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# ROCKBUSTER STEALTH LLC

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Data dictionary



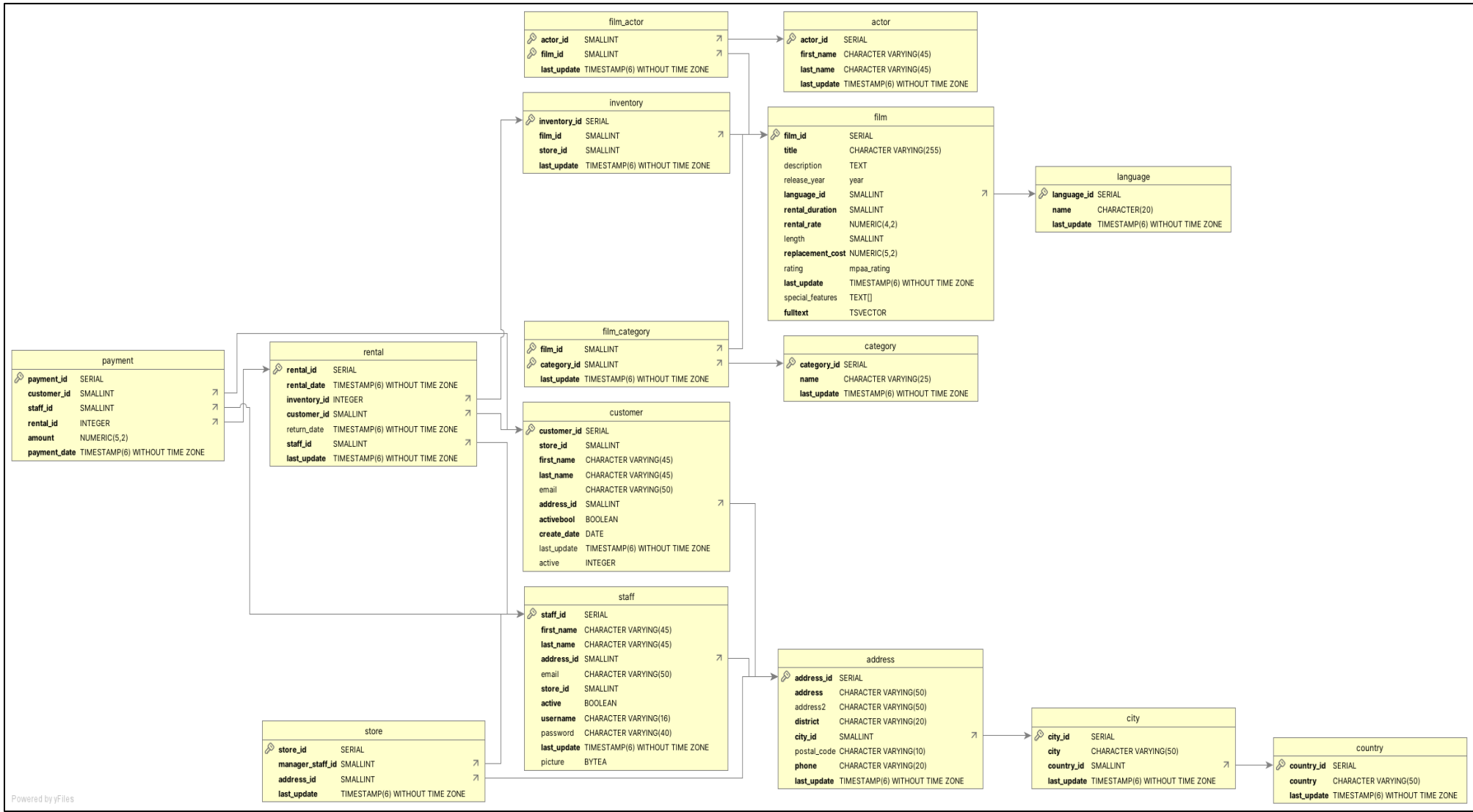
DECEMBER, 2024

BILEL  
YAHYAOU

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# 1.Entity Relationship Diagram (ERD)



# ROCKBUSTER STEALTH LLC Data Dictionary


## 2. Legend




|   |             |   |            |
|---|-------------|---|------------|
|  | Primary key |  | Links To   |
|  | Foreign key |  | Links From |

