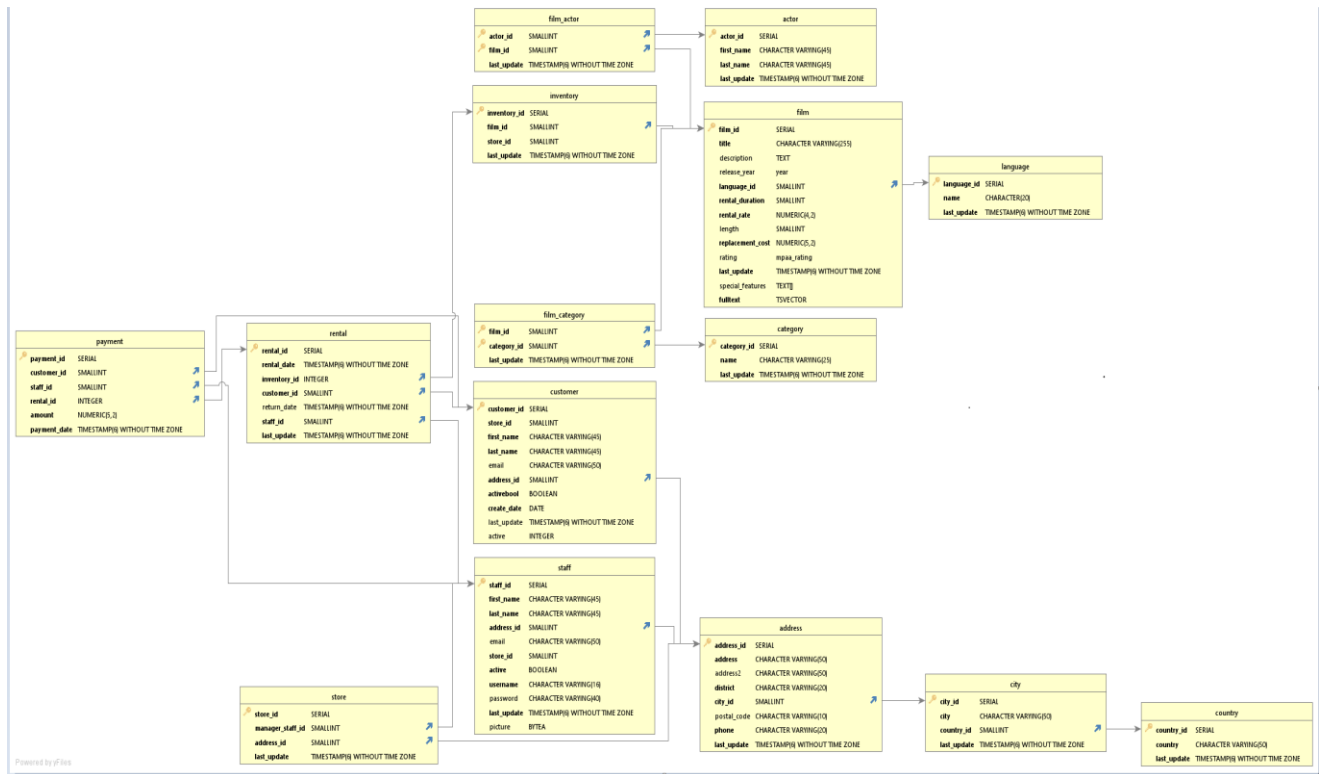


ANSWERS: 3.2

Step 2. Extract the ERD:



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

✚ Take a moment to examine your ERD. Does the Rockbuster database have a snowflake schema or a star schema? Write a brief explanation for your answer.

- The database has a snowflake schema. The ERD has a lot of dimension and sub-dimension tables.

ANSWERS: 3.2

- 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.

FACT TABLES

TABLES	Columns	Data Type	Description
PAYMENT	PAYMENT_ID	Serial	Unique number for every payment
	CUSTOMER_ID	Small Integer	Unique number for every customer
	STAFF_ID	Small Integer	Unique number for every Staff member
	RENTAL_ID	Integer	Unique rental number
	AMOUNT	Numeric(5,2)	In USD for amount received per rental
	PAYMENT_DATE	Timestamp(6) without Time zone	Date and time registration when payment is made
RENTAL	RENTAL_ID	Serial	Unique rental number
	RENTAL_DATE	Timestamp(6) without Time zone	Date and time registration when rental was done
	INVENTORY_ID	Integer	Unique number for storage of films
	CUSTOMER_ID	Small Integer	Unique number for every customer
	RETURN_DATE	Timestamp(6) without Time zone	Record of Date and time of return
	STAFF_ID	Small Integer	Unique number for every Staff member
	LAST_UPDATE	Timestamp(6) without Time zone	Date and time record for the last update done

