



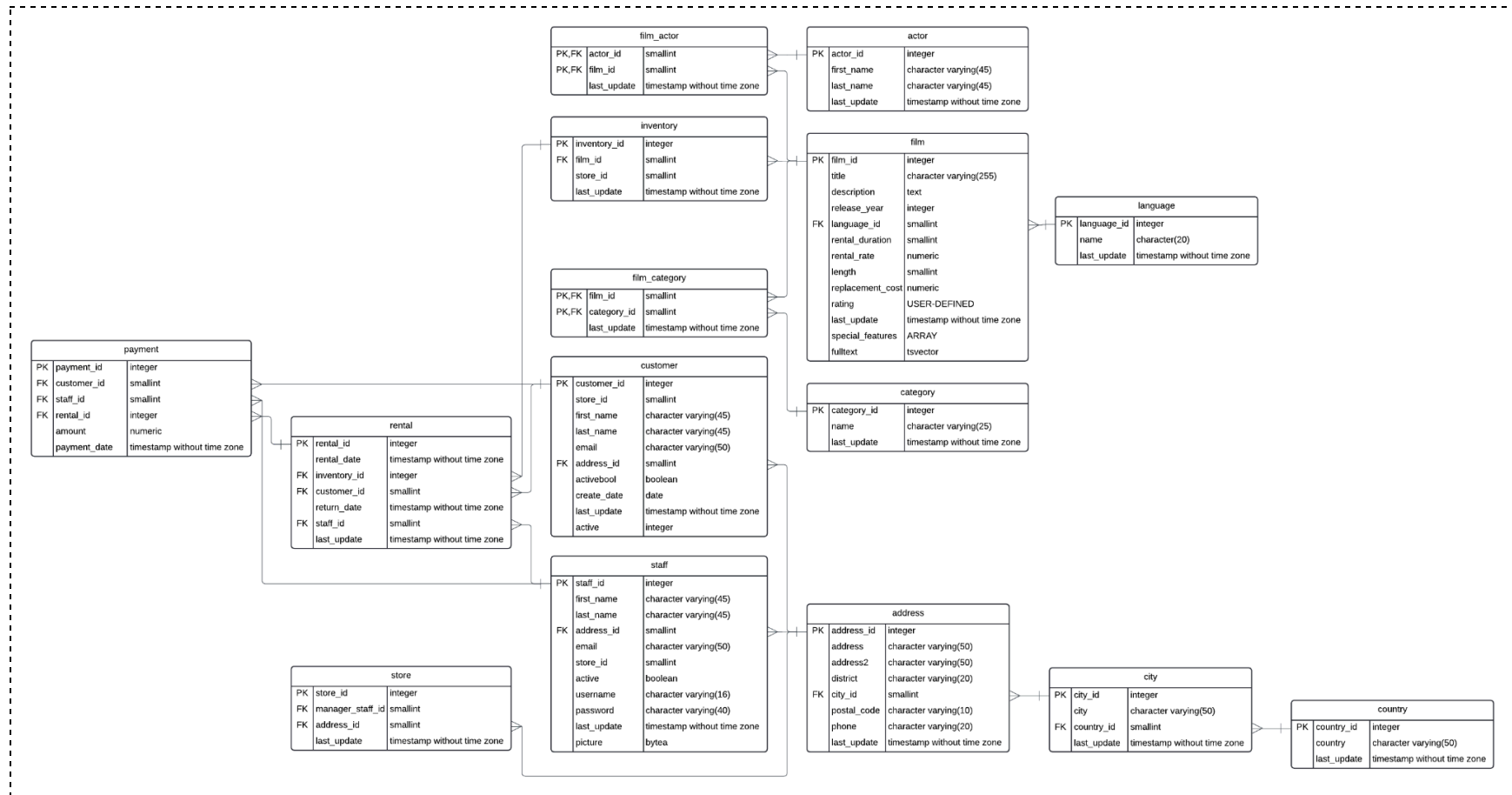
Rockbuster

A Data Dictionary by **Noortje Offreins**

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1. MAPPING THE RELATIONAL DATABASE ROCKBUSTER (or: Entity Relationship Diagram)











2. FACT TABLE

2.1 Table: inventory



Cross-reference table mapping inventory, movies and stores.

Key	Name	Data Type	Description / Attributes
	inventory_id	SERIAL	<ul style="list-style-type: none">- Unique identification number for the inventory- Primary Key
	film_id	SMALLINT	<ul style="list-style-type: none">- Unique identification number for a movie- Foreign Key
	store_id	SMALLINT	<ul style="list-style-type: none">- Unique identification number for a Rockbuster store
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	<ul style="list-style-type: none">- Date and time the record was last updated

