Rockbuster Stealth

Data Dictionary

CareerFoundry – Data Analytics Mariana Oliveira, 30.04.2024



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1. Rockbuster Stealth

Rockbuster Stealth LLC is a fictive company, an online provider of movie rentals.

The dataset presented here is fictional and provided by Career Foundry as obligatory achievement for the qualification course of Data Analysis.

2. Entity Relationship Diagram

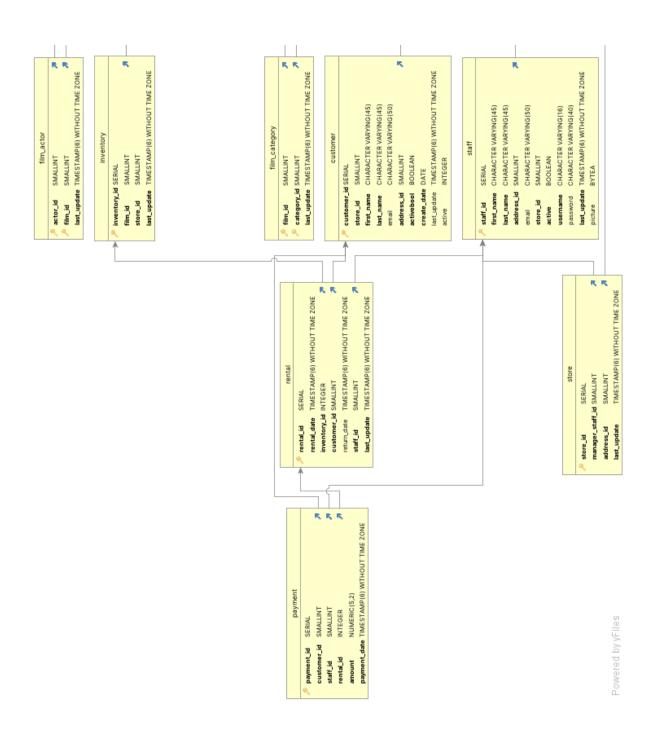


Figure 1- ERD Part 1 - Left

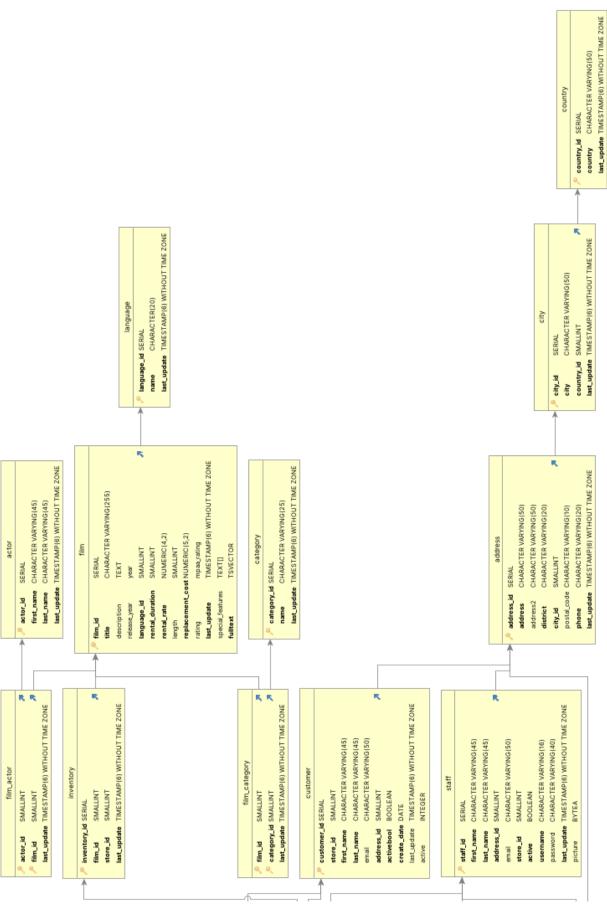


Figure 2- ERD Part Two - Right

3. Fact tables

P = Primary Key

F = Foreign Key

3.1. Payment

| Column_Name | KEY | Data_Type | Description |
|--------------|-----|---------------------------------|--------------------------------|
| payment_id | Р | serial | primary key for unique payment |
| customer_id | F | smallint | customer unique number |
| staff_id | F | smallint | staff unique number |
| rental_id | F | integer | rental unique number |
| amount | | numeric (5,2) | total rental price |
| payment_date | | timestamp (6) without time zone | date of the payment |

| | Table Unique Keys Equivalence | | |
|------------|-------------------------------|---------------------|----------------------|
| Links to | rental | payment.rental_id | rental.rental_id |
| | staff | payment.staff_id | staff.staff_id |
| | customer | payment.customer_id | customer.customer_id |
| Links from | - | - | - |

