Rockbuster Stealth LLC

Data Dictionary

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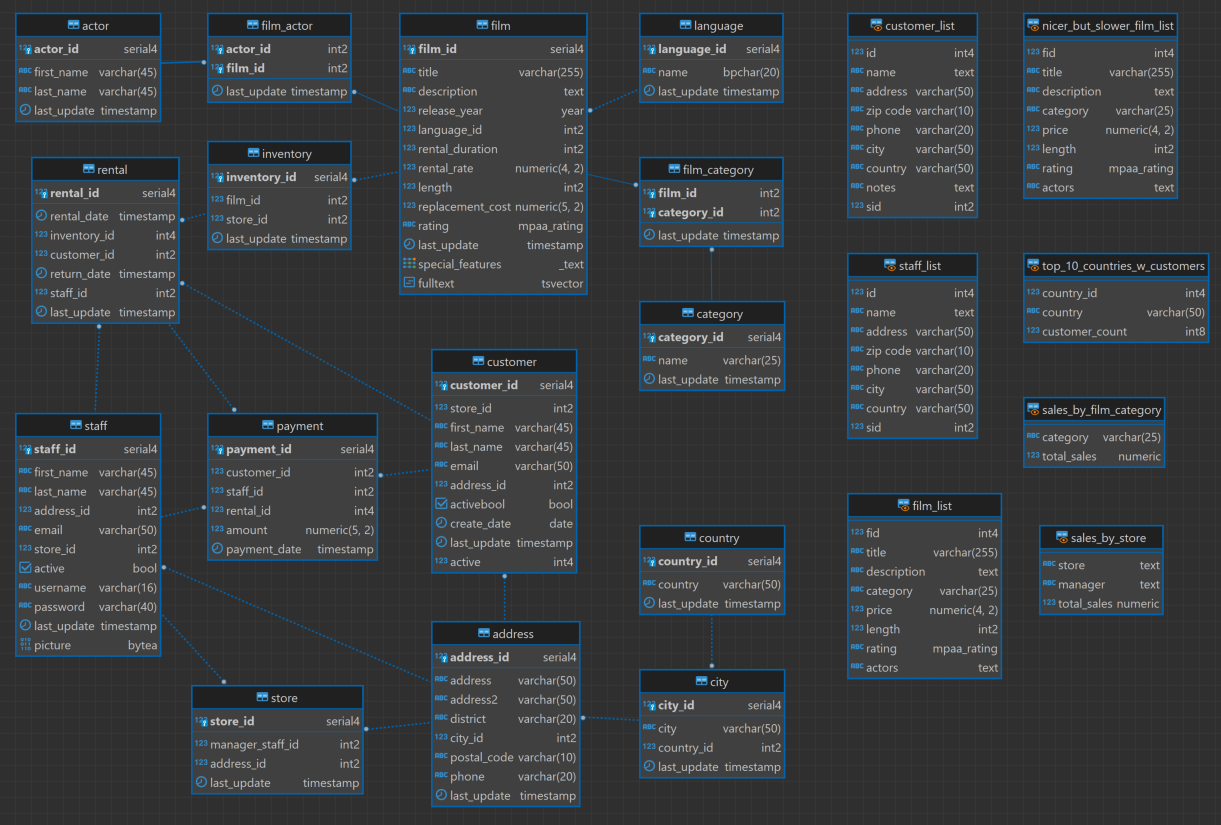
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# Entity Relationship Diagram (ERD)



# Tables

## Table: Rental

Rental information for a single movie rental

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Column Name | Data Type | Not Null | Default | Description |
| PK | rental\_id | serial4 | X | nextval('rental\_rental\_id\_seq'::regclass) | ID of the rental |
|  | rental\_date | timestamp | X |  | Date of rental |
| FK | inventory\_id | int4 | X |  | ID of item rented |
| FK | customer\_id | int2 | X |  | ID of customer |
|  | return\_date | timestamp |  |  | Date rental returned |
| FK | staff\_id | int2 | X |  | ID of staff renting |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| Payment | rental.rental\_id = payment.rental\_id |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| Inventory | inventory.inventory\_id = rental.inventory\_id |
| Customer | customer.customer\_id = rental.customer\_id |
| Staff | staff.staff\_id = rental.staff\_id |

## Table: Payment

Rental payment information

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | payment\_id | serial4 | X | nextval('payment\_payment\_id\_seq'::regclass) | ID of payment |
| FK | customer\_id | int2 | X |  | ID of customer |
| FK | staff\_id | int2 | X |  | ID of staff renting |
| FK | rental\_id | int4 | X |  | ID of the rental |
|  | amount | numeric(5, 2) | X |  | Cost of rental |
|  | payment\_date | timestamp | X |  | Date of rental payment |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| None |  |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| Rental | rental.rental\_id = payment.rental\_id |
| Customer | customer.customer\_id = payment.customer\_id |
| Staff | staff.staff\_id = payment.staff\_id |

