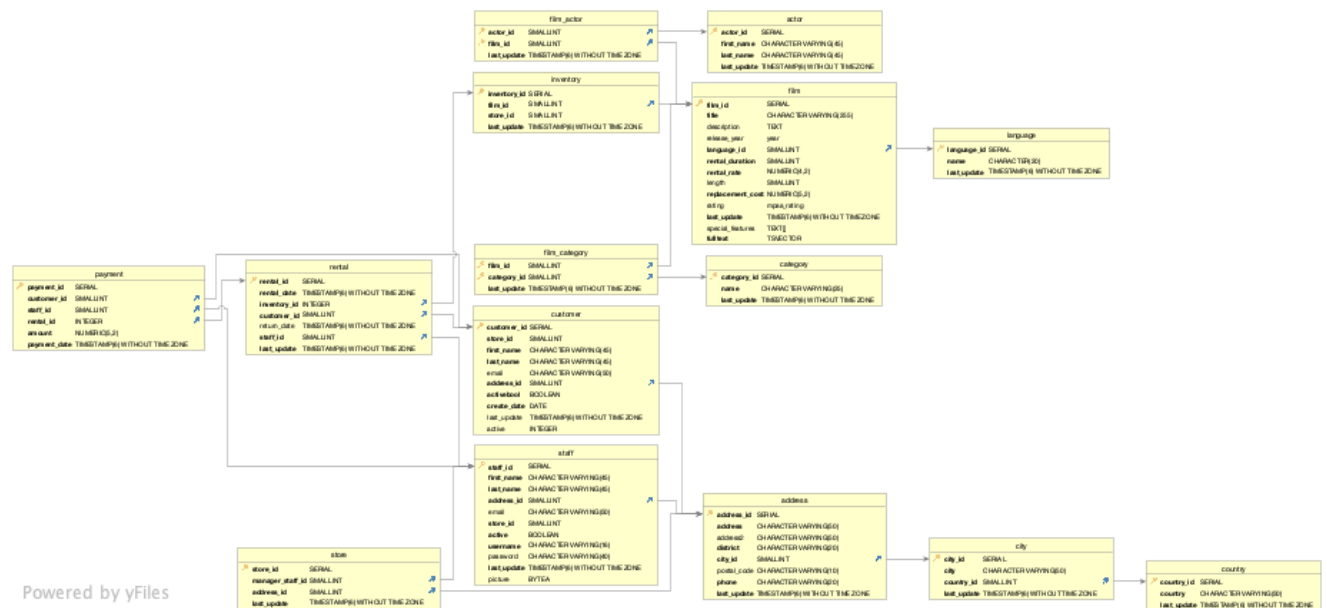


Task_2_HG

Step 2. Extract the ERD:



Step_3: The Rockbuster database has a snowflake schema, The Fact Table (Rental) is surrounded by sub-dimension tables.

FACT TABLE

Table name: Rental

| <i>Columns</i> | <i>Data Type</i> | <i>Description</i> |
|----------------|-----------------------------------|---|
| rental_id | SERIAL | Unique id for each movie rental |
| 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 |
| customer_id | SMALLINT | Customer id who rented the movie |
| return_date | TIMESTAMP(6) WITHOUT TIME ZONE | The date and time of return |
| staff_id | SMALLINT | The id assigned to each staff |
| last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time of last updated status |

DIMENSION TABLE

Table Name: Customer

| <i>Columns</i> | <i>Data Type</i> | <i>Description</i> |
|-----------------------|-------------------------|--------------------------------------|
| customer_id | SERIAL | Customer id to whom the movie rented |
| store_id | SMALLINT | The unique store id for each store |
| first_name | CHARACTER VARYING(45) | First name of the customer |
| last_name | CHARACTER VARYING(45) | Last name of the customer |
| email | CHARACTER VARYING(45) | email address of the customer |
| address_id | SMALLINT | Postal address of customer |
| activebool | BOOLEAN | Status if customer is active or not |
| create_date | DATE | creation date |

Table Name: Staff

| <i>Columns</i> | <i>Data Type</i> | <i>Description</i> |
|-----------------------|--------------------------------|----------------------------------|
| staff_id | SERIAL | The unique id of each staff |
| first_name | CHARACTER VARYING(45) | First name of staff |
| last_name | CHARACTER VARYING(45) | Last name of staff |
| address_id | SMALLINT | Postal address of staff |
| email | CHARACTER VARYING(50) | Email address of staff |
| store_id | SMALLINT | The unique id of each store |
| active | BOOLEAN | Status if staff is active or not |
| username | CHARACTER VARYING(16) | username of staff |
| password | CHARACTER VARYING(40) | password of staff |
| last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time of last update of staff |
| picture | BYTEA | Picture of staff |

Table Name: Payment

| <i>Columns</i> | <i>Data Type</i> | <i>Description</i> |
|-----------------------|-----------------------------------|--|
| payment_id | SERIAL | The id for record keeping |
| customer_id | SMALLINT | Customer id to whom the movie was rented |
| staff_id | SMALLINT | The unique id of the staff |
| rental_id | INTEGER | The unique id of each movie rental |
| amount | NUMERIC(5,2) | The rental amount paid by customer |
| payment_date | TIMESTAMP(6) WITHOUT TIME ZONE | Time of payment |

Table Name: Inventory

| <i>Columns</i> | <i>Data Type</i> | <i>Description</i> |
|-----------------------|-----------------------------------|---------------------------------|
| inventory_id | SERIAL | The id for record keeping |
| film_id | SMALLINT | The unique id of film |
| store_id | SMALLINT | The unique id of each store |
| last_update | TIMESTAMP(6) WITHOUT TIME ZONE | The time of last updated status |

Table Name: Film Category

| <i>Columns</i> | <i>Data Type</i> | <i>Description</i> |
|-----------------------|-----------------------------------|---------------------------------------|
| film_id | SMALLINT | The unique id for each movie |
| category_id | SMALLINT | The unique id for each movie category |
| last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time of last updated status |

Table Name: Language

| <i>Columns</i> | <i>Data Type</i> | <i>Description</i> |
|-----------------------|-----------------------------------|-----------------------------|
| language_id | SERIAL | ID for languages of movies |
| name | CHARACTER(20) | Name of language |
| last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time of last updated status |

Table Name: Address

| <i>Columns</i> | <i>Data Type</i> | <i>Description</i> |
|-----------------------|--------------------------------|-----------------------------|
| address_id | SERIAL | Postal address of store |
| address | CHARACTER VARYING(50) | Postal address of store |
| address2 | CHARACTER VARYING(50) | Postal address of store |
| district | CHARACTER VARYING(20) | Time of last updated status |
| city_id | SMALLINT | Unique id of city |
| postal_code | CHARACTER VARYING(10) | Postal code |
| phone | CHARACTER VARYING(20) | Phone number |
| last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time of last updated status |

Table Name: City

| <i>Columns</i> | <i>Data Type</i> | <i>Description</i> |
|-----------------------|--------------------------------|-----------------------------|
| city_id | SERIAL | ID assigned to city |
| name | CHARACTER VARYING(50) | name of city |
| country_id | SMALLINT | Country code |
| last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time of last updated status |

Table Name: Country

| <i>Columns</i> | <i>Data Type</i> | <i>Description</i> |
|-----------------------|--------------------------------|-----------------------------|
| country_id | SERIAL | Unique country code |
| country | CHARACTER VARYING(50) | Name of country |
| last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time of last updated status |

Step_4:

Which actors brought Rockbuster the most revenue?

Film_actor, Film, Rental

What language are the majority of movies in the collection?

Film and Language