

# **ROCKBUSTER LLC**

## **Data Dictionary**

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**Rockbuster  
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# 1. The Company


Rockbuster Stealth LLC, a global movie rental enterprise that once boasted a widespread presence with physical stores worldwide, is currently confronted with intense competition from streaming giants like Netflix and Amazon Prime.

# 1. The Entity Relationship Diagram (ERD)

The Rockbuster database has a snowflake schema. The fact table (rental) is in the center and surrounded by dimension tables and sub-dimension tables.







## 2. Tables





|   |             |
|---|-------------|
|  | Primary key |
|  | Foreign key |

### Fact Tables

#### Rental



|   | Column       | Data Type                      | Description                                  |
|---|--------------|--------------------------------|--|
|  | Rental_id    | SERIAL                         | Primary Key, identifying unique rental event |
|   | Rental_date  | TIMESTAMP (6) WITHOUT TIMEZONE | Date of movie rental                         |
|  | Inventory_id | INTEGER                        | Unique ID, linked to inventory information   |
|  | Customer_id  | SMALLINT                       | Unique ID, linked to customer information    |
|   | Return_date  | TIMESTAMP (6) WITHOUT TIMEZONE | Date, when movie is returned to the system   |
|  | Staff_id     | SMALLINT                       | Unique ID, linked to staff information       |
|   | Last_update  | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update             |

#### Payment



|   | Column       | Data Type                      | Description   |
|---|--------------|--------------------------------|---|
|  | Payment_id   | SERIAL                         | Primary Key, identifying unique payment transaction |
|  | Customer_id  | SMALLINT                       | Unique ID, linked to customer information           |
|  | Staff_id     | SMALLINT                       | Unique ID, linked to staff information              |
|  | Rental_id    | INTEGER                        | Unique ID, linked to rental information             |
|   | Amount       | NUMERIC(5,2)                   | Total amount linked to specific rental transaction  |
|   | Payment_date | TIMESTAMP (6) WITHOUT TIMEZONE | Transaction date                                    |

# Dimension Tables




## Customer

|   | Column      | Data Type                      | Description                            |
|---|-------------|--------------------------------|--|
|  | Customer_id | SERIAL                         | Unique ID for each costumer record     |
|   | Store_id    | SMALLINT                       | Unique ID, linked to store information |
|   | First_name  | CHARACTER VARYING(45)          | First name of the customer             |
|   | Last_name   | CHARACTER VARYING(45)          | Last name of the customer              |
|   | Email       | CHARACTER VARYING(50)          | Email from the customer                |
|  | Address_id  | SMALLINT                       | Address of the customer                |
|   | Activebool  | BOOLEAN                        | true or false statement                |
|   | Create_date | DATE                           | Date record was created                |
|   | Last_update | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update       |
|   | Active      | INTEGER                        | Binary 1/0 if customer is active       |



## Staff

|   | Column      | Data Type                      | Description                                 |
|---|-------------|--------------------------------|---|
|  | Staff_id    | SERIAL                         | Unique ID for each staff member             |
|   | Store_id    | SMALLINT                       | Unique ID, linked to store information      |
|   | First_name  | CHARACTER VARYING(45)          | First name of the staff member              |
|   | Last_name   | CHARACTER VARYING(45)          | Last name of the staff member               |
|   | Email       | CHARACTER VARYING(50)          | Email from the staff member                 |
|  | Address_id  | SMALLINT                       | Address of the staff member                 |
|   | Active      | BOOLEAN                        | staff member account is active – true/false |
|   | User_name   | CHARACTER VARYING(16)          | Online username of staff member             |
|   | Password    | CHARACTER VARYING(40)          | Online password of staff member             |
|   | Last_update | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update            |
|   | Picture     | BYTEA                          | Photo of staff member                       |



## Store

|   | Column           | Data Type                      | Description                              |
|---|------------------|--------------------------------|--|
|  | Store_id         | SERIAL                         | Unique ID, linked to store information   |
|  | Manager_staff_id | SMALLINT                       | Unique ID, linked to staff information   |
|  | Address_id       | SMALLINT                       | Unique ID, linked to address information |
|   | Last_update      | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update         |


