# ROCKBUSTER

Data Dictionary

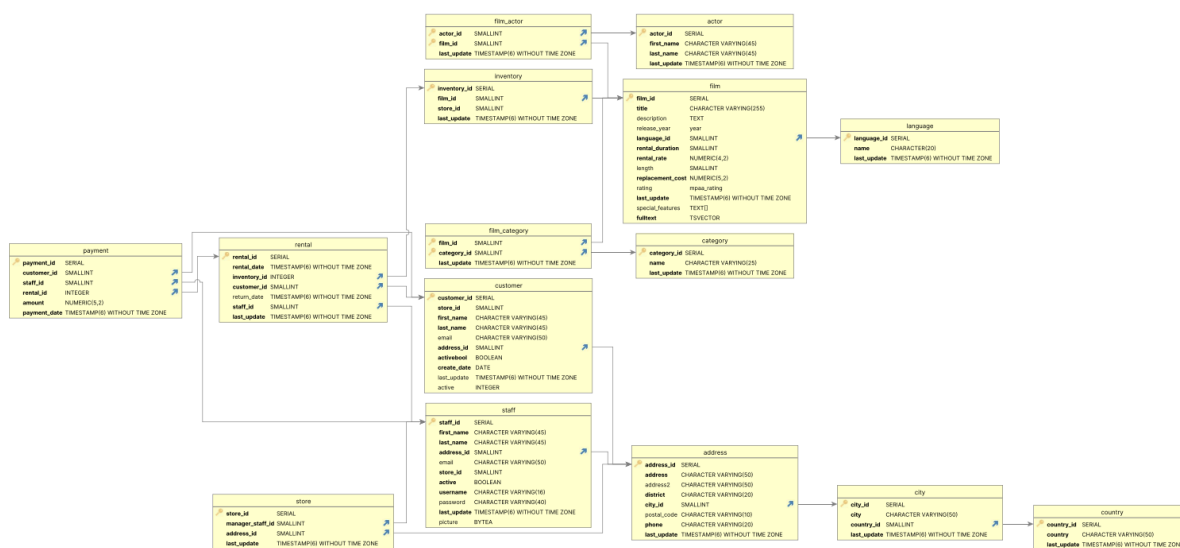NOVEMBER 18, 2023

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Data Analytics Achievement 3

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# Glossary:

Primary Key Icon:



Foreign Key Icon:

# Entity Relationship Diagram (ERD)



Click on the hyperlink to get the ERD in pdf format.

Rockbuster ERD PDF

Table: Payment

| | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | Payment_id | SERIAL | Primary Key. Automatically assigned by Database to identify the transaction. |
| ✈ | Customer_id | SMALLINT | Foreign Key. ID assigned to customer who rented the movie(s) |
| ✈ | Staff_id | SMALLINT | Foreign Key. ID assigned to staff member who rang out the customer |
| ✈ | Rental_id | INTEGER | Foreign Key. ID assigned to movie's transaction during this sale |
| | Amount | NUMERIC(5,2) | Dollar amount for rental in USD |
| | Payment_date | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time (without specifying time zone) when the sale took place |

## LINKS TO:

| Table | Join |
|---|---|
| Staff | Payment.staff_id = staff.staff_id |
| Customer | Payment.customer_id = customer.customer_id |
| rental | Payment.rental_id = rental.rental_id<br>Payment.customer_id = rental.customer_id |

## Table: Rental

| | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | Rental_id | SERIAL | Primary Key. Number automatically assigned to rental to distinguish each time a single movie was rented. |
| | Rental-Date | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time this movie was rented. |
| ✈ | Inventory_id | INTEGER | Foreign Key. Automatically generated in the inventory table when a new film first arrives at the store. |
| ✈ | Customer_ID | SMALLINT | Foreign Key. Automatically generated for every new customer in the customer table. |
| | Return_date | TIMESTAMP(6) WITHOUT TIME ZONE | This is the date the movie was returned to the store. |
| ✈ | Staff_id | SMALLINT | Foreign Key. Unique idea identifying each individual staff member. Automatically generated in the staff table |
| | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | This is the last time this rental table was updated. |

## LINKS TO:

| Table | Join |
|---|---|
| customer | Rental.customer_id = customer.customer_id |
| staff | Rental.staff_id = staff.staff_id |
| inventory | Rental.inventory_id = inventory.inventory_id |

