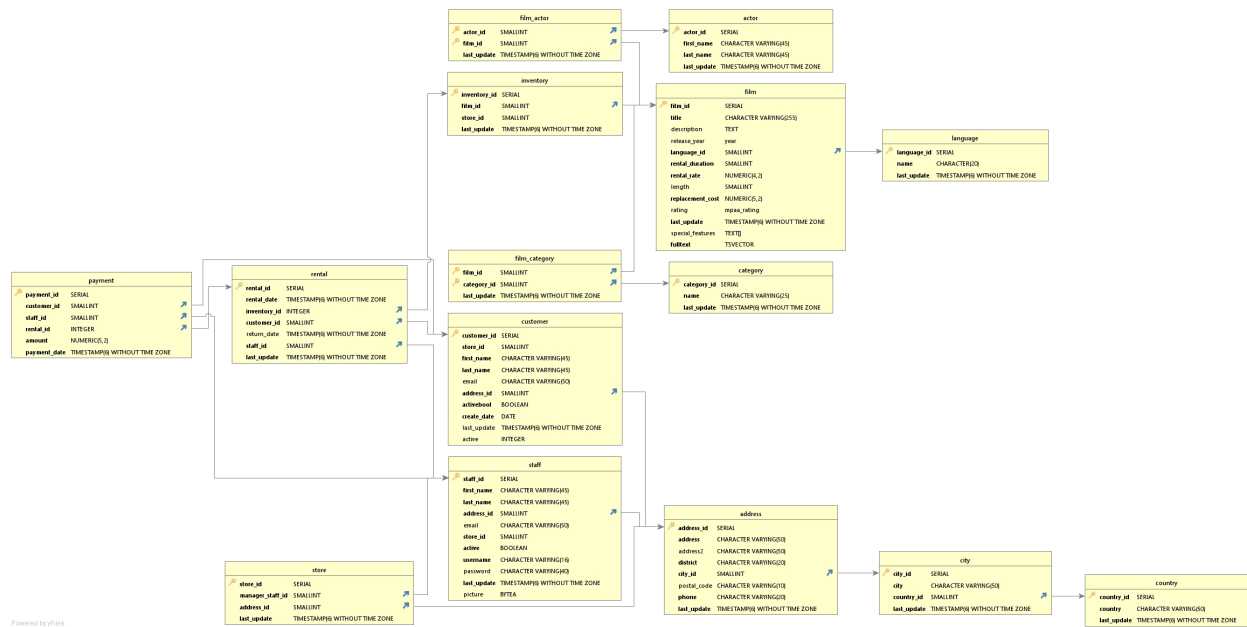


Answer 3.2

Step 2. Extract the ERD:



Step 3. Create the first draft of a data dictionary:

- Does the Rockbuster database have a snowflake schema or a star schema? Write a brief explanation for your answer.
 - Snowflake schema as there are sub dimension tables.
- List all the fact tables and all the dimension tables in the schema. For each table, list every column and its data type, and write a brief description of the column. To get an idea of what this should look like, check out these [example fact and dimension tables](#).

Fact table

Aa Columns	Data type	Description	Name of the table
<u>rental_id</u>	SERIAL	number identifying the rental record	rental

Aa Columns	Data type	Description	Name of the table
<u>rental_date</u>	TIMESTAMP(6) WITHOUT TIME ZONE	date and time when rental record was created	rental
<u>inventory_id</u>	INTEGER	number identifying the inventory record	rental
<u>customer_id</u>	SMALLINT	number identifying the customer	rental
<u>return_date</u>	TIMESTAMP(6) WITHOUT TIME ZONE	date and time when the rental was returned	rental
<u>staff_id</u>	SMALLINT	number identifying the staff processing the rental	rental
<u>last_update</u>	TIMESTAMP(6) WITHOUT TIME ZONE	date and time when record was last updated	rental

Dimension tables

Aa Columns	Data Type	Description	Name of the table
<u>payment_id</u>	SERIAL	number identifying the payment record	payment
<u>customer_id</u>	SMALLINT	number identifying the customer	payment
<u>staff_id</u>	SMALLINT	number identifying the staff member processing the payment	payment
<u>rental_id</u>	INTEGER	number identifying the rental record	payment
<u>amount</u>	NUMERIC(5,2)	amount of rental payment	payment
<u>payment_date</u>	TIMESTAMP(6) WITHOUT TIME ZONE	date and time when payment was processed	payment
<u>actor_id</u>	SMALLINT	number identifying the actor record	film_actor

