	Column	Data Type	Description
	Inventory_id	SERIAL	Unique identifier for inventory
	Film_id	SMALLINT	Unique identifier for film
	Store_id	SERIAL	Unique identifier for store
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated



Links to

Table	Join	Description
film	inventory.film_id = film.film_id	Foreign key link to film table

Links from





Table	Join	Description
rental	rental.inventory_id = inventory.inventory_id	Primary key link from rental table

Unique Key Columns

Key	Column Name	Description
	inventory_id	Unique identifier for inventory
	film_id	Unique identifier for film

2.2.4 Film category



Film and category id's

	Column	Data Type	Description
 	Film_id	SMALLINT	Unique identifier for film
 	Category_id	SMALLINT	Unique identifier for category
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated

Links to



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

Unique Key Columns

Key	Column Name	Description
	film_id	Unique identifier for film
	category	Unique identifier for category

2.2.5 Customer

Personal information on customers and whether they are still active

	Column	Data Type	Description
	Customer_id	SERIAL	Unique identifier for customer
	Store_id	SMALLINT	Unique identifier for store
	First_name	CHARACTER VARYING(45)	Customers first name
	Last_name	CHARACTER VARYING(45)	Customers surname
	Email	CHARACTER VARYING(50)	Customers email address
	Address_id	SMALLINT	Unique identifier for address
	Activebool	BOOLEAN	True/false if customer still active
	Create_date	DATE	Date record created
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated
	Active	INTEGER	True/false if customer still active in binary form



Links to

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

Links from



Table	Join	Description
rental	rental.customer_id = customer.customer_id	Primary key link from rental table
payment	payment.customer_id = customer.customer_id	Primary key link from payment table

Unique Key Columns

Key	Column Name	Description
	customer_id	Unique identifier for customer
	address_id	Unique identifier for address

2.2.6 Staff

Personal details for staff members with login information

	Column	Data Type	Description
	Staff_id	SERIAL	Unique identifier for staff member
	First_name	CHARACTER VARYING(45)	Staff members first name
	Last_name	CHARACTER VARYING(45)	Staff members surname
	Address_id	SMALLINT	Unique identifier for staff address
	Email	CHARACTER VARYING(50)	Staff members email address
	Store_id	SMALLINT	Unique identifier for store
	Active	BOOLEAN	True/false if staff member still active
	Username	CHARACTER VARYING(16)	Staff members username
	Password	CHARACTER VARYING(40)	Staff members password
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated
	Picture	BYTEA	Staff members photo



Links to

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

Links from


Table	Join	Description
payment	payment.staff_id = staff.staff_id	Foreign key link from payment table

Unique Key Columns

Key	Column Name	Description
	staff_id	Unique identifier for staff member
	address_id	Unique identifier for staff address

2.2.7 Actor


Actor names

	Column	Data Type	Description
	Actor_id	SERIAL	Unique identifier for actor
	First_name	CHARACTER VARYING(45)	Actors first name
	Last_name	CHARACTER VARYING(45)	Actors surname
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated

Links from


Table	Join	Description
film_actor	film_actor.actor_id = actor.actor_id	Primary key link from film_actor table


Unique Key Columns

Key	Column Name	Description
	actor_id	Unique identifier for actor

2.2.8 Film

Key information about films along with NCAA rating

	Column	Data Type	Description
	Film_id	SERIAL	Unique identifier for film
	Title	CHARACTER VARYING (255)	Film title
	Description	TEXT	Description of film

	Release_year	Year	Year film released
	Language_id	SMALLINT	Unique identifier for language
	Rental_duration	SMALLINT	Duration of rental
	Rental_rate	NUMERIC(4,2)	Rate of rental
	Length	SMALLINT	Length of film
	Replacement_cost	NUMERIC(5,2)	Cost to replace film
	Rating	Mpaa_rating	MPAA film rating
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated
	Special_features	TEXT[]	Information about films special features
	Fulltext	TSVECTOR	Organized list of lexemes from document describing film



Links to

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

Links from


Table	Join	Description
film_actor	film_actor.film_id = film.film_id	Primary key link from film_actor table
inventory	inventory.film_id = film.film_id	Primary key link from inventory table
film_category	film_category.film_id = film.film_id	Primary key link from film_category table

Unique Key Columns

Key	Column Name	Description
	film_id	Unique identifier for film
	language_id	Unique identifier for language

2.2.9 Category

Film genres with id's


	Column	Data Type	Description
	Category_id	SERIAL	Unique identifier for category
	Name	CHARACTER VARYING (25)	Name of category

	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated
--	-------------	------------------------------------	--------------------------

Links from



Table	Join	Description
film_category	film_category.category_id = category.category_id	Primary key link from film_category table

Unique Key Columns

Key	Column Name	Description
	category_id	Unique identifier for category

2.2.10 Address

Address and contact information for customers

	Column	Data Type	Description
	Address_id	SERIAL	Unique identifier for address
	Address	CHARACTER VARYING (50)	First line of address
	Address2	CHARACTER VARYING (50)	Second line of address
	District	CHARACTER VARYING (20)	District of address
	City_id	SMALLINT	Unique identifier for city
	Postal_code	CHARACTER VARYING (10)	Postal code
	Phone	CHARACTER VARYING (20)	Phone number
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated



Links to

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

Links from


Table	Join	Description
customer	customer.address_id = address.address_id	Primary key link from customer table
staff	staff.address_id = address.address_id	Primary key link from staff table
store	store.address_id = address.address_id	Primary key link from store table

Unique Key Columns

Key	Column Name	Description
	address_id	Unique identifier for address
	city_id	Unique identifier for city

2.2.11 Language


Language id and names

	Column	Data Type	Description
	Language_id	SERIAL	Unique identifier for language
	Name	CHARACTER (20)	Name of language
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated

Links from



Table	Join	Description
film	film.language_id = language.language_id	Primary key link from film table

Unique Key Columns

Key	Column Name	Description
	language_id	Unique identifier for language

2.2.12 City

Customer's city

	Column	Data Type	Description
	City_id	SERIAL	Unique identifier for city
	City	CHARACTER VARYING (50)	Name of city
	Country_id	SMALLINT	Unique identifier for country
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Last time record updated



Links to

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

Links from


Table	Join	Description
address	address.city_id = city.city_id	Primary key link from address table

Unique Key Columns

Key	Column Name	Description
	city_id	Unique identifier for city
	country	Unique identifier for country

2.2.13 Country


Customer's country

	Column	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 time record updated

Links from

Table	Join	Description
city	city.country_id = country.country_id	Primary key link from city table

Unique Key Columns

Key	Column Name	Description
	country_id	Unique identifier for country