ROCKBUSTER

Data Dictionary

Table of Contents

1. **Entity Relationship Diagram2**
2. **Fact Tables3**
   1. Payment3

2.2 Rental3

1. **Dimension Tables4**

3.1 Film\_actor4

3.2 Actor4

3.3 Film4

3.4 Language4

3.5 Film\_category5

3.6 Category5

3.7 Inventory5

3.8 Customer6

3.9 Staff6

3.10 Store7

3.11 Address7

3.12 City7

3.13 Country8

## Entity Relationship Diagram

Diagram

Description automatically generated

## Fact Tables

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| **Table** | **Column** | **Data Type** | **Description** |
| *2.1 payment* | Payment\_id | SERIAL | **PK.** Unique numeric id assigned to each transaction. Surrogate key – automatically created at the point of payment. |
| Customer\_id | SMALLINT | Customer id number. Surrogate key – automatically created at the point of payment. Foreign key for customer table. |
| Staff\_id | SMALLINT | Staff id number. Foreign key for staff table. |
| Rental\_id | INTEGER | Rental id number. Foreign key for rental table. |
| Amount | NUMERIC (5,2) | Total cost of transaction in *“00000.00”* number format |
| Payment\_date | TIMESTAMP(6) WITHOUT TIME ZONE | Date of the transaction, in 6-digit format. |
| Linked with customer, rental, staff tables | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *2.2*  *rental* | Rental\_id | SERIAL | **PK.** Unique numeric id assigned to each movie rental. |
| Rental\_date | TIMESTAMP(6) WITHOUT TIME ZONE | The date and time the rental was made in a 6-digit format. |
| Inventory\_id | INTEGER | Unique id assigned to the backend management system. Foreign key for inventory table. |
| Customer\_id | SMALLINT | Unique id assigned to the customer who made the transaction. Foreign key for customer table. |
| Return\_date | TIMESTAMP(6) WITHOUT TIME ZONE | The date and time the rental was returned, in 6-digit format. |
| Staff\_id | SMALLINT | Unique id assigned to the staff member who facilitated the transaction. Foreign key for staff table. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Linked with customer, inventory, store tables | | | |

