

The background of the slide features several overlapping, slightly blurred film strips. The strips are dark with white sprocket holes and some orange markings. They are arranged in a way that suggests motion and depth, with some strips appearing more in focus than others. The overall color palette is soft, with a mix of white, grey, and muted orange tones.

Data Dictionary

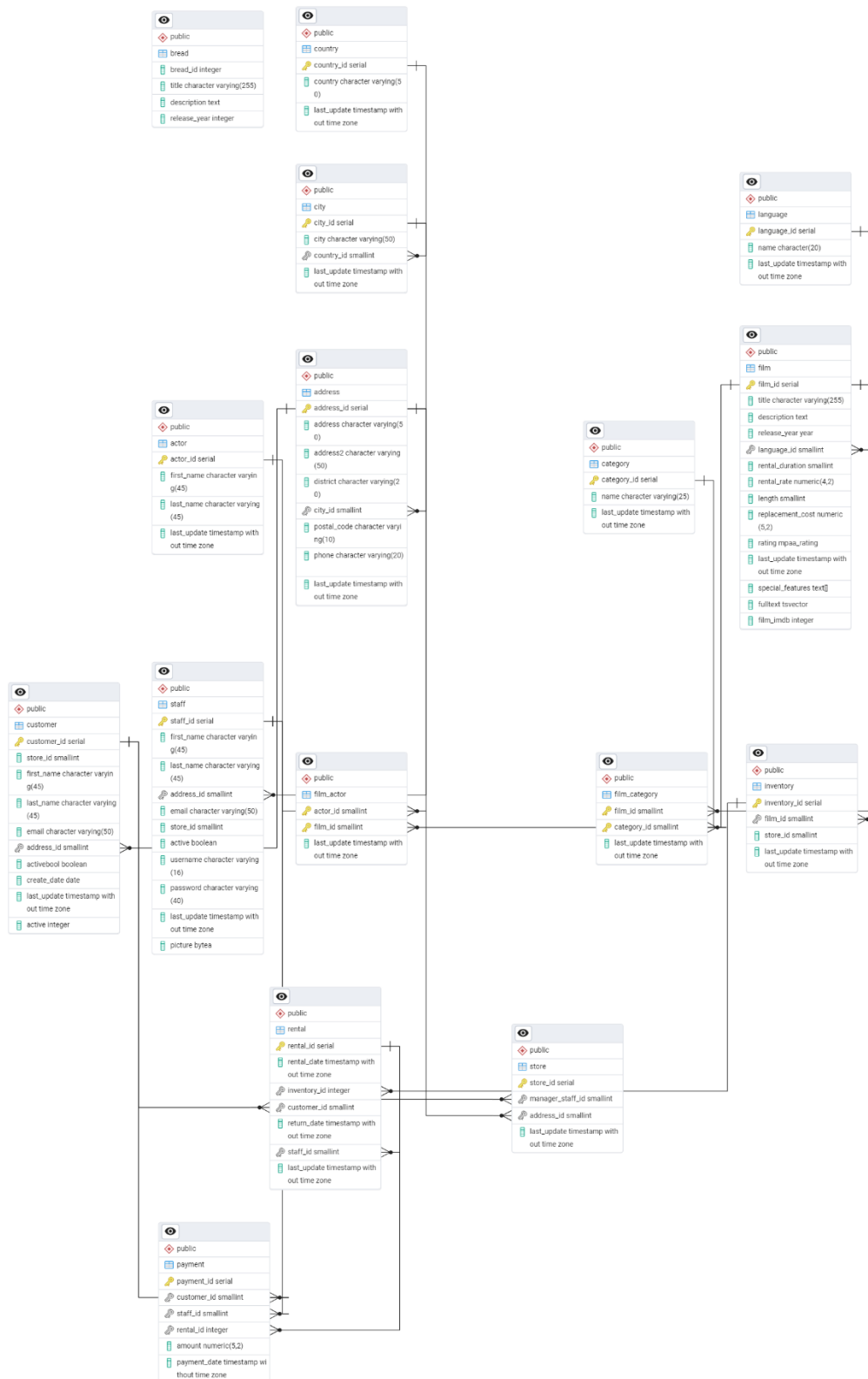
Rockbuster SQL

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Presenting SQL Results

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Entity Relationship Diagram – ERD






