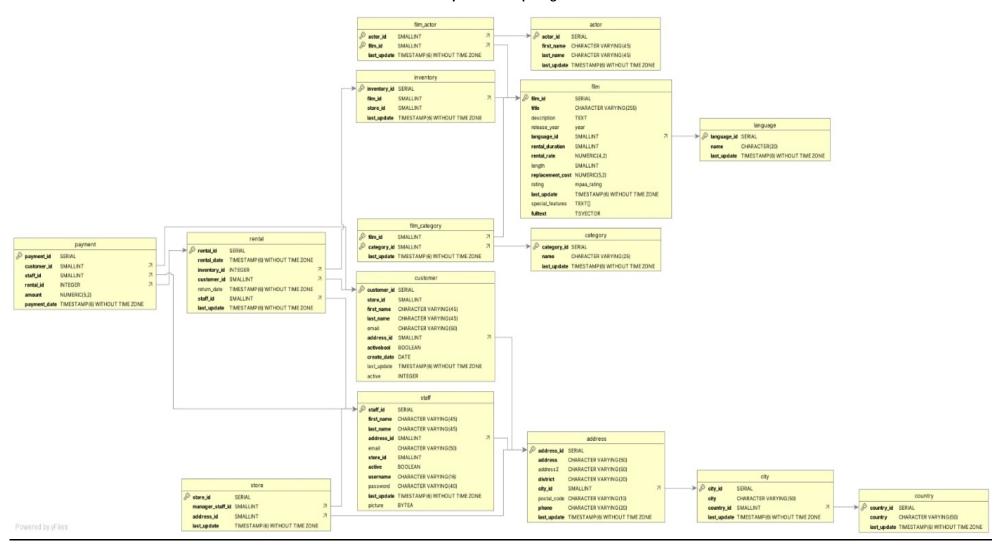
# **Rockbuster Data Dictionary**

#### **Entity Relationship Diagram**



# a) <u>Fact tables:</u>

#### Rental

| COLUMN_NAME  | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                                    | UNIQUE KEY |
|--------------|-----------|-------------|--|------------|
| rental_id    | serial    | 10          | Unique identifier for each rental              | Yes        |
| rental_date  | timestamp | 29          | Date when the film was rented                  |            |
| inventory_id | int4      | 10          | Unique inventory identifier                    |            |
| customer_id  | int2      | 5           | Unique customer identifier                     |            |
| return_date  | timestamp | 29          | Date when the film was returned                |            |
| staff_id     | int2      | 5           | Unique staff member<br>identifier              |            |
| last_update  | timestamp | 29          | Date and time when the record was last updated |            |

## **Payment**

| COLUMN_NAME  | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                       | UNIQUE KEY |
|--------------|-----------|-------------|-----------------------------------|------------|
| payment_id   | serial    | 10          | Unique identifier of payment      | Yes        |
| customer_id  | int2      | 5           | Unique customer identifier        |            |
| staff_id     | int2      | 5           | Unique staff memeber identifier   |            |
| rental_id    | int4      | 10          | Unique identifier for each rental |            |
| amount       | numeric   | 5           | Amount paid for the rental        |            |
|              |           | 29          | Date and Time when the            |            |
| payment_date | timestamp |             | payment took place                |            |

## b) <u>Dimension tables:</u>

#### Customer

| COLUMN_NAME | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                | UNIQUE KEY |
|-------------|-----------|-------------|----------------------------|------------|
| customer_id | serial    | 10          | Unique customer identifier | Yes        |
| store_id    | int2      | 5           | Unique store identifier    |            |

| first_name  | varchar   | 45 | Customer's first name              |
|-------------|-----------|----|------------------------------------|
| last_name   | varchar   | 45 | Customer's last name               |
| email       | varchar   | 50 | Customer's email                   |
| address_id  | int2      | 5  | Customer's address                 |
|             |           | 1  | Boolean Indicator showing if a     |
| activebool  | bool      | 1  | customer is active or not          |
|             |           | 13 | Date when the customer record      |
| create_date | date      |    | was created                        |
|             |           | 29 | Date and time when the record      |
| last_update | timestamp | 23 | was last updated                   |
|             |           | 10 | Indicator showing if a customer is |
| active      | int4      | 10 | active or not                      |

## Film

| COLUMN_NAME      | DATA_TYPE   | COLUMN_SIZE | DESCRIPTION   | UNIQUE KEY |
|------------------|-------------|-------------|---|------------|
| film_id          | serial      | 10          | Unique film identifier                                | Yes        |
| title            | varchar     | 255         | Film title  |            |
| description      | text        | 2147483647  | Description of the film                               |            |
| release_year     | year        | 10          | Year when the film was released                       |            |
| language_id      | int2        | 5           | Unique identifier for the film language               |            |
| rental_duration  | int2        | 5           | The duration of the rental                            |            |
| rental_rate      | numeric     | 4           | The amount of money for which the film was rented for |            |
| length           | int2        | 5           | The film duration                                     |            |
| replacement_cost | numeric     | 5           | The cost of replacing the film                        |            |
| rating           | mpaa_rating | 2147483647  | MPAA Rating   |            |
| last_update      | timestamp   | 29          | The date and time when the record was last updated    |            |
| special_features | _text       | 2147483647  | Description of the film special features              |            |
| fulltext         | tsvector    | 2147483647  | Other comments related to the film                    |            |