## 3. Tables

### 3.1 Fact Tables:

#### 3.1.1 Payment





| Payment   |            |           |   |
|---|------------|-----------|---|
| Columns   |            | Data type | Description                                       |
|  | payment_id | SERIAL    | Primary key, Unique Id for each row in this table |

|   |              |                                |   |
|---|--------------|--------------------------------|---|
|  | customer_id  | SMALLINT                       | Foreign key to link customer table, Unique Id for each row in that table        |
|  | staff_id     | SMALLINT                       | Foreign key to link staff table, Unique Id for each row in that table           |
|  | rental_id    | INTEGER                        | Foreign key to link rental table, Unique Id for each row in that table          |
|   | amount       | NUMERIC(5,2)                   | A real number with 5 digits with 2 number after the decimal point, rental price |
|   | payment_date | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date the rent has happened   |





#### Links

|   |          |  |
|---|----------|--|
|    | customer | payment.customer_id = customer.customer_id |
|   | staff    | payment.staff_id = staff.staff_id          |
|  | rental   | payment.rental_id = rental.rental_id       |

### 3.1.2 Rental



| Rental  |              |                                |   |
|---|--------------|--------------------------------|---|
|   | Columns      | Data type                      | Description   |
|  | rental_id    | SERIAL                         | Primary key, Unique Id for each row in this table                         |
|   | rental_date  | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of the rent has begun                                       |
|  | inventory_id | TIMESTAMP(6) WITHOUT TIME ZONE | Foreign key to link inventory table, Unique Id for each row in that table |
|  | customer_id  | SMALLINT                       | Foreign key to link customer table, Unique Id for each row in that table  |
|   | return_date  | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of the rent has finished                                    |
|  | staff_id     | SMALLINT                       | Foreign key to link staff table, Unique Id for each row                   |
|   | last_update  | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple                  |

#### Links


|   |           |  |
|---|-----------|--|
|  | customer  | rental.customer_id = customer.customer_id    |
|  | staff     | rental.staff_id = staff.staff_id             |
|  | inventory | rental.inventory_id = inventory.inventory_id |
|  | payment   | payment.rental_id = rental.rental_id         |

## 3.2 Dimension Tables:



### 3.2.1 Inventory

| Inventory   |              |                                |  |
|---|--------------|--------------------------------|--|
| Columns   |              | Data type                      | Description  |
|  | inventory_id | SERIAL                         | Primary key, Unique Id for each row in this table                    |
|  | film_id      | SMALLINT                       | Foreign key to link film table, Unique Id for each row in that table |
|   | store_id     | SMALLINT                       | A unique Id in store table   |
|   | last_update  | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple             |



#### Links

|  |        |  |
|--|--------|--|
|   | film   | inventory.film_id = film.film_id             |
|  | rental | rental.inventory_id = inventory.inventory_id |

### 3.2.2 Film - Actor


| Film_actor  |             |                                |  |
|---|-------------|--------------------------------|--|
| Columns   |             | Data type                      | Description  |
|  | actor_id    | SMALLINT                       | Composite key, Foreign key to link actor table           |
|  | film_id     | SMALLINT                       | Composite key, Foreign key to link film table            |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple |

#### Links

|   |       |                                      |
|---|-------|--------------------------------------|
|  | actor | film_actor.actor_id = actor.actor_id |
|  | film  | film_actor.film_id = film.film_id    |




### 3.2.3 Actor

| Actor   |             |                                |   |
|---|-------------|--------------------------------|---|
| Columns   |             | Data type                      | Description   |
|  | actor_id    | SERIAL                         | Primary key, Unique Id for each row in this table                   |
|   | first_name  | CHARACTER VARYING(45)          | First name of the actor, variable-length string up to 45 characters |
|   | last_name   | CHARACTER VARYING(45)          | Last name of the actor, variable-length string up to 45 characters  |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple            |


#### Links

|  |       |                                      |
|--|-------|--------------------------------------|
|  | actor | film_actor.actor_id = actor.actor_id |
|--|-------|--------------------------------------|


### 3.2.4 Language

| Language  |             |                                |   |
|---|-------------|--------------------------------|---|
| Columns   |             | Data type                      | Description   |
|  | language_id | SERIAL                         | Primary key, Unique Id for each row in this table             |
|   | name        | CHARACTER(20)                  | Name of the language, Fixed-length string up to 20 characters |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple      |