ANSWERS: 3.2

DIMENSION TABLES

TABLES	COLUMNS	DATA TYPE	DESCRIPTION
STORE	STORE_ID	Serial	Unique Id for every store
	MANAGER_STAFF_ID	Small Integer	Manager Staff ID number
	ADDRESS_ID	Small Integer	Address ID Number
STAFF	STAFF_ID	Small Integer	Unique number for every Staff member
	LAST_UPDATE	Timestamp(6) without Time zone	Date and time record for the last update done
	FIRST_NAME	Character Varying (45)	First name of staff member with max. 45 characters
	LAST_NAME	Character Varying (45)	Last name of staff member with max. 45 characters
	ADDRESS_ID	Small Integer	Address of the staff member
	EMAIL	Character Varying (50)	Email of the staff member with max. 50 characters
	STORE_ID	Small Integer	Unique Id for every store
	ACTIVE	Boolean	Is the staff member currently working or not
	USERNAME	Character Varying (16)	Unique user name of every staff member with max. 16 characters
	PASSWORD	Character Varying (40)	Unique password of every staff member with max. 40 characters
	LAST_UPDATE	Timestamp(6) without Time zone	Date and time record for the last update done
	PICTURE	Bytea	Picture of individual employee

ANSWERS: 3.2

TABLES	COLUMNS	DATA TYPE	DESCRIPTION
CUSTOMER	CUSTOMER_ID	Small Integer	Unique number for every customer
	STORE_ID	Small Integer	Unique Id for every store
	FIRST_NAME	Character Varying (45)	First name of customer with max. 45 characters
	LAST_NAME	Character Varying (45)	Last name of customer with max. 45 characters
	EMAIL	Character Varying (50)	Email of the customer with max. 50 characters
	ADDRESS_ID	Small Integer	Address of the customer
	ACTIVEBOOL	Boolean	
	CREATE_DATE	Timestamp(6) without Time zone	Account creation date with time
	LAST_UPDATE	Timestamp(6) without Time zone	Date and time record for the last update done
	ACTIVE	Integer	
FILM CATEGORY	FILM_ID	Small Integer	Unique number for every film
	CATEGORY_ID	Small Integer	Category reference for sorting and storing films
	LAST_UPDATE	Timestamp(6) without Time zone	Date and time record for the last update done
CATEGORY	CATEGORY_ID	Small Integer	Category reference for sorting and storing films
	NAME	Character Varying (25)	Category name with max. 25 characters
	LAST_UPDATE	Timestamp(6) without Time zone	Date and time record for the last update done
INVENTORY	INVENTORY_ID	Serial	Inventory ID Number
	FILM_ID	Small Integer	Unique number for every film
	STORE_ID	Small Integer	Unique Id for every store
	LAST_UPDATE	Timestamp(6) without Time zone	Date and time record for the last update done

ANSWERS: 3.2

FILM ACTOR	ACTOR_ID	Small Integer	Unique Id for every Actor
	FILM_ID	Small Integer	Unique number for every film
	LAST_UPDATE	Timestamp(6) without Time zone	Date and time record for the last update done
ACTOR	ACTOR_ID	Serial	Unique Id for every Actor
	FIRST_NAME	Character Varying (45)	First name of actor with max. 45 characters
	LAST_NAME	Character Varying (45)	Last name of actor with max. 45 characters
	LAST_UPDATE	Timestamp(6) without Time zone	Date and time for the last update done
FILM	FILM_ID	Serial	Unique number for every film
	TITLE	Character Varying (255)	Title of the film with max. 255 characters
	DESCRIPTION	Text	The plot of the film
	RELEASE_YEAR	Year	Film release year
	LANGUAGE_ID	Small Integer	Language ID number
	RENTAL_DURATION	Small Integer	The record of duration the film is rented
	RENTAL_RATE	Numeric(4,2)	Cost of film rental
	LENGTH	Small Integer	The length of the film in minutes
	REPLACEMENT_COST	Numeric(5,2)	The cost of replaing the film
	RATING	M paa_rating	The rating of the film
	LAST_UPDATE	Timestamp(6) without Time zone	Date and time for the last update done
	SPECIAL_FEATURES	Text[]	Special features of the film
	FULLTEXT	TSVECTOR	Fulltext of the film, all details
LANGUAGE	LANGUAGE_ID	Serial	Language ID number
	NAME	Character Varying (25)	Language of the film with max. 25 characters
	LAST_UPDATE	Timestamp(6) without Time zone	Date and time for the last update done

ANSWERS: 3.2

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?
 - To get the desired data, we would need to look into the film table, film_actor table, actor table, inventory table and the rental table.
- ✚ What language are the majority of movies in the collection?
 - To get the desired results, we will need to look into the inventory table, film category table and the language table.