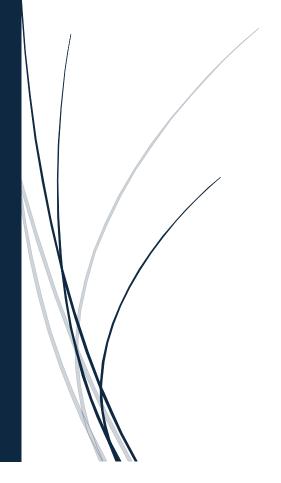
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Rockbuster

Data Dictionary



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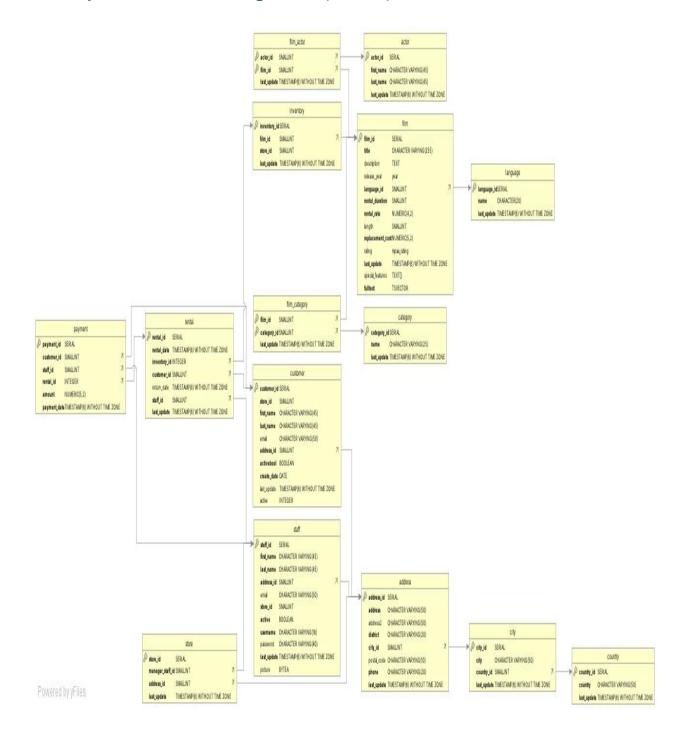
Overview

The Rockbuster database, with the function of managing and storing business information for the video rental company Rockbuster, is a relational database with a snowflake schema.

The database includes many relations for various tables such as payment, rental, customer, film, actor, inventory and other related aspects.

On the left most side of the schema, there are two fact tables: rental and payment. These tables are then branched off of by dimension tables like inventory and customer, which are further surrounded by sub-dimension tables. Due to the many tables making up this database, there is a myriad of information from which insights around Rockbuster's business and customers can be inferred.

Entity Relation Diagram (ERD)



Fact Tables

Payment

| Key | Columns | Data Type | Description |
|----------|--------------|-------------------|---------------------------|
| | Payment_id | Serial | Identification number |
| O | | | assigned to each payment |
| | Customer_id | Smallint | Identification number |
| | | | assigned to each customer |
| | Staff_id | Smallint | Identification number |
| | | | assigned to each staff |
| | Rental_id | Integer | Identification number |
| | | | assigned to each rental |
| | Amount | Numeric (5,2) | Amount paid for rental by |
| | | | customer |
| | Payment_date | Timestamp(6) | Date of payment |
| | | without time zone | |

Payment Links

| Links To | Links From |
|-------------------------|------------|
| Rental, Customer, Staff | N/A |

Rental

| Key | Columns | Data Type | Description |
|-----|--------------|--------------------------------|--------------------------------------------------------------------|
| • | Rental_id | Serial | Identification number assigned to each rental |
| | Rental_date | Timestamp(6) without time zone | Date of rental |
| | Inventory_id | Integer | Identification number assigned for record keeping of stock |
| | Customer_id | Smallint | Identification number assigned to each customer when rental issued |
| | Return_date | Timestamp(6) without time zone | Date of rental return |
| | Staff_id | Smallint | Identification number assigned to each staff member |
| | Last_update | Timestamp(6) without time zone | Date and time of record last updated |