#### Links

|   |      |   |
|---|------|---|
|  | film | film_language_id = language.language_id |
|---|------|---|



### 3.2.5 Category

| Category  |             |                                |   |
|---|-------------|--------------------------------|---|
| Columns   |             | Data type                      | Description   |
|  | category_id | SERIAL                         | Primary key, Unique Id for each row in this table                               |
|   | name        | CHARACTER VARYING(25)          | Name of the film's category (genre), variable-length string up to 25 characters |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple                        |



#### Links

|   |               |  |
|---|---------------|--|
|  | Film_category | film-category.category_id = category.category_id |
|---|---------------|--|


### 3.2.6 Film - Category


| Film_category   |             |                                |  |
|---|-------------|--------------------------------|--|
| Columns   |             | Data type                      | Description  |
|  | film_id     | SMALLINT                       | Composite key, Foreign key to link film table            |
|  | category_id | SMALLINT                       | Composite key, Foreign key to link category table        |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple |

#### Links





|   |          |  |
|---|----------|--|
|  | category | film-category.category_id = category.category_id |
|  | film     | film-category.film_id = film.film_id             |

### 3.2.7 Film



| Film  |             |                        |   |
|---|-------------|------------------------|---|
| Columns   |             | Data type              | Description   |
|  | film_id     | SERIAL                 | Primary key, Unique Id for each row in this table             |
|   | title       | CHARACTER VARYING(255) | Name of the film, variable-length string up to 255 characters |
|   | description | TEXT                   | Explanations, variable-length string without limitation       |

|   |                  |                                |  |
|---|------------------|--------------------------------|--|
|   | release_year     | year                           | Year of film's publication   |
|  | language_id      | SMALLINT                       | Foreign key to link language table, Unique Id for each row in there            |
|   | rental_duration  | SMALLINT                       | Small integer, number of days film was rented                                  |
|   | rental_rate      | NUMERIC(4,2)                   | A real number with 4 digits with 2 number after the decimal point, rental rate |
|   | length           | SMALLINT                       | Small integer, length of the film  |
|   | replacement_cost | NUMERIC(5,2)                   | A real number with 5 digits with 2 number after the decimal point, cost        |
|   | rating           | mpaa_rating                    | Film rating  |
|   | last_update      | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple                       |
|   | special_features | TEXT                           | Further explanations, variable-length string without limitation                |
|   | fulltext         | TSVECTOR                       | Text which is used full-text searches  |

## Links

|   |               |   |
|---|---------------|---|
|  | language      | film_language_id = language.language_id |
|  | Film_actor    | film_actor.film_id = film.film_id       |
|  | inventory     | inventory.film_id = film.film_id        |
|  | film_category | film-category.film_id = film.film_id    |

### 3.2.8 Customer

| Customer  |             |                                |   |
|---|-------------|--------------------------------|---|
| Columns   |             | Data type                      | Description   |
|  | customer_id | SERIAL                         | Primary key, Unique Id for each row in this table                       |
|   | store_id    | SMALLINT                       | A unique Id in store table  |
|   | first_name  | CHARACTER VARYING(45)          | First name of customer, variable-length string up to 45 characters      |
|   | last_name   | CHARACTER VARYING(45)          | Last name of customer, variable-length string up to 45 characters       |
|   | email       | CHARACTER VARYING(50)          | Customer's email, variable-length string up to 50 characters            |
|  | address_id  | SMALLINT                       | Foreign key to link address table, Unique Id for each row in that table |
|   | activebool  | BOOLEAN                        | True or Fales value based on customer's status                          |
|   | create_date | DATE                           | Date of customer's account creation                                     |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple                |
|   | active      | INTEGER                        | A number to indicate a customer is active or not                        |

## Links

|     |         |  |
|-----|---------|--|
| »»» | address | customer.address_id = address.address_id   |
| ««« | payment | payment.customer_id = customer.customer_id |
| ««« | rental  | rental.customer_id = customer.customer_id  |


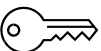
## 3.2.9 Store

| store   |                  |                                |   |
|---------|------------------|--------------------------------|---|
| Columns |                  | Data type                      | Description   |
| 🔑       | store_id         | SERIAL                         | Primary key, Unique Id for each row                                     |
| 🔑       | manager_staff_id | SMALLINT                       | Foreign key to link staff table, Unique Id for each row in that table   |
| 🔑       | address_id       | SMALLINT                       | Foreign key to link address table, Unique Id for each row in that table |
|         | last_update      | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple                |



