Rockbuster Database

**Data Dictionary**

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2. Entity Relationship Diagram (ERD)

Table

Description automatically generated

3. Schema Type

The schema type has the shape of a Snowflake because the Fact table is surrounded by sub-dimension tables and it gives it the shape of a snowflake.

4. Legend

**Primary Key**

**Foreign Key**

5. Fact Tables

5.1 Rental -done

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **rental\_id** | SERIAL | The unique id assigned to each film rental | payment |  |
| rental\_date | TIMESTAMP(6) WITHOUT TIME ZONE | The date and time of when it was rented out |  |  |
| **inventory\_id** | INTEGER | The id assigned for record keeping |  | inventory |
| **customer\_id** | SMALLINT | Customer id who got the film was issued | payment | customer |
| return\_date | TIMESTAMP(6) WITHOUT TIME ZONE | The date and time the rental was returned |  |  |
| **staff\_id** | SMALLINT | The id assigned to each staff | payment | staff |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and Time the status was last updated |  |  |

6. Dimension Table

6.1 Payment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **payment\_id** | SERIAL | The unique id assigned for each payment |  | payment |
| **customer\_id** | SMALLINT | Customer id to whom the film was issued | Rental, payment | customer |
| **staff\_id** | SMALLINT | The unique id assigned to each staff | Rental, payment | staff |
| **rental\_id** | INTEGER | The unique id assigned to each film rental | rental | rental |
| Amount | Numeric(5, 2 ) | The amount paid by customer | payment |  |
| Payment\_date | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |

6.2 Store

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **store\_id** | SERIAL | The unique id assigned to each store | Customer, inventory, staff | store |
| **manager\_staff\_id** | SMALLINT | ID of Manager |  |  |
| **address\_id** | SMALLINT | Postal address of store | customer, staff, store | address |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |

6.3 Film Actor

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **actor\_id** | SMALLINT | The unique id assigned to an actor | film\_actor, actor | film\_actor, actor |
| **film\_id** | SMALLINT | The unique id assigned to each film | film\_actor, inventory | film, film\_category |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |

6.4 Inventory

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **inventory\_id** | SERIAL | The unique id assigned for record keeping | rental | inventory |
| **film\_id** | SMALLINT | The unique id assigned to each film | film\_actor, inventory | film, film\_category |
| **store\_id** | SMALLINT | The unique id assigned to each store | customer, inventory, staff | store |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |

6.5 Film- Category

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **film\_id** | SMALLINT | The unique id assigned to each film | film\_actor, inventory | film, film\_category |
| **category\_id** | SMALLINT | The unique id assigned to each film category | film\_category | category |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |

6.6 Customer

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **customer\_id** | SERIAL | The unique id assigned Customer to whom the film was issued | Payment, rental | customer |
| **store\_id** | SMALLINT | The unique id assigned to each store | Customer, inventory, staff | store |
| first\_name | CHARACTER VARYING(45) | Customer’s first name |  |  |
| Last\_name | CHARACTER VARYING(45) | Customer’s last name |  |  |
| email | CHARACTER VARYING(50) | Customer’s email address |  |  |
| **address\_id** | SMALLINT | Customer’s address ID number | customer, staff, store | address |
| activebool | BOOLEAN | Status whether customer is active or not |  |  |
| create\_date | DATE | Date customer account was created |  |  |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last data update |  |  |
| active | INTEGER | Describes whether a customer is currently renting |  |  |

6.7 Staff

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **staff\_id** | SERIAL | The unique id assigned to each staff | Rental, payment | staff |
| first\_name | CHARACTER VARYING(45) | Staff’s first name |  |  |
| Last\_name | CHARACTER VARYING(45) | Staff’s last name |  |  |
| **address\_id** | SMALLINT | Staff’s address ID | customer, staff, store | address |
| email | CHARACTER VARYING(50) | Staff’s email |  |  |
| **store\_id** | SMALLINT | Store ID number where employee works | Customer, inventory, staff | store |
| active | BOOLEAN | Status whether staff is still employed or not |  |  |
| user name | CHARACTER VARYING(16) | Employees’ login username |  |  |
| password | CHARACTER VARYING(40) | Employees’ login password |  |  |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |
| picture | BYTEA | Picture of employee |  |  |

6.8 Actor

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **actor\_id** | SERIAL | The unique id assigned to an actor | film\_actor, actor | Actor, film\_actor |
| first\_name | CHARACTER VARYING(45) | Actors’ first name |  |  |
| Last\_name | CHARACTER VARYING(45) | Actors’ last name |  |  |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |

6.9 Film

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **film\_id** | SERIAL | The unique id assigned to each film | film\_actor, inventory | film, film\_category |
| title | CHARACTER VARYING(255) | Title of film |  |  |
| description | TEXT | Film description |  |  |
| release\_year | year | Release year of film |  |  |
| **language\_id** | SMALLINT | Language ID | film | language |
| rental\_duration | SMALLINT | Length of time film certain was rented |  |  |
| rental\_rate | Numeric(4, 2 ) | Cost of certain film |  |  |
| length | SMALLINT | Length of film in minutes |  |  |
| Replacement\_cost | Numeric(5, 2 ) | Cost of replacing a film |  |  |
| rating | Mpaa\_rating | Film rating |  |  |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |
| Special\_features | TEXT | Special features in the film |  |  |
| fulltext | TSVECTOR | Key words |  |  |

6.10 Category

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **category\_id** | SERIAL | The unique id assigned to each film category | film\_category | category |
| name | CHARACTER VARYING(20) | Film category name |  |  |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |

6.11 Address

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **address\_id** | SERIAL | The unique ID for Postal address of store | Customer, staff, store | address |
| address | CHARACTER VARYING(50) | Address of store |  |  |
| address2 | CHARACTER VARYING(50) | Extended address of store |  |  |
| district | CHARACTER VARYING(20) | Province or region |  |  |
| **city\_id** | SMALLINT | ID number of city | address | city |
| postal\_code | CHARACTER VARYING(10) | Postal code of locality |  |  |
| Phone | CHARACTER VARYING(20) | Phone number of store |  |  |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |

6.12 Language

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **language\_id** | SERIAL | The unique ID assigned to language(s) film is available in | film | language |
| name | CHARACTER VARYING(20) | Language name |  |  |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |

6.13 City

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **city\_id** | SERIAL | The unique ID for city | address | city |
| city | CHARACTER VARYING(50) | Name of city |  |  |
| **country\_id** | SMALLINT | Country code | city | country |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |

6.14 Country

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Columns** | **Data Type** | **Description** | **Link To** | **Link From** |
| **country\_id** | SERIAL | The unique ID for country | city | country |
| country | CHARACTER VARYING(50) | Name of country |  |  |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last date update |  |  |