3.2. Rental

| Column_Name | KEY | Data_Type | Description |
|--------------|-----|---------------------------------|-------------------------------|
| rental_id | Р | serial | primary key for unique rental |
| rental_date | | timestamp (6) without time zone | date of the rental |
| inventory_id | F | integer | inventory unique number |
| customer_id | F | smallint | costumer unique number |
| return_date | | timestamp (6) without time zone | date of rental return |
| staff_id | F | smallint | staff unique number |
| last_update | | timestamp (6) without time zone | date of last record update |

| | Table | Unique Keys Equivalence | | |
|------------|-----------|-------------------------|------------------------|--|
| Links to | inventory | rental.inventory_id | inventory.inventory_id | |
| | staff | rental.staff_id | staff.staff_id | |
| | customer | rental.customer_id | customer.customer_id | |
| Links from | payment | rental.rental_id | payment.rental_id | |

4. Dimension Tables

P = Primary Key

F = Foreign Key

4.1. Actor

| Column_Name | KEY | Data_Type | Description |
|-------------|-----|---------------------------------|------------------------------|
| actor_id | Р | serial | primary key for unique actor |
| 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 time zone | date of last record update |

| | Table | Unique Keys Equivalen | се |
|------------|------------|-----------------------|---------------------|
| Links to | - | - | - |
| Links from | Film_actor | actor.actor_id | film_actor.actor_id |

4.2. Address

| Column_Name | KEY | Data_Type | Description |
|-------------|--------------------------------|---------------------------------|--------------------------------|
| address_id | Р | serial | primary key for unique address |
| address | address character varying (50) | | address information |
| address2 | | character varying (50) | address information |
| district | | character varying (20) | district name |
| city_id | F | smallint | cite unique number |
| postal_code | | character varying (10) | postal code |
| phone | | character varying (20) | phone number |
| last_update | | timestamp (6) without time zone | date of last record update |

| | Table | Unique Keys Equivalence | | |
|------------|-------|-------------------------|---------------------|--|
| Links to | city | address.city_id | city.city_id | |
| Links from | staff | address.address_id | staff.address_id | |
| customer | | address.address_id | customer.address_id | |
| | store | address.address_id | store.address_id | |

4.3. Category

| Column_Name | KEY | Data_Type | Description |
|-------------|-----|---------------------------------|---------------------------------|
| category_id | Р | serial | primary key for unique category |
| name | | character varying (25) | name of the category |
| last_update | | timestamp (6) without time zone | date of last record update |

| | Table | Unique Keys Equivalen | ce |
|------------|---------------|-----------------------|---------------------------|
| Links to | - | - | - |
| Links from | film_category | category.category_id | film_category.category_id |

4.4. City

| Column_Name | KEY | Data_Type | Description |
|-------------|-----|---------------------------------|------------------------------|
| city_id | Р | serial | primary key for unique city |
| city | | character varying (50) | city name |
| country_id | F | smallint | Unique key of city's country |
| last_update | | timestamp (6) without time zone | date of last record update |

| | Table | Unique Keys Equivalence | | |
|------------|---------|-------------------------|--------------------|--|
| Links to | country | city.country_id | country.country_id | |
| Links from | address | city.city_id | address.city_id | |

4.5. Country

| Column_Name | KEY | Data_Type | Description |
|-------------|------------------------|---------------------------------|--------------------------------|
| country_id | Р | serial | primary key for unique country |
| country | character varying (50) | | country name |
| last_update | | timestamp (6) without time zone | date of last record update |

| | Table | Unique Keys Equivalence | | |
|------------|-------|-------------------------|-----------------|--|
| Links to | - | - | - | |
| Links from | city | country.country_id | city.country_id | |

4.6. Customer

| Column_Name | KEY | Data_Type | Description |
|-------------|-----|---------------------------------|---------------------------------|
| customer_id | Р | serial | primary key for unique customer |
| store_id | F | smallint | store unique number |
| first_name | | character varying (45) | first name of the costumer |
| last_name | | character varying (45) | last name of the costumer |
| email | | character varying (50) | email of the costumer |
| address_id | F | smallint | address unique number |
| activebool | | boolean | says if the customer is active |
| create_date | | date | when the record was created |
| last_update | | timestamp (6) without time zone | date of last record update |
| active | | integer | says if the customer is active |

| | Table | Unique Keys Equivalence | | |
|------------|---------|-------------------------|---------------------|--|
| Links to | address | customer.address_id | city.city_id | |
| Links from | payment | customer.customer_id | staff.address_id | |
| | rental | customer.customer_id | customer.address_id | |