## Links

|     |         |                                       |
|-----|---------|---------------------------------------|
| »»» | staff   | store.store_id = staff.store_id       |
| »»» | address | store.address_id = address.address_id |

### 3.2.10 Staff

| Staff   |             |                                |   |
|---|-------------|--------------------------------|---|
| Columns   |             | Data type                      | Description   |
|  | staff_id    | SERIAL                         | Primary key, Unique Id for each row in this table                       |
|   | first_name  | CHARACTER VARYING(45)          | First name of staff, variable-length string up to 45 characters         |
|   | last_name   | CHARACTER VARYING(45)          | Last name of staff, variable-length string up to 45 characters          |
|  | address_id  | SMALLINT                       | Foreign key to link address table, Unique Id for each row in that table |
|   | email       | CHARACTER VARYING(50)          | Staff's email, variable-length string up to 50 characters               |
|   | Store_id    | SMALLINT                       | A unique Id in store table  |
|   | active      | BOOLEAN                        | True or Fales value based on staff's account status                     |
|   | username    | CHARACTER VARYING(16)          | Staff's account username, variable-length string up to 16 characters    |
|   | password    | CHARACTER VARYING(40)          | Staff's account password, variable-length string up to 40 characters    |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple                |
|   | active      | INTEGER                        | A number to indicate a staff is active or not                           |
|   | Picture     | BYTEA                          | Staff's picture   |

#### Links

|   |         |                                       |
|---|---------|---------------------------------------|
|  | address | staff.address_id = address.address_id |
|  | payment | payment.staff_id = staff.staff_id     |

|   |        |                                  |
|---|--------|----------------------------------|
| ⏏ | rental | rental.staff_id = staff.staff_id |
| ⏏ | store  | store.store_id = staff.store_id  |

### 3.2.11 City



| City    |             |                                |   |
|---------|-------------|--------------------------------|---|
| Columns |             | Data type                      | Description   |
| 🔑       | city_id     | SERIAL                         | Primary key, Unique Id for each row in this table                       |
|         | city        | CHARACTER VARYING(50)          | Name of the city, variable-length string up to 50 characters            |
| 🔑       | country_id  | SMALLINT                       | Foreign key to link country table, Unique Id for each row in that table |
|         | last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple                |

### Links





|   |         |                                      |
|---|---------|--------------------------------------|
| ⏏ | country | city.country_id = country.country_id |
| ⏏ | address | city.city_id = address.city_id       |




### 3.2.12 Address

| Address   |             |                                |  |
|---|-------------|--------------------------------|--|
| Columns   |             | Data type                      | Description  |
|  | address_id  | SERIAL                         | Primary key, Unique Id for each row                                  |
|   | address     | CHARACTER VARYING(50)          | Address, variable-length string up to 50 characters                  |
|   | address2    | CHARACTER VARYING(50)          | Address, variable-length string up to 50 characters                  |
|   | district    | CHARACTER VARYING(20)          | District, region, state, variable-length string up to 20 characters  |
|  | city_id     | SMALLINT                       | Foreign key to link city table, Unique Id for each row in that table |
|   | postal_code | CHARACTER VARYING(10)          | Postal code, variable-length string up to 10 characters              |
|   | phone       | CHARACTER VARYING(20)          | Phone number, variable-length string up to 20 characters             |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple             |

#### Links

|   |          |  |
|---|----------|--|
|  | city     | city.city_id = address.city_id           |
|  | customer | customer.address_id = address.address_id |
|  | staff    | staff.address_id = address.address_id    |
|  | store    | store.address_id = address.address_id    |

### 3.2.13 Country

| Country   |             |                                |   |
|---|-------------|--------------------------------|---|
| Columns   |             | Data type                      | Description   |
|  | Country_id  | SERIAL                         | Primary key, Unique Id for each row in this table               |
|   | country     | CHARACTER VARYING(50)          | Name of the country, variable-length string up to 50 characters |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time and date of the last changes happened to each tuple        |

#### Links

|   |      |                                      |
|---|------|--------------------------------------|
|  | city | city.country_id = country.country_id |
|---|------|--------------------------------------|