Aa Columns	Data Type	Description	Name of the table
<u>film_id</u>	SMALLINT	number identifying the film record	film_actor film_category inventory
<u>last_update</u>	TIMESTAMP(6) WITHOUT TIME ZONE	date and time when record was last updated	actor address category city country customer film film_actor film_category inventory language staff store
<u>category_id</u>	SMALLINT	number identifying the category record	film_category
<u>store_id</u>	SERIAL	number identifying store record	store
<u>manager_staff_id</u>	SMALLINT	number identifying management staff	store
<u>address_id</u>	SMALLINT	number identifying the address record	customer staff store
<u>inventory_id</u>	SERIAL	number identifying the inventory record	inventory
<u>first_name</u>	CHARACTER VARYING(45)	first name of the customer/staff/actor	actor customer staff
<u>last_name</u>	CHARACTER VARYING(45)	last name of the customer/staff/actor	actor customer staff
<u>email</u>	CHARACTER VARYING(50)	email address	customer staff
<u>activebool</u>	BOOLEAN	active status of customer	customer
<u>create_date</u>	DATE	date the record was created	customer
<u>active</u>	INTEGER	active status of customer	customer
<u>username</u>	CHARACTER VARYING(16)	name identifying user	staff

Aa Columns	Data Type	Description	Name of the table
<u>password</u>	CHARACTER VARYING(40)	password allowing access for user	staff
<u>picture</u>	BYTEA	image of employee	staff
<u>address</u>	CHARACTER VARYING(50)	address line 1	address
<u>address2</u>	CHARACTER VARYING(50)	address line 2	address
<u>district</u>	CHARACTER VARYING(20)	district	address
<u>city_id</u>	SMALLINT	number identifying city record	address
<u>postal_code</u>	CHARACTER VARYING(10)	post code	address
<u>phone</u>	CHARACTER VARYING(20)	phone number	address
<u>city</u>	CHARACTER VARYING(50)	name of city	city
<u>country_id</u>	SMALLINT	number identifying country record	city
<u>country</u>	CHARACTER VARYING(50)	name of country	country
<u>name</u>	CHARACTER VARYING(25)	category name	category
<u>title</u>	CHARACTER VARYING(255)	film title	film
<u>description</u>	TEXT	description of film	film
<u>release_year</u>	year	year of film release	film
<u>language_id</u>	SMALLINT	number identifying language record	film
<u>rental_duration</u>	SMALLINT	number of days film was rented	film

Aa Columns	Data Type	Description	Name of the table
<u>rental_rate</u>	NUMERIC(4,2)	rate to be payed for rental	film
<u>length</u>	SMALLINT	film length in minutes	film
<u>replacement_cost</u>	NUMERIC(5,2)	cost of replacing film	film
<u>rating</u>	mpaa_rating	age rating of the film record	film
<u>special_features</u>	TEXT	special features of the film record	film
<u>fulltext</u>	TSVECTOR	keywords linked to film	film
<u>language_id</u>	SERIAL	number identifying language record	language
<u>name</u>	CHARACTER(20)	name of language	language
<u>actor_id</u>	SERIAL	number identifying the actor	actor
<u>film_id</u>	SERIAL	number identifying film record	film
<u>category_id</u>	SERIAL	number identifying category record	category
<u>address_id</u>	SERIAL	number identifying address record	address
<u>city_id</u>	SERIAL	number identifying city record	city
<u>country_id</u>	SERIAL	number identifying country record	country
<u>store_id</u>	SMALLINT	number identifying the store record	customer inventory staff
<u>customer_id</u>	SERIAL	number identifying the customer record	customer

Aa Columns	Data Type	Description	Name of the table
<u>staff_id</u>	SERIAL	number identifying staff record	staff
<u>active</u>	BOOLEAN	active status of staff member	staff

Step 4. Find information:

Now that your data dictionary and ERD are ready to use, your manager has given you a list of business questions to answer. Use your data dictionary to figure out which tables you'd need to answer the questions below:

- Which actors brought Rockbuster the most revenue?
 - actor, film_actor, film
- What language are the majority of movies in the collection?
 - language, film