## Address

|   | Column      | Data Type                      | Description                      |
|---|-------------|--------------------------------|----------------------------------|
|  | Address_id  | SERIAL                         | Unique ID                        |
|   | Address     | CHARACTER VARYING(50)          | Address details                  |
|   | Address2    | CHARACTER VARYING(50)          | Extra address details            |
|   | District    | CHARACTER VARYING(20)          | Name of the district             |
|  | City_id     | SMALLINT                       | Unique city number               |
|   | Postal_code | CHARACTER VARYING(10)          | Postal code details              |
|   | Phone       | CHARACTER VARYING(20)          | Phone number                     |
|   | Last_update | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update |



## City

|   | Column      | Data Type                      | Description                      |
|---|-------------|--------------------------------|----------------------------------|
|  | City_id     | SERIAL                         | Unique ID                        |
|   | City        | CHARACTER VARYING(50)          | Name of the city                 |
|  | Country_id  | SMALLINT                       | Unique country number            |
|   | Last_update | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update |


## Country

|   | Column      | Data Type                      | Description                      |
|---|-------------|--------------------------------|----------------------------------|
|  | Country_id  | SERIAL                         | Unique ID                        |
|   | Country     | CHARACTER VARYING(50)          | Name of the country              |
|   | Last_update | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update |



## Film Actor

|   | Column      | Data Type                      | Description                            |
|---|-------------|--------------------------------|--|
|  | Actor_id    | SMALLINT                       | Unique ID, linked to actor information |
|  | Film_id     | SMALLINT                       | Unique ID, linked to film information  |
|   | Last_update | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update       |


## Actor

|   | Column      | Data Type                      | Description                            |
|---|-------------|--------------------------------|--|
|  | Actor_id    | SERIAL                         | Unique ID, linked to actor information |
|   | First_name  | CHARACTER VARYING(45)          | First name of the actor                |
|   | Last_name   | CHARACTER VARYING(45)          | Last name of the actor                 |
|   | Last_update | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update       |

## Inventory



|   | Column       | Data Type                      | Description                                |
|---|--------------|--------------------------------|--|
|  | Inventory_id | SERIAL                         | Unique ID, linked to inventory information |
|  | Film_id      | SMALLINT                       | Unique ID, linked to film information      |
|   | Store_id     | SMALLINT                       | Unique ID, linked to store information     |
|   | Last_update  | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update           |

## Language





|   | Column      | Data Type                      | Description                               |
|---|-------------|--------------------------------|---|
|  | Language_id | SERIAL                         | Unique ID, linked to language information |
|   | Name        | CHARACTER (20)                 | Name of the language                      |
|   | Last_update | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update          |







## Film

|   | Column           | Data Type                      | Description                               |
|---|------------------|--------------------------------|---|
|  | Film_id          | SERIAL                         | Unique ID                                 |
|   | Title            | CHARACTER VARYING(255)         | Title of the movie                        |
|   | Description      | TEXT                           | Description of the movie                  |
|   | Release_year     | YEAR                           | Release year                              |
|  | Language_id      | SMALLINT                       | Unique ID, linked to language information |
|   | Rental_duration  | SMALLINT                       | Duration of movie rental                  |
|   | Rental_rate      | NUMERIC(4,2)                   | Rating score by customers                 |
|   | Length           | SMALLINT                       | Duration of the movie                     |
|   | Replacement_cost | NUMERIC(5,2)                   | Costs to replace the rental movie         |
|   | Rating           | MPAA_RATING                    | Age rating                                |
|   | Last_update      | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update          |
|   | Special_features | TEXT[]                         | Special features of the movie             |
|   | Fulltext         | TSVECTOR                       | Additional movie information              |

## Film Category

|   | Column      | Data Type                      | Description                               |
|---|-------------|--------------------------------|---|
|     | Film_id     | SMALLINT                       | Unique ID, linked to film information     |
|   | Category_id | SMALLINT                       | Unique ID, linked to category information |
|   | Last_update | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update          |

## Category

|   | Column      | Data Type                      | Description                               |
|---|-------------|--------------------------------|---|
|   | Film_id     | SMALLINT                       | Unique ID, linked to film information     |
|   | Category_id | SMALLINT                       | Unique ID, linked to category information |
|   | Last_update | TIMESTAMP (6) WITHOUT TIMEZONE | Date and time of the last update          |