Rental Links

| Links To | Links From |
|----------------------------|------------|
| Inventory, Customer, Staff | Payment |

Dimension Table

Actor

| Key | Columns | Data Type | Description |
|----------|-------------|--------------------------------|----------------------------------------------|
| 3 | Actor_id | Serial | Identification number 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 and time of record last updated |

Actor Links

| Links To | Links From |
|----------|------------|
| N/A | Film_Actor |

Address

| Key | Columns | Data Type | Description |
|----------|-------------|--------------------------------|------------------------------------------------------|
| 3 | Address_id | Serial | Identification number assigned to each store address |
| | Address | Character varying (50) | Address of Store |
| | Address2 | Character varying (50) | Additional address of Store |
| | District | Character varying (20) | District of store |
| | City_id | Smallint | Identification number assigned to city of store |
| | Postal_code | Character varying (10) | Postal code of city of store |
| | Phone | Character varying (20) | Store phone number |
| | Last_update | Timestamp(6) without time zone | Date and time of record last updated |

Address Links

| Links To | Links From |
|----------|------------------------|
| City | Customer, Staff, Store |

Category

| Key | Columns | Data Type | Description |
|-----|-------------|-------------------|------------------------------|
| | Catgeory_id | Serial | Identification number |
| | | | assigned to the category the |
| | | | film falls under |
| | Name | Character Varying | Name of category |
| | | (20) | |
| | Last_update | Timestamp(6) | Date and time of record last |
| | | without time zone | updated |

Category Links

| Links To | Links From |
|----------|---------------|
| N/A | Film_Category |

City

| Key | Columns | Data Type | Description |
|----------|-------------|--------------------------------|------------------------------------------------|
| 3 | City_id | Serial | Identification number assigned to each city |
| | City | Character Varying (50) | Name of city |
| | Country_id | Smallint | Identification number assigned to each country |
| | Last_update | Timestamp(6) without time zone | Date and time of record last updated |

City Links

| Links To | Links From |
|----------|------------|
| Country | Address |

Country

| Key | Columns | Data Type | Description |
|-----|-------------|--------------------------------|------------------------------------------------|
| • | Country_id | Serial | Identification number assigned to each country |
| | Country | Character Varying (50) | Name of country |
| | Last_update | Timestamp(6) without time zone | Date and time of record last updated |

Country Links

| Links To | Links From |
|----------|------------|
| N/A | City |

Customer

| Columns | Data Type | Description |
|-------------|-------------------|---------------------------------|
| Customer_id | Serial | Identification number |
| | | assigned to each customer |
| | | |
| Store_id | Smallint | Identification number |
| | | assigned to each store |
| First_name | Character Varying | First name of customer |
| | (45) | |
| Last_name | Character Varying | Last name of customer |
| | (45) | |
| Email | Character varying | Email address of customer |
| | (50) | |
| Address_id | Smallint | Postal address of customer |
| Activebool | Boolean | Status of whether an |
| | | customer is still active or not |
| Create_date | Date | Date of when a customer's |
| | | account was created |
| Last_update | Timestamp(6) | Date and time of record last |
| | without time zone | updated |
| Active | Integer | Status of customer |

Customer Links

| Links To | Links From |
|----------|-----------------|
| Address | Payment, Rental |