## Table: Staff

Staff details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | staff\_id | serial4 | X | nextval('staff\_staff\_id\_seq'::regclass) | ID of staff renting |
|  | first\_name | varchar(45) | X |  | First name of staff member |
|  | last\_name | varchar(45) | X |  | Last name of staff member |
| FK | address\_id | int2 | X |  | ID of address |
|  | email | varchar(50) |  |  | email of staff member |
|  | store\_id | int2 | X |  | ID of store renting |
|  | active | bool | X | true | Flag if staff is active staff |
|  | username | varchar(16) | X |  | Username of staff member |
|  | password | varchar(40) |  |  | Password of staff member |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |
|  | picture | bytea |  |  | Picture of staff member |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| Rental | staff.staff\_id = rental.staff\_id |
| Payment | staff.staff\_id = payment.staff\_id |
| Store | staff.staff\_id = store.manager\_staff\_id |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| Address | address.address\_id = staff.address\_id |

## Table: Customer

Customer details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | customer\_id | serial4 | X | nextval('customer\_customer\_id\_seq'::regclass) | ID of customer |
|  | store\_id | int2 | X |  | ID of store |
|  | first\_name | varchar(45) | X |  | First name of customer |
|  | last\_name | varchar(45) | X |  | Last name of customer |
|  | email | varchar(50) |  |  | Email of customer |
| FK | address\_id | int2 | X |  | ID of address |
|  | activebool | bool | X | true | Flag if customer is active or not |
|  | create\_date | date | X | 'now'::text::date | Date customer was created |
|  | last\_update | timestamp |  | now() | Timestamp of last update of record |
|  | active | int4 |  |  | Active status int |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| Rental | customer.customer\_id = rental.customer\_id |
| Payment | customer.customer\_id = payment.customer\_id |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| Address | address.address\_id = customer.address\_id |

## Table: Address

All addresses

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | address\_id | serial4 | X | nextval('address\_address\_id\_seq'::regclass) | ID of address |
|  | address | varchar(50) | X |  | Address |
|  | address2 | varchar(50) |  |  | Address 2 |
|  | district | varchar(20) | X |  | District |
| FK | city\_id | int2 | X |  | ID of city |
|  | postal\_code | varchar(10) |  |  | Postal code |
|  | phone | varchar(20) | X |  | Phone number |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| Staff | address.address\_id = staff.address\_id |
| Customer | address.address\_id = customer.address\_id |
| Store | address.address\_id = store.address\_id |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| City | city.city\_id = address.city\_id |

## Table: City

All cities

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | city\_id | serial4 | X | nextval('city\_city\_id\_seq'::regclass) | ID of city |
|  | city | varchar(50) | X |  | City name |
| FK | country\_id | int2 | X |  | ID of country |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| Address | city.city\_id = address.city\_id |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| Country | country.country\_id = city.country\_id |

## Table: country

All countries

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | country\_id | serial4 | X | nextval('country\_country\_id\_seq'::regclass) | ID of country |
|  | country | varchar(50) | X |  | Country name |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| City | country.country\_id = city.country\_id |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| None |  |

## Table: Inventory

Movie inventory by store

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | inventory\_id | serial4 | X | nextval('inventory\_inventory\_id\_seq'::regclass) | ID of inventory item |
| FK | film\_id | int2 | X |  | ID of film |
|  | store\_id | int2 | X |  | ID of store |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| Rental | inventory.inventory\_id = rental.inventory\_id |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| Film | film.film\_id = inventory.film\_id |

## Table: Film\_category

Joining table between Film and Category

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| FK | film\_id | int2 | X |  | ID of film |
| FK | category\_id | int2 | X |  | ID of film category |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| None |  |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| Category | category.category\_id = film\_category.category\_id |
| Film | film.film\_id = film\_category.film\_id |

## Table: Film\_actor

Joining table between Actor and Film

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| FK | actor\_id | int2 | X |  | ID of actor |
| FK | film\_id | int2 | X |  | ID of film |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| None |  |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| Actor | actor.actor\_id = film\_actor.actor\_id |
| Film | film.film\_id = film\_actor.film\_id |

## Table: Actor

All actors

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | actor\_id | serial4 | X | nextval('actor\_actor\_id\_seq'::regclass) | ID of actor |
|  | first\_name | varchar(45) | X |  | Actor first name |
|  | last\_name | varchar(45) | X |  | Actor last name |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| Film\_actor | actor.actor\_id = film\_actor.actor\_id |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| None |  |