Fact Tables





PaymentTable

Column	Key	Data Type	Description
Payment_id	 PK	Serial	Unique identifier for payment
Customer_id	 FK	Int	Id of the customer making the payment
Staff_id	 FK	Int	Id of the staff processing the payment
Rental_id	 FK	Int	Id of the rental associate with the payment
amount		numeric	Amount of payment made
Payment_date		Time stamp	When the payment was made




Link to:

Table	Join	Description
customer	payment.customer_id = customer.customer_id	 Foreign Key
staff	payment.staff_id = staff.staff_id	 Foreign Key
rental	payment.rental_id = rental.rental_id	 Foreign Key


RentalTable

Column	Key	Data Type	Description
Rental_id	 PK	Serial	Unique id for each rental transaction
Rental_date		Timestamp	Date and time when the rental was made
Inventory_id	 FK	Int	Id of the inventory item (specific film copy) rented
Customer_id	 FK	Int	Id of the customer who rented the film
Return_date		Timestamp	Date and time when the rental was returned
Last_update		Timestamp	Last time this rental record was updated
Staff_id	 FK	Int	Id of the staff member who processed the rental or return.

Link to:




Table	Join	Description
inventory	rental.inventory_id = inventory.inventory_id	 Foreign Key
customer	rental.customer_id = customer.customer_id	 Foreign Key
staff	rental.staff_id = staff.staff_id	 Foreign Key

Links from:



Table	Join	Description
payment	rental.rental_id = payment.rental_id	 Primary Key

Dimension Tables



CustomerTable

Column	Key	Data Type	Description
customer_id	 PK	serial	Unique ID for the customer
store_id	 FK	int	Store associated with the customer
first_name		varchar	Customer's first name
last_name		varchar	Customer's last name
email		varchar	Customer's email address
address_id	 FK	int	Address ID for customer
activebool		bool	Whether the customer is active (true/false)
create_date		date	When the customer was created
last_update		timestamp	Last time the record was updated
active		int	Alternative active status (integer form)




Link to:

Table	Join	Description
address	customer.address_id = address.address_id	 Foreign Key
store	customer.store_id = store.store_id	 Foreign Key



Links from:

Table	Join	Description
payment	customer.customer_id = payment.customer_id	 Primary Key
rental	customer.customer_id = rental.customer_id	 Primary Key



Staff Table

Column	Key	Data Type	Description
staff_id	 PK	serial	Unique ID for staff
first_name		varchar	Staff's first name
last_name		varchar	Staff's last name
address_id	 FK	int	Address ID for staff
email		varchar	Staff's email address
store_id	 FK	int	Store where staff works
active		bool	Whether staff member is active
username		varchar	Staff's system username
password		varchar	Staff's password
last_update		timestamp	Last time record was updated
picture		bytea	Staff profile picture (binary data)



Link to:

Table	Join	Description
address	staff.address_id = address.address_id	 Foreign Key
store	staff.store_id = store.store_id	 Foreign Key


Links from:

Table	Join	Description
payment	staff.staff_id = payment.staff_id	 Primary Key
rental	staff.staff_id = rental.staff_id	 Primary Key




Store Table

Column	Key	Data Type	Description
store_id	 PK	serial	Unique ID for store
manager_staff_id		int	Staff member managing the store
address_id	 FK	int	Address of the store
last_update		timestamp	Last time record was updated



Link to:

Table	Join	Description
address	store.address_id = address.address_id	 Foreign Key


Links from:

Table	Join	Description
customer	store.store_id = customer.store_id	 Primary Key
staff	store.store_id = staff.store_id	 Primary Key
inventory	store.store_id = inventory.store_id	 Primary Key




AddressTable

Column	Key	Data Type	Description
address_id	 PK	serial	Unique ID for address
address		varchar	Street address
address2		varchar	Additional address information
district		varchar	District/region name
city_id	 FK	int	City ID
postal_code		varchar	Postal/ZIP code
phone		varchar	Phone number
last_update		timestamp	Last time record was updated