Film

| Key | Columns | Data Type | Description |
|-----|------------------|--------------------------------|-------------------------------------------------------------------------|
| • | Film_id | Serial | Identification number assigned to each film |
| | Title | Character Varying (255) | Title of film |
| | Description | Text | Description of what film is about |
| | Release_year | Year | The year the film was released |
| | Language_id | Smallint | Identification number assigned to the language the film is available in |
| | Rental_duration | Smallint | Length of the time that film was rented out for |
| | Rental_rate | Numeric (4,2) | Cost to rent film |
| | Length | Smallint | Length of film in minutes |
| | Replacement_cost | Numeric (5,2) | Cost to replace film if lost, damaged, stollen |
| | Rating | Mpaa_rating | Rating of film |
| | Last_update | Timestamp(6) without time zone | Date and time of record last updated |
| | Special_features | Text [] | Any special features included in film (CC, sign language) |
| | Fulltext | TSVECTOR | Keywords associated with film |

Film Links

| Links To | Links From | |
|----------|--------------------------------------|--|
| Language | Film_Actor, Film_category, Inventory | |

Film_Actor

| Key | Columns | Data Type | Description |
|-----|-------------|--------------------------------|----------------------------------------------|
| • | Actor_id | Smallint | Identification number assigned to each actor |
| • | Film_id | Smallint | Identification number assigned to each film |
| | Last_update | Timestamp(6) without time zone | Date and time of record last updated |

Film_Actor Links

| Links To | Links From | |
|----------|------------|--|
| Actor | N/A | |

Film_Category

| Key | Columns | Data Type | Description |
|-----|-------------|--------------------------------|---------------------------------------------|
| • | Film_id | Smallint | Identification number assigned to each film |
| • | Category_id | Smallint | Number assigned to each category of film |
| | Last_update | Timestamp(6) without time zone | Date and time of record last updated |

Film_Category Links

| Links To | Links From |
|----------------|------------|
| Category, Film | N/A |

Inventory

| Key | Columns | Data Type | Description |
|-----|--------------|-------------------|------------------------------|
| | Inventory_id | Serial | Identification number |
| | | | assigned for record keeping |
| | | | of stock |
| | Film_id | Smallint | Identification number |
| | | | assigned to each film |
| | Store_id | Smallint | Identification number |
| | | | assigned to each store |
| | Last_update | Timestamp(6) | Date and time of record last |
| | | without time zone | updated |

Inventory Links

| Links To | Links From |
|----------|------------|
| Film | Rental |

Language

| Key | Columns | Data Type | Description |
|-----|-------------|-------------------|------------------------------|
| | Language_id | Serial | Identification number |
| | | | assigned to the language the |
| | | | film is available in |
| | Name | Character (20) | Name of language |
| | Last_update | Timestamp(6) | Date and time of record last |
| | | without time zone | updated |

Language Links

| Links To | Links From |
|----------|------------|
| N/A | Film |

Staff

| Key | Columns | Data Type | Description |
|-----|-------------|--------------------------------|----------------------------------------------------------------------------------------------|
| • | Staff_id | Serial | Identification number assigned to each staff member |
| | First_name | Character Varying (45) | First name of staff |
| | Last_name | Character Varying (45) | Last name of staff |
| | Address_id | Smallint | Postal address of staff |
| | Email | Character varying (50) | Email address of staff |
| | Store_id | Smallint | Identification number assigned to each store |
| | Active | Boolean | Status of whether an employee is still active or not (current employee vs previous employee) |
| | Username | Character varying (16) | Staff username |
| | Password | Character varying (40) | Password staff use in conjunction with username to login |
| | Last_update | Timestamp(6) without time zone | Date and time of record last updated |
| _ | Picture | Bytea | Picture of staff member |

Staff Links

| Links To | Links From |
|----------|------------------------|
| Address | Payment, Rental, Store |

Store

| Key | Columns | Data Type | Description |
|-----|------------------|--------------------------------|----------------------------------------------|
| • | Store_id | Serial | Identification number assigned to each store |
| | Manager_staff_id | Smallint | Identification number assigned to manager |
| | Address_id | Smallint | Postal address of store |
| | Last_update | Timestamp(6) without time zone | Date and time of record last updated |

Store Links

| Links To | Links From |
|----------------|------------|
| Address, Staff | N/A |