## LINKED FROM:

| Table | Join |
|---|---|
| Payment | Rental.rental_id = payment. Rental_id |

## Table: Store

| | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | Store_id | SERIAL | Primary Key. A surrogate key given to each additional store automatically by the database. |
| ✈ | Manager_staff_id | SMALLINT | Foreign Key. A number used to identify the manager in the data. |
| ✈ | Address_id | SMALLINT | Foreign Key. A number assigned to identify the correct address in the address table. |
| | Last_update | TIMESTAMP(S) WITHOUT TIME ZONE | Last time table was updated. |

## LINKS TO:

| Table | Join |
|---|---|
| Staff | Store.manager_staff_id = staff.staff_id |
| Address | Store.address_id = address.address_id |

## Table: Film_actor

| | Column | Data Type | Column Description |
|---|---|---|---|
| | Actor_id | SMALLINT | Foreign key. Generated automatically in the actor table. Used to identify the actor in a film. |
| | Film_id | SMALLINT | Foreign Key. Automatically generated in the film table. Used to identify individual films. |
| | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Last time the table was updated. |

## LINKS TO:

| Table | Join |
|---|---|
| Actor | Film_actor.actor_id = actor.actor_id |
| Film | Film_actor.film_id = film.film_id |

## Table: Inventory

| | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | Inventory_id | SERIAL | Primary Key. Autiomatically generated to identify each film in the inventory of each store. |
| ✈ | Film_id | SMALLINT | Foreign Key. Automatically generated in film table to identify each movie. |
| | Store_id | SMALLINT | Identifies the store the move/inventory is at. |
| | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Shows date when inventory table was last updated. |

## LINKED FROM:

| Table | Join |
|---|---|
| rental | Inventory.inventory_id = rental.inventory_id |

## LINKS TO:

| Table | Join |
|---|---|
| film | Inventory.film_id = film.film_id |

## Table: Film_category

| | Column | Data Type | Column Description |
|---|---|---|---|
| | Film_id | SMALLINT | Foreign Key. This is a number automatically generated in the film table. It is used to identify a movie. |
| | Category_id | SMALLINT | Foreign Key. Generated automatically in the category table. Connects this table to the type of film is being rented. |
| | Last_update | TIMSETAMP(6) WITHOUT TIME ZONE | Date showing when this table was last updated. |

## LINKS TO:

| Table | Join |
|---|---|
| category | Film_category.category_id = category.category_id |
| film | Film_category.film_id = film.film_id |

## Table: Customer

| | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | Customer_id | SERIAL | Surrogate ID. Number automatically generated by SQL to identify each customer |
| | Store_id | SMALLINT | Numeric ID identifying which store customer uses |
| | 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 | Foreign Key. Number identifying address of customer in Address table. |
| | Activebool | BOOLEAN | Tells us true or false whether or not that customer is still actively renting videos. |
| | Create_date | DATE | States the day this costumer's account was created. All these dates are the same, meaning they all had accounts prior to this system being used and they were all entered at once. |
| | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date these accounts were last updated. |
| | Active | INTEGER | Displays 0 or 1 depending if customer is still sctive. |

### LINKED FROM:

| Table | Join |
|---|---|
| Payment | Customer.customer_id = payment.customer_id |
| rental | Customer.customer_id = rental.customer_id |

### LINKS TO:

| Table | Join |
|---|---|
| address | Customer.address_id = address.address_id |

## Table: Staff

|  | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | Staff_id | SERIAL | Primary Key. Unique id automatically generated for each new staff member. |
|  | First_name | CHARACTER VARYING(45) | First name of staff. |
|  | Last_name | CHARACTER VARYING(45) | Last name of staff. |
| ✈ | Address_id | SMALLINT | Foreign Key. Identifies address of staff in address table. |
|  | Email | CHARACTER VARYING(50) | Email of staff. |
|  | Store_id | SMALLINT | Identifies which store staff works at. |
|  | Active | BOOLEAN | True or false on whether staff is still actively working here. |
|  | Username | CHARACTER VARYING(16) | Username of staff. |
|  | Password | CHARACTER VARYING(40) | Staff's password. |
|  | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | When these records were last updated. |
|  | Picture | BYTEA | Picture of staff. |

## LINKED FROM:

| Table | Join |
|---|---|
| payment | Staff.staff_id = payment.staff_id |
| rental | Staff.staff_id = rental.staff_id |
| store | Staff.staff_id = store.manager_staff_id |

## LINKS TO:

| Table | Join |
|---|---|
| address | Staff.address_id = address.address_id |

## Table: Actor

| | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | Actor_id | SERIAL | Primary Key. Unique number automatically generated by SQL and assigned to each actor. |
| | First_name | CHARACTER VARYING(45) | First name of actor. |
| | Last_name | CHARACTER VARYING(45) | Last name of actor. |
| | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date table was last updated. |

