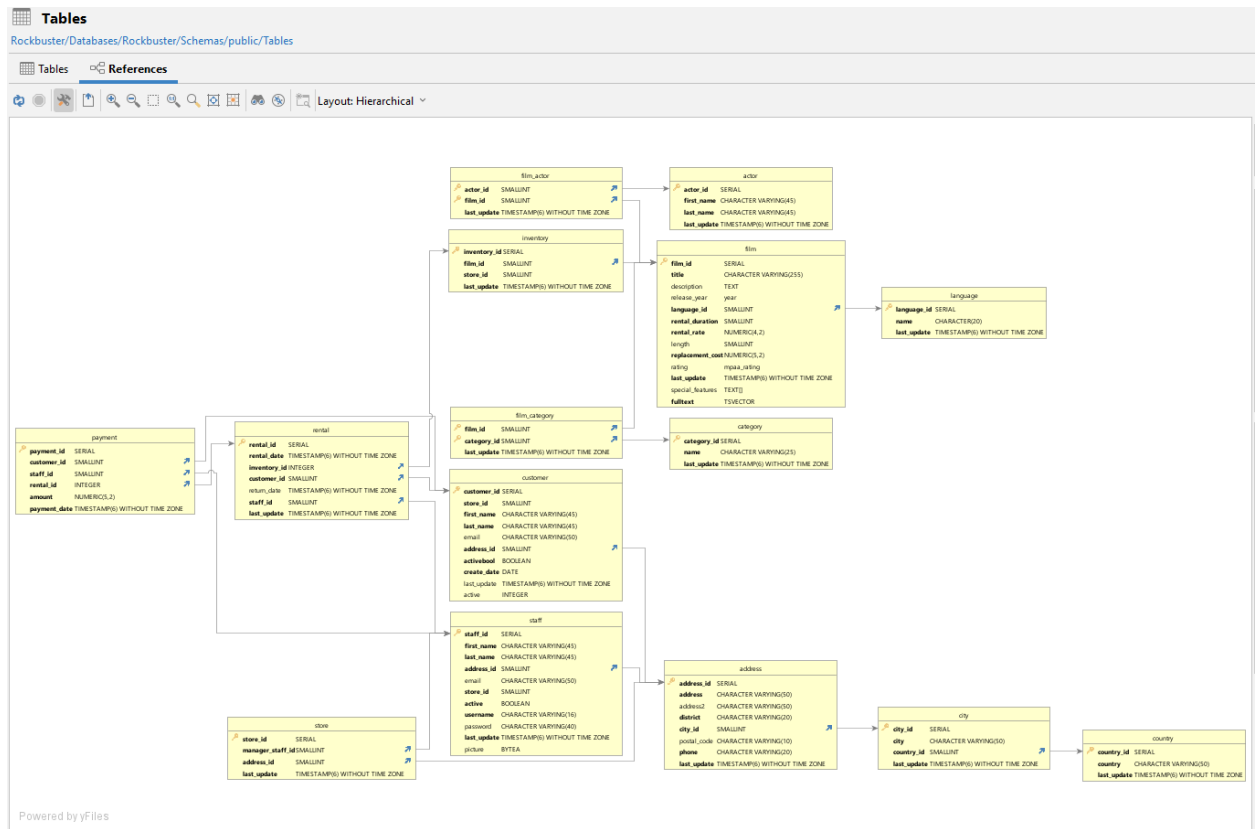


1. Answers 3.2



- The ERD has a snowflake schema. This ERD has centralized categories that are all connected by sub categories that relate and expand out into a snowflake like schema.

Fact Table

Rental

Column	Data Type	Description
Rental_id	SERIAL	Number assigned to rental
rental_date	TIMESTAMP(6) WITHOUT TIMEZONE	Date of rental
inventory_id	INTEGER	Number of items in table
customer_id	SMALLINT	Number assigned to customer
return_date	TIMESTAMP(6) WITHOUT TIMEZONE	Date movie was returned
staff_id	SMALLINT	Employee number
last_update	TIMESTAMP(6) WITHOUT	Date entry was last updated

	TIMEZONE	
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Dimension Tables

Payment

Column	Data Type	Description
payment_id	SERIAL	Number assigned to payment
customer_id	SMALLINT	Number assigned to customer
staff_id	SMALLINT	Number assigned to employee
rental_id	INTEGER	Number assigned to rental
amount	NUMERIC (5,2)	Amount paid
payment_date	TIMESTAMP(6) WITHOUT TIMEZONE	Date of payment