## Table: Category

All movie category names

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | category\_id | serial4 | X | nextval('category\_category\_id\_seq'::regclass) | ID of movie category |
|  | name | varchar(25) | X |  | Category name |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| Film\_category | category.category\_id = film\_category.category\_id |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| None |  |

## Table: Film

All films with details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | film\_id | serial4 | X | nextval('film\_film\_id\_seq'::regclass) | ID of film |
|  | title | varchar(255) | X |  | Title of film |
|  | description | text |  |  | Description |
|  | release\_year | year |  |  | Release year |
| FK | language\_id | int2 | X |  | ID of language |
|  | rental\_duration | int2 | X | 3 | Duration of the rental permitted |
|  | rental\_rate | numeric(4, 2) | X | 4.99 | Rate of the rental |
|  | length | int2 |  |  | Length of movie |
|  | replacement\_cost | numeric(5, 2) | X | 19.99 | Cost to replace |
|  | rating | mpaa\_rating |  | 'G'::mpaa\_rating | Movie rating |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |
|  | special\_features | \_text | X |  | Special features in film |
|  | fulltext | tsvector | X |  | Text field of descriptive keywords |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| Inventory | film.film\_id = inventory.film\_id |
| Film\_actor | film.film\_id = film\_actor.film\_id |
| Film\_category | film.film\_id = film\_category.film\_id |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| Language | language.language\_id = film.language\_id |

## Table: Language

All language names

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | language\_id | serial4 | X | nextval('language\_language\_id\_seq'::regclass) | ID of language |
|  | name | bpchar(20) | X |  | Name of language |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| Film | language.language\_id = film.language\_id |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| None |  |

## Table: Store

Store information

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
| PK | store\_id | serial4 | X | nextval('store\_store\_id\_seq'::regclass) | ID of store |
| FK | manager\_staff\_id | int2 | X |  | ID of manager staff member |
| FK | address\_id | int2 | X |  | ID of store address |
|  | last\_update | timestamp | X | now() | Timestamp of last update of record |

Link To:

|  |  |
| --- | --- |
| Table | Join on |
| None |  |

Link From:

|  |  |
| --- | --- |
| Table | Join on |
| Staff | staff.staff\_id = store.manager\_staff\_id |
| Address | address.address\_id = store.address\_id |

# Views

## View: Actor\_info

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
|  | actor\_id | actor\_id |  |  |  |
|  | first\_name | first\_name |  |  |  |
|  | last\_name | last\_name |  |  |  |
|  | film\_info | film\_info |  |  |  |

## View: Customer\_list

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
|  | id | id |  |  |  |
|  | name | name |  |  |  |
|  | address | address |  |  |  |
|  | zip code | zip code |  |  |  |
|  | phone | phone |  |  |  |
|  | city | city |  |  |  |
|  | country | country |  |  |  |
|  | notes | notes |  |  |  |
|  | sid | sid |  |  |  |

## View: Film\_list

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
|  | fid | fid |  |  |  |
|  | title | title |  |  |  |
|  | description | description |  |  |  |
|  | category | category |  |  |  |
|  | price | price |  |  |  |
|  | length | length |  |  |  |
|  | rating | rating |  |  |  |
|  | actors | actors |  |  |  |

## View: Nicer\_but\_slower\_film\_list

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
|  | fid | fid |  |  |  |
|  | title | title |  |  |  |
|  | description | description |  |  |  |
|  | category | category |  |  |  |
|  | price | price |  |  |  |
|  | length | length |  |  |  |
|  | rating | rating |  |  |  |
|  | actors | actors |  |  |  |

## View: Sales\_by\_film\_category

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
|  | category | category |  |  |  |
|  | total\_sales | total\_sales |  |  |  |

## View: Sales\_by\_store

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
|  | store | store |  |  |  |
|  | manager | manager |  |  |  |
|  | total\_sales | total\_sales |  |  |  |

## View: Staff\_list

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
|  | id | id |  |  |  |
|  | name | name |  |  |  |
|  | address | address |  |  |  |
|  | zip code | zip code |  |  |  |
|  | phone | phone |  |  |  |
|  | city | city |  |  |  |
|  | country | country |  |  |  |
|  | sid | sid |  |  |  |

## View: Top\_10\_countries\_w\_customers

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key | Columns | Data Type | Not Null | Default | Description |
|  | country\_id | country\_id |  |  |  |
|  | country | customer\_count |  |  |  |
|  | customer\_count | country |  |  |  |