#### Film Actor

| COLUMN_NAME | TYPE_NAME | COLUMN_SIZE | DESCRIPTION                                    | UNIQUE KEY |
|-------------|-----------|-------------|--|------------|
| actor_id    | int2      | 5           | Unique actor identifier                        | Yes        |
| film_id     | int2      | 5           | Unique film identifier                         | Yes        |
| last_update | timestamp | 29          | Date and time when the record was last updated |            |

#### Actor

| COLUMN_NAME | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                            | UNIQUE KEY |
|-------------|-----------|-------------|--|------------|
| actor_id    | serial    | 10          | Unique actor identifier                | Yes        |
| first_name  | varchar   | 45          | Actor's first name                     |            |
| last_name   | varchar   | 45          | Actor's last name                      |            |
|             |           |             | Date and time when the record was last |            |
| last_update | timestamp | 29          | updated                                |            |

## Film Category

| COLUMN_NAME | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                       | UNIQUE KEY |
|-------------|-----------|-------------|-----------------------------------|------------|
| film_id     | int2      | 5           | Unique film identifier            | Yes        |
| category_id | int2      | 5           | Unique film category identifier   | Yes        |
|             |           | 29          | Date and time when the record was |            |
| last_update | timestamp | 29          | last updated                      |            |

## Category

| COLUMN_NAME | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                             | UNIQUE KEY |
|-------------|-----------|-------------|---|------------|
| category_id | serial    | 10          | Unique identifier for the film category | Yes        |
| name        | varchar   | 25          | Name of film category                   |            |
|             |           |             | Date and time when the record was       |            |
| last_update | timestamp | 29          | last updated                            |            |

#### Language

| COLUMN_NAME | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                       | UNIQUE KEY |
|-------------|-----------|-------------|-----------------------------------|------------|
| language_id | serial    | 10          | Unique language identifier        | Yes        |
| name        | bpchar    | 20          | Language name                     |            |
|             |           |             | Date and time when the record was |            |
| last_update | timestamp | 29          | last updated                      |            |

#### Inventory

| COLUMN_NAME  | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                       | UNIQUE KEY |
|--------------|-----------|-------------|-----------------------------------|------------|
| inventory_id | serial    | 10          | Unique inventory identifier       | Yes        |
| film_id      | int2      | 5           | Unique film identifier            |            |
| store_id     | int2      | 5           | Unique store identifier           |            |
|              |           |             | Date and time when the record was |            |
| last_update  | timestamp | 29          | last updated                      |            |

## Staff

| COLUMN_NAME | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                                    | UNIQUE KEY |
|-------------|-----------|-------------|--|------------|
| staff_id    | serial    | 10          | Unique staff identifier(employee ID)           | Yes        |
| first_name  | varchar   | 45          | Employee first name                            |            |
| last_name   | varchar   | 45          | Employee last name                             |            |
| address_id  | int2      | 5           | Unique identifier for employee's address       |            |
| email       | varchar   | 50          | Employe's email                                |            |
| store_id    | int2      | 5           | Unique store identifier                        |            |
| active      | bool      | 1           | Employee active indicator                      |            |
| username    | varchar   | 16          | Employee's username                            |            |
| password    | varchar   | 40          | Employee's password                            |            |
| last_update | timestamp | 29          | Date and time when the record was last updated |            |
| picture     | bytea     | 2147483647  | Employee's photo                               |            |

#### Store

| COLUMN_NAME      | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                       | UNIQUE KEY |
|------------------|-----------|-------------|-----------------------------------|------------|
| store_id         | serial    | 10          | Unique store identifier           | Yes        |
| manager_staff_id | int2      | 5           | Unique store manager identifier   |            |
| address_id       | int2      | 5           | Unique address identifier         |            |
|                  |           |             | Date and time when the record was |            |
| last_update      | timestamp | 29          | last updated                      |            |

## Address

| COLUMN_NAME | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                                    | UNIQUE KEY |
|-------------|-----------|-------------|--|------------|
| address_id  | serial    | 10          | Unique address identifier                      | Yes        |
| address     | varchar   | 50          | Address Line 1                                 |            |
| address2    | varchar   | 50          | Address Line 2                                 |            |
| district    | varchar   | 20          | District in which the store is located         |            |
| city_id     | int2      | 5           | Unique city identifier                         |            |
| postal_code | varchar   | 10          | Address postal code                            |            |
| phone       | varchar   | 20          | Phone number                                   |            |
| last_update | timestamp | 29          | Date and time when the record was last updated |            |

# City

| COLUMN_NAME | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                          | UNIQUE KEY |
|-------------|-----------|-------------|--------------------------------------|------------|
| city_id     | serial    | 10          | Unique city identifier               | Yes        |
| city        | varchar   | 50          | Name of the city                     |            |
| country_id  | int2      | 5           | Country in which the city is located |            |
|             |           |             | Date and time when the record was    |            |
| last_update | timestamp | 29          | last updated                         |            |

## Country

| COLUMN_NAME | DATA_TYPE | COLUMN_SIZE | DESCRIPTION                       | UNIQUE KEY |
|-------------|-----------|-------------|-----------------------------------|------------|
| country_id  | serial    | 10          | Unique country identifier         | Yes        |
| country     | varchar   | 50          | Name of the country               |            |
|             |           | 29          | Date and time when the record was |            |
| last_update | timestamp | 29          | last updated                      |            |