Store

Column	Data Type	Description
store_id	SERIAL	Number assigned to store
manager_staff_id	SMALLINT	Number assigned to store manager
address_id	SMALLINT	Number assigned to store address
last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date entry was last updated

Film_actor

Column	Data Type	Description
actor_id	SMALLINT	Number assigned to actor
film_id	SMALLINT	Number assigned to film
last_update	TIMESTAMP(6) WITHOUT	Date entry was last updated

	TIMEZONE	
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Inventory

Column	Data Type	Description
inventory_id	SERIAL	Number assigned to item
film_id	SMALLINT	Number assigned to film
store_id	SMALLINT	Number assigned to store
last_update	TIMESTAMP(6) WITHOUT	Date entry was last updated

Film_category

Column	Data Type	Description
film_id	SMALLINT	Number assigned to film
film_category	SMALLINT	Number assigned to genre/category
last_update	TIMESTAMP(6) WITHOUT	Date entry was last updated

Customer

Column	Data Type	Description
customer_id	SERIAL	Number assigned to customer
store_id	SMALLINT	Number assigned to store
first_name	CHARACTERVARYING(50)	First name of customer
last_name	CHARACTERVARYING(45)	Customer last name
email	CHARACTERVARYING(50)	Customer Email address
address_id	SMALLINT	Number assigned to customer's address
activebool	BOOLEAN	Customer's active status
create_date	DATE	Date entry was created
last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date entry was last updated

active	INTGER	Customer's active status
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Staff

Column	Data Type	Description
staff_id	SERIAL	Number assigned to employee
first_name	CHARACTERVARYING(45)	First name of employee
last_name	CHARACTERVARYING(45)	Last name of employee
address_id	SMALLINT	Number assigned to employee's address
email	CHARACTERVARYING(50)	Email address of employee
store_id	SMALLINT	Number assigned to store
active	BOOLEAN	Employee active status
username	CHARACTERVARYING(16)	Username of employee
password	CHARACTERVARYING(40)	Password of employee
last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date entry was last updated
picture	BYTEA	Picture of employee

Actor

Column	Data Type	Description
actor_id	SERIAL	Number assigned to actor
first_name	CHARACTERVARYING(45)	First name of actor
last_name	CHARACTERVARYING(45)	Last name of actor
last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date entry was last updated

Film

Column	Data Type	Description
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film_id	SERIAL	Number assigned to film
title	CHARACTERVARYING(45)	Title of film
description	TEXT	Description of film
release_year	YEAR	Release year of film
language_id	SMALLINT	Number assigned to film language
rental_duration	SMALLINT	Length of film rental
rental_rate	NUMERIC(4,2)	Price of film
length	SMALLINT	Length of film
replacement_cost	NUMERIC(5,2)	Cost of replace of film
rating	mpaa_rating	Film rating
last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date entry was last updated
special_features	TEXT []	Special features included with film
fulltext	TSVECTOR	Keywords associated with film

Category

Column	Data Type	Description
language_id	SERIAL	Number assigned to language
name	CHARACTERVARYING(20)	Name of language
last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date entry was last updated

Address

Column	Data Type	Description
address_id	SERIAL	Number assigned to address
address	CHARACTERVARYING(50)	Street address

address2	CHARACTERVARYING(50)	Supplementary street address
district	CHARACTERVARYING(20)	District
city_id	SMALLINT	Number assigned to City
postal_code	CHARACTERVARYING(10)	Postal code
phone	CHARACTERVARYING(20)	Phone number
last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date entry was last updated

Language

Column	Data Type	Description
language_id	SERIAL	Number assigned to language
name	CHARACTERVARYING(20)	Name of language
last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date entry was last updated

City

Column	Data Type	Description
city_id	SERIAL	Number assigned to city
city	CHARACTERVARYING(20)	Name of city
country_id	SMALLINT	Number assigned to country
last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date entry was last updated

Country

Column	Data Type	Description
country_id	SERIAL	Number assigned to country
country	CHARACTERVARYING(50)	Name of country

last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date entry was last updated
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4. I would need to query the actor table for their names, "film_actor table" and the film table for the rental rates for each film that the actor is in. For the languages of the movies to see the majority I would need to query the "language" table then the "film" table so we can see which language is associated with each film to get our answer.