4.7. Film

| 5. Column_Name | KEY | Data_Type | Description |
|------------------|-----|---------------------------------|-------------------------------|
| film_id | Р | serial | primary key for unique film |
| title | | character varying (225) | film title |
| description | | text | description of the film |
| release_year | | year | year of release |
| language_id | F | smallint | language of the film |
| rental_duration | | smallint | duration of the rental |
| rental_rate | | numeric(4,2) | rate of rental by customers |
| length | | smallint | duration of the film |
| replacement_cost | | numeric(5,2) | cost to replace/buy a new one |
| rating | | mpaa_rating | mpaa rating |
| last_update | | timestamp (6) without time zone | date of last record update |
| special_features | | text[] | which special features are |
| | | | available |
| fulltext | | tsvector | information about content |

| | Table | Unique Keys Equivalence | | | |
|------------|---------------|---------------------------------------|-----------------------|--|--|
| Links to | language | film.language_id language.language_id | | | |
| Links from | film_actor | film.film_id | film_actor.film_id | | |
| | inventory | film.film_id | inventory.film_id | | |
| | film_category | film.film_id | film_category.film_id | | |

4.8. Film_actor

| Column_Name | KEY | Data_Type | Description |
|-------------|-----|---------------------------------|-----------------------------------|
| actor_id | Р | smallint | primary key for unique film actor |
| film_id | F | smallint | film unique number |
| last_update | | timestamp (6) without time zone | date of last record update |

| | Table | Unique Keys Equivalence | | |
|------------|-------|-------------------------|----------------|--|
| Links to | actor | film_actor.actor_id | actor.actor_id | |
| | film | film_actor.film_id | film.film_id | |
| Links from | - | - | - | |

4.9. Film_category

| Column_Name | KEY | Data_Type | Description |
|-------------|-----|---------------------------------|-----------------------------|
| film_id | Р | smallint | primary key for unique film |
| | | | category |
| category_id | F | smallint | category unique number |
| last_update | | timestamp (6) without time zone | date of last record update |

| | Table | Unique Keys Equivalence | |
|------------|----------|---------------------------|----------------------|
| Links to | category | film_category.category_id | category.category_id |
| | film | film_category.film_id | film.film_id |
| Links from | - | - | 1 |

4.10. Inventory

| Column_Name | KEY | Data_Type | Description |
|--------------|-----|---------------------------------|----------------------------------|
| inventory_id | Р | serial | primary key for unique inventory |
| film_id | F | smallint | film unique number |
| store_id | F | smallint | store unique number |
| last_update | | timestamp (6) without time zone | date of last record update |

| | Table | Unique Keys Equivalence | |
|------------|--------|-------------------------|---------------------|
| Links to | film | inventory.film_id | film.film_id |
| Links from | rental | inventory.inventory_id | rental.inventory_id |

4.11. Language

| Column_Name | KEY | Data_Type | Description |
|-------------|-----|---------------------------------|---------------------------------|
| language_id | Р | serial | primary key for unique language |
| name | | character(20) | language name |
| last_update | | timestamp (6) without time zone | date of last record update |

| | Table | Unique Keys Equivalence | | |
|------------|-------|-------------------------|----------------|--|
| Links to | actor | film_actor.actor_id | actor.actor_id | |
| | film | film_actor.film_id | film.film_id | |
| Links from | - | - | - | |

4.12. Staff

| Column_Name | KEY | Data_Type | Description |
|-------------|-----|--|-----------------------|
| staff_id | Р | serial | primary key for staff |
| first_name | | character varying (45) | first name of staff |
| last_name | | character varying (45) last name of staff | |
| address_id | F | smallint address of the store | |
| email | | character varying (45) | email of employee |
| store_id | F | smallint | unique key of store |
| active | | boolean if staff is active | |
| username | | character varying (16) staff username of store sys | |
| password | | character varying (40) staff password of store sys | |
| last_update | | timestamp (6) without time zone last time entry was update | |
| picture | | bytea photo of the staff | |

| | Table | Unique Keys Equivalence | |
|------------|---------|-------------------------|--------------------|
| Links to | address | staff.address_id | address.address_id |
| Links from | payment | staff.staff_id | payment.staff_id |
| | rental | staff.staff_id | rental.staff_id |
| | store | staff.staff_id | store.staff_id |

4.13. Store

| Column_Name | KEY | Data_Type | Description |
|------------------|-----|---------------------------------|------------------------------|
| store_id | Р | serial | primary key for unique store |
| manager_staff_id | F | smallint | staff unique number |
| address_id | F | smallint | address unique number |
| last_update | | timestamp (6) without time zone | date of last record update |

| | Table | Unique Keys Equivalenc | Unique Keys Equivalence | | |
|------------|---------|------------------------|-------------------------|--|--|
| Links to | staff | store.manager_staff_id | staff.manager_staff_id | | |
| | address | store.address_id | address.address_id | | |
| Links from | - | - | - | | |