Link to:

Table	Join	Description
city	address.city_id = city.city_id	 Foreign Key

Links from:

Table	Join	Description
customer	address.address_id = customer.address_id	 Primary Key
staff	address.address_id = staff.address_id	 Primary Key
store	address.address_id = store.address_id	 Primary Key


CityTable

Column	Key	Data Type	Description
city_id	 PK	serial	Unique ID for city
city		varchar	City name
country_id	 FK	int2	Country ID associated with the city
last_update		timestamp	Last time record was updated

Link to:

Table	Join	Description
country	city.country_id = country.country_id	 Foreign Key


Links from:

Table	Join	Description
address	city.city_id = address.city_id	 Primary Key


CountryTable

Column	Key	Data Type	Description
country_id	 PK	serial	Unique ID for country
country		varchar	Country name
last_update		timestamp	Last time record was updated


Link from:

Table	Join	Description
city	country.country_id = city.country_id	 Primary Key


ActorTable


Column	Key	Data Type	Description
actor_id	 PK	serial	Unique ID for actor
first_name		varchar	Actor's first name
last_name		varchar	Actor's last name
last_update		timestamp	Last time record was updated

Link from:


Table	Join	Description
film_actor	actor.actor_id = film_actor.actor_id	 Primary Key

FilmTable




Column	Key	Data Type	Description
film_id	 PK	serial	Unique ID for film
title		varchar	Film title
description		text	Description or synopsis

release_year		year	Release year
language_id	 FK	int	Language of the film
rental_duration		int	Days for rental
rental_rate		numeric	Rental price
length		int	Film duration (minutes)
replacement_cost		numeric	Replacement cost if lost
rating		mpaa_rating	Film rating (e.g., PG-13)
last_update		timestamp	Last time record was updated
special_features		.text	Extra features (text list)
fulltext		tsvector	Full text search support


Link to:

Table	Join	Description
language	film.language_id = language.language_id	 Foreign Key

Link from:

Table	Join	Description
inventory	Film.film_id = inventory.film_id	 Primary Key
film_actor	film.film_id = film_actor.film_id	 Primary Key
Film_category	film.film_id = film_category.film_id	 Primary Key


CategoryTable

Column	Key	Data Type	Description
category_id	 PK	serial	Unique ID for category
name		varchar	Category name (e.g., Comedy)
last_update		timestamp	Last time record was updated


Link from:

Table	Join	Description
film_category	film_category._id = category.category_id	 Foreign Key




LanguageTable

Column	Key	Data Type	Description
language_id	 PK	serial	Unique ID for language
name		bpchar	Language name (e.g., English)
last_update		timestamp	Last time record was updated



Link from:

Table	Join	Description
film	language.language_id = film.language_id	 Primary Key


InventoryTable

Column	Key	Data Type	Description
inventory_id	 PK	serial	Unique ID for language
film_id	 FK	serial	Unique ID for film
store_id	 FK	serial	Unique ID for store
last_update		timestamp	Last time record was updated

Link to:





Table	Join	Description
film	film.film_id = inventory.film_id	 Foreign Key
store	store.store_id = inventory_store_id	 Foreign Key

Link from:



Table	Join	Description
rental	rental.inventory_id = inventory.inventory_id	 Primary Key

Bridge Tables





Film CategoryTable

Column	Key	Data Type	Description
film_id	 PK  FK	serial	Unique ID for film (composite primary key with category)
category_id	 PK  FK	serial	Unique ID for category (composite primary key with film)
last_update		timestamp	Last time record was updated



Link to:

Table	Join	Description
category	film_category.category_id = category.category_id	 Foreign Key
film	film_category.film_id = film.film_id	 Foreign Key

Film ActorTable

Column	Key	Data Type	Description
actor_id	 PK  FK	serial	Unique ID for actor (composite primary key with film)
film_id	 PK  FK	serial	Unique ID for film (composite primary key with actor)
last_update		timestamp	Last time record was updated

Link to:

Table	Join	Description
film	film_actor.film_id = film.film_id	 Foreign Key
actor	film_actor.actor_id = actor.actor_id	 Foreign Key