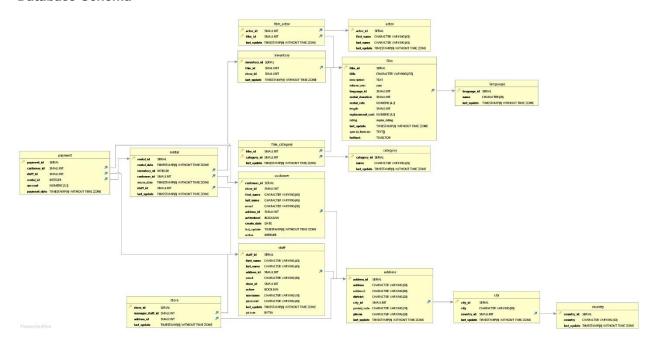
Databases & SQL for Analysts

3.2: Data Storage & Structure

Database Schema



1. Type of schema: Snowflake schema

2. Fact tables:

Table	Column	Data Types	Description
rental	rental_id	integer	Primary Key rental id number
	rental_date	timestamp without time zone	rental date & time
	inventory_id	integer	inventory id number
	customer_id	smallint	Foreign Key to public.customer customer id number
	return_date	timestamp without time zone	return date & time
	staff_id	smallint	Foreign Key to public.staff staff id number
	last_update	timestamp without time zone	last update date & time
payment	payment_id	integer	Primary Key

		payment id number
		Foreign Key to
customer_i	d smallint	public.customer
		customer id number
staff id	integer	Foreign Key to public.staff
Stan_iu	integer	staff id number
rental_id	integer	Foreign Key to public.rental
Tental_id	Integer	rental id number
amount	numeric	payment amount in USD
payment_d	ate timestamp withou	ut time zone payment date & time

3. Dimension tables:

Table	Column	Data Types	Description
	inventory_id	integer	Primary Key
			inventory id number
inventory	film_id	smallint	Foreign Key to public.film
Inventory			film id number
	store_id	smallint	store id number
	last_update	timestamp without time zone	last update date & time
	film_id	integer	Primary Key
			film id number
	title	character varying	film title
	description	text	film description
	release_year	year	film release year
film	language_id	smallint	Foreign Key to
			public.language
			language id number
	rental_duration	smallint	rental duration in days
	rental_rate	numeric	rental rate amount in USD
	length	smallint	film length in minutes
	replacement_cost	numeric	film replacement cost in USD

			film rating based on MPAA
	rating	mpaa_rating	rating sytem
	last_update	timestamp without time zone	last update date & time
	special_features	text[]	film special features
	fulltext	tsvector	related keywords
	language id	Interes	Primary Key
language	language_id	integer	language id number
laliguage	name	character	language name
	last_update	timestamp without time zone	last update date & time
			Primary Key with film_id
	actor_id	smallint	Foreign Key to public.actor
film_actor			actor id number
IIIII_actor	film id	- m - Himb	Foreign Key to public.film
	film_id	smallint	film id number
	last_update	timestamp without time zone	last update date & time
	actor_id	intogor	Primary Key
	actor_iu	integer	actor id number
actor	first_name	character varying	actor first name
	last_name	character varying	actor last name
	last_update	timestamp without time zone	last update date & time
	film_id	smallint	Primary Key with category_id
			Foreign Key to public.film
			category id number
film_category	category_id	smallint	Foreign Key to
			public.category
			category id number
	last_update	timestamp without time zone	last update date & time
	category_id	integer	Primary Key
category	category_iu	integer	category id number
category	name	character varying	category name
	last_update	timestamp without time zone	last update date & time
store	store_id	integer	Primary Key

			store id number
	manager_staff_id	smallint	Foreign Key to public.staff
			manager staff id number
	address_id	smallint	Foreign Key to public.address
	address_id	Silidillit	store address id number
	last_update	timestamp without time zone	last update date & time
	customer_id	integer	Primary Key
			customer id number
	store_id	smallint	store id number
	first_name	character varying	customer first name
	last_name	character varying	customer last name
	email	character varying	customer email
customer	address_id	smallint	Foreign Key to public.address
	addic35_id	Smannt	address id number
	activebool	boolean	account active status
	create_date	date	date the customer account
			was created
	last_update	timestamp without time zone	last update date & time
	active	integer	customer active status
	staff_id	integer	Primary Key
			staff id number
	first_name	character varying	staff first name
	last_name	character varying	staff last name
	address_id	smallint	Foreign Key to public.address
			staff address id number
staff	email	character varying	staff email
	store_id	smallint	store id number
	active	boolean	account active status
	username	character varying	staff account username
	password	character varying	staff account password
	last_update	timestamp without time zone	last update date & time
	picture	bytea	staff account profile picture

	address_id	integer	Primary Key address id number
	address	character varying	first address
	address2	character varying	second address
address	district	character varying	district name
address	city_id	smallint	Foreign Key to public.city
	City_id		city id number
	postal_code	character varying	postal code
	phone	character varying	phone number
	last_update	timestamp without time zone	last update date & time
	city_id	integer	Primary Key
			city id number
city	city	character varying	city name
City	country_id	smallint	Foreign Key to public.country
			country id number
	last_update	timestamp without time zone	last update date & time
	country_id	integer	Primary Key
country			country id number
Country	country	character varying	country name
	last_update	timestamp without time zone	last update date & time

Business Questions:

- 1. Which actors brought Rockbuster the most revenue? actor, film_actor, film, payment, rental, inventory.
- 2. What language are the majority of movies in the collection? film, language.