### LINKED FROM:

| Table | Join |
|---|---|
| Film_actor | Actor.actor_id = film_actor.actor_id |

## Table: Film

| | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | Film_id | SERIAL | Primary Key. Automatically generated by SQL and assigned to new movies coming into the store. |
| | Title | CHARACTER VARYING(255) | Title of the movie. |
| | Description | TEXT | Description of the movie. |
| | Release_year | Year | Year that the movie came out. |
| ✈ | Language_id | SMALLINT | Foreign Key. Identifies language of movie in language table. |
| | Rental_duration | SMALLINT | How many days a customer can rent the movie per rental. |
| | Rental_rate | NUMERIC(4,2) | How much it costs to rent the movie in dollars. |
| | Length | SMALLINT | How long the movie runs in minutes. |
| | Replacement_cost | NUMERIC(5,2) | How much it costs to replace this movie if it goes missing in dollars. |
| | Rating | Mpaa_rating | The rating that shows how old you have to be to watch the film (ex: PG-13, R, etc.) |
| | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date the table was last updated. |
| | Special_features | TEXT[] | What is included in the movie, not including the movie itself. Ex: trailers, commentary, behind the scenes, etc. |
| | Fulltext | TSVECTOR | List of key words to categorize movies by what they're about. Useful for searching for movies of interest. |

## LINKED FROM:

| Table | Join |
|---|---|
| Film_actor | Film.film_id = film_actor.film_id |
| inventory | Film.film_id = inventory.film_id |
| Film_category | Film.film_id = film_category.film_id |

## LINKS TO:

| Table | Join |
|---|---|
| language | Film.language_id = language.language_id |

## Table: Category

|  | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | Category_id | SERIAL | Primary key. Automatically generated by SQL to identify the category in other tables. |
|  | Name | CHARACTER VARYING(25) | Name of the category. |
|  | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date of when the table was last updated. |

## LINKED FROM:

| Table | Join |
|---|---|
| Film_category | Category.category_id = film_category.category_id |

## Table: Address

| | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | Address_id | SERIAL | Primary Key. Automatically generated by SQL to identify the correct address in the table. |
| | Address | CHARACTER VARYING(50) | Address of customer or staff. |
| | Address2 | CHARACTER VARYING(50) | Second address of customer or staff. (usually null) |
| | District | CHARACTER VARYING(20) | District where customer/staff lives. |
| ✈ | City_id | SMALLINT | Foreign Key. Automatically generated in City table. Identifies the correct city in City table. |
| | Postal_code | CHARACTER VARYING(10) | Postal code of customer/staff. |
| | Phone | CHARACTER VARYING(20) | Phone number of customer/staff. |
| | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date of last time this table was upgraded. |

## LINKED FROM:

| Table | Join |
|---|---|
| customer | Address.address_id = customer.address_id |
| Staff | Address.address_id = staff.address_id |
| Store | Address.address_id = store.address_id |

## LINKS TO:

| Table | Join |
|---|---|
| City | Address.city_id = city.city_id |

## Table: Language

| | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | Language_id | SERIAL | Primary Key. Automatically generated in list of languages. |
| | Name | CHARACTER(20) | Name of the language. |
| | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date when table was last updated. |

## LINKED FROM:

| Table | Join |
|---|---|
| Film | Language.language_id = film.language_id |

## Table: City

|  | Column | Data Type | Column Description |
|---|---|---|---|
| 🔑 | City_id | SERIAL | Primary Key. Automatically generated in list of cities to identify them in other tables. |
|  | City | CHARACTER VARYING(50) | Name of the city. |
| ✈ | Country_id | SMALLINT | Foreign Key. Number revealing the country in the country table. |
|  | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date the City table was last updated. |

## LINKED FROM:

| Table | Join |
|---|---|
| Address | City.city_id = address.city_id |

## LINKS TO:

| Table | Join |
|---|---|
| Country | City.country_id = country.country_id |

## Table: Country

| | Column | Data Type | Column Description |
|---|---|---|---|
|  | Country_id | SERIAL | Primary Key. Number automatically generated to identify the country in this and other tables. |
| | Country | CHARACTER VARYING(50) | Name of the country. |
| | Last_update | TIMESTAMP(6) WITHOUT TIME ZONE | When this table was last updated. |

## LINKED FROM:

| Table | Join |
|---|---|
| city | Country.country_id = city.country_id |