## Dimension Tables

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.1*  *film\_actor* | Actor\_id | SMALLINT | **PK.** Unique id assigned to the film actor. Foreign key for actor table. |
| Film\_id | SMALLINT | Unique id assigned to the film. Foreign key for film table. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Linked with actor, film tables | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.2*  *Actor* | Actor\_id | SERIAL | **PK.** Unique numeric id assigned to the film actor. |
| First\_name | CHARACTER VARYING (45) | First name of actor. Could be a combination of letters, special characters, or numbers, with a maximum length of 45 characters. |
| Last\_name | CHARACTER VARYING (45) | Last name of actor. Could be a combination of letters, special characters, or numbers, with a maximum length of 45 characters. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Linked with film\_actor table | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.3*  *film* | Film\_id | SERIAL | **PK.** Unique numeric id assigned to each film. Surrogate key. |
| Title | CHARACTER VARYING (255) | Title of film. Could be a combination of letters, special characters, or numbers, with a maximum length of 255 characters. |
| Description | TEXT | Description of film. Text of unlimited length. |
| Release\_year | Year | Year the film was released. |
| Language\_id | SMALLINT | Unique numeric id assigned to the main language of the film. |
| Rental\_duration | SMALLINT | Unique numeric id assigned to the rental duration, in days. |
| Rental\_rate | Numeric (4,2) | Cost of renting the film. Numeric value in “*0000.00”* format. |
| Length | SMALLINT | Duration of the film in minutes. |
| Replacement\_cost | NUMERIC (5,2) | Cost of replacing the film if lost. Numeric value in “*0000.00”* format. |
| Rating | Mpaa\_rating | Film rating by the Motion Picture Association. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Special\_features | TEXT[] | *Unclear, but suspect this refers to whether the rental includes special features. Text of unlimited length.* |
| Fulltext | TSVECTOR | The TSVECTOR data type is a list of words that have been normalised to merge difference variants of the same word. |
| Linked with film\_actor, inventory, film\_category, language tables | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.4*  *Language* | Language\_id | SERIAL | **PK.** Unique numeric id assigned to the main language of the film. |
| Name | CHARACTER(20) | Name of the language, with a max length of 20 characters. In case the length of the string is smaller than the value of 20, the rest of the remaining spaces are automatically padded. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Linked with film table | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.5*  *Film\_category* | Film\_id | SMALLINT | **PK.** Unique numeric id assigned to each film. Surrogate key. |
| Category\_id | SMALLINT | Unique numeric id assigned to the film category. Foreign key for category table. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Linked with film, category tables | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.6*  *Category* | Category\_id | SERIAL | **PK.** Unique numeric id assigned to film category. Surrogate key. |
| Name | CHARACTER VARYING (25) | Title of film. Could be a combination of letters, special characters, or numbers, with a maximum length of 25 characters. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Linked with film\_category | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.7*  *Inventory* | Inventory\_id | SERIAL | **PK.** Unique numeric id assigned to backend inventory tracking. Surrogate key. |
| Film\_id | SMALLINT | Unique id assigned to the film. Foreign key for film table. |
| Store\_id | SMALLINT | Unique id assigned to the store of transaction. Foreign key for store table. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Linked with rental, film tables | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.8*  *Customer* | Customer\_id | SMALLINT | **PK.** Unique id assigned to the film actor. Foreign key for actor table. |
| store\_id | SMALLINT | Unique id assigned to the film. Foreign key for film table. |
| First\_name | CHARACTER VARYING (45) | First name of customer. Could be a combination of letters, special characters, or numbers, with a maximum length of 45 characters. |
| Last\_name | CHARACTER VARYING (45) | Last name of customer. Could be a combination of letters, special characters, or numbers, with a maximum length of 45 characters. |
| Email | CHARACTER VARYING (50) | Email of customer. Could be a combination of letters, special 50 characters, or numbers, with a maximum length of 5 characters. |
| Address\_id | SMALLINT | Unique numeric id assigned to customer address. Surrogate key. |
| Activebool | BOOLEAN | Whether or not the customer is still active. BOOLEAN keys can either be True or False (or Null). |
| Create\_date | Date | Date the customer account was created. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Active | INTEGER | Potentially a numeric interpretation of their active status. |
| Linked with rental, address tables | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.9*  *Staff* | Staff\_id | SERIAL | **PK.** Unique numeric id assigned to staff member. Surrogate key. |
| First\_name | CHARACTER VARYING (45) | First name of staff member. Could be a combination of letters, special characters, or numbers, with a maximum length of 45 characters. |
| Last\_name | CHARACTER VARYING (45) | Last name of staff member. Could be a combination of letters, special characters, or numbers, with a maximum length of 45 characters. |
| Address\_id | SMALLINT | Unique numeric id assigned to staff member address. Surrogate key. |
| Email | CHARACTER VARYING (50) | Email of staff member. Could be a combination of letters, special 50 characters, or numbers, with a maximum length of 5 characters. |
| Store\_id | SMALLINT | Unique numeric id assigned to the store where the staff member is employed. Foreign key for store table. |
| Activebool | BOOLEAN | Whether or not employee is still active member of staff. BOOLEAN keys can either be True or False (or Null). |
| Username | CHARACTER VARYING (16) | Username of staff member. Could be a combination of letters, special characters, or numbers, with a maximum length of 16 characters. |
| Password | CHARACTER VARYING (40) | Password of staff member. Could be a combination of letters, special characters, or numbers, with a maximum length of 40 characters. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Picture | BYTEA | Unique picture id for each staff in binary data. |
| Linked with payment, store, rental, address tables | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.10’*  *Store* | Store\_id | SERIAL | **PK.** Unique numeric id assigned to store. |
| Manager\_staff\_id | SMALLINT | Unique numeric id assigned to the manager of store. |
| Address\_id | SMALLINT | Unique numeric id assigned to store address. Foreign key for address table. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Linked with staff, address tables | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.11*  *Address* | Address\_id | SERIAL | **PK.** Unique numeric id assigned to store address. |
| Address | CHARACTER VARYING (50) | First line of address for store. Could be a combination of letters, special characters, or numbers, with a maximum length of 50 characters. |
| Address2 | CHARACTER VARYING (50) | Second line of address for store. Could be a combination of letters, special characters, or numbers, with a maximum length of 50 characters. |
| District | CHARACTER VARYING (20) | District store is located in. Could be a combination of letters, special characters, or numbers, with a maximum length of 20 characters. |
| City\_id | SMALLINT | Unique numeric id for city store is located in. |
| Postal\_code | CHARACTER VARYING (10) | Post code for store. Could be a combination of letters, special characters, or numbers, with a maximum length of 10 characters. |
| Phone | CHARACTER VARYING (20) | Phone number for store. Could be a combination of letters, special characters, or numbers, with a maximum length of 20 characters. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Linked with store, staff, customer, city tables | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.12*  *city* | City\_id | SERIAL | **PK.** Unique numeric id assigned to city store is located in. |
| City | CHARACTER VARYING (50) | City store is located in. Could be a combination of letters, special characters, or numbers, with a maximum length of 50 characters. |
| Country\_id | SMALLINT | Unique numeric id assigned to country store is located in. Foreign key for country table. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Linked address, country tables | | | |

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| **Table** | **Column** | **Data Type** | **Description** |
| *3.13*  *Country* | Country\_id | SERIAL | **PK.** Unique numeric id assigned to country store is located in. |
| Country | CHARACTER VARYING (50) | Country store is located in. Could be a combination of letters, special characters, or numbers, with a maximum length of 50 characters. |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last update, in 6-digit format. |
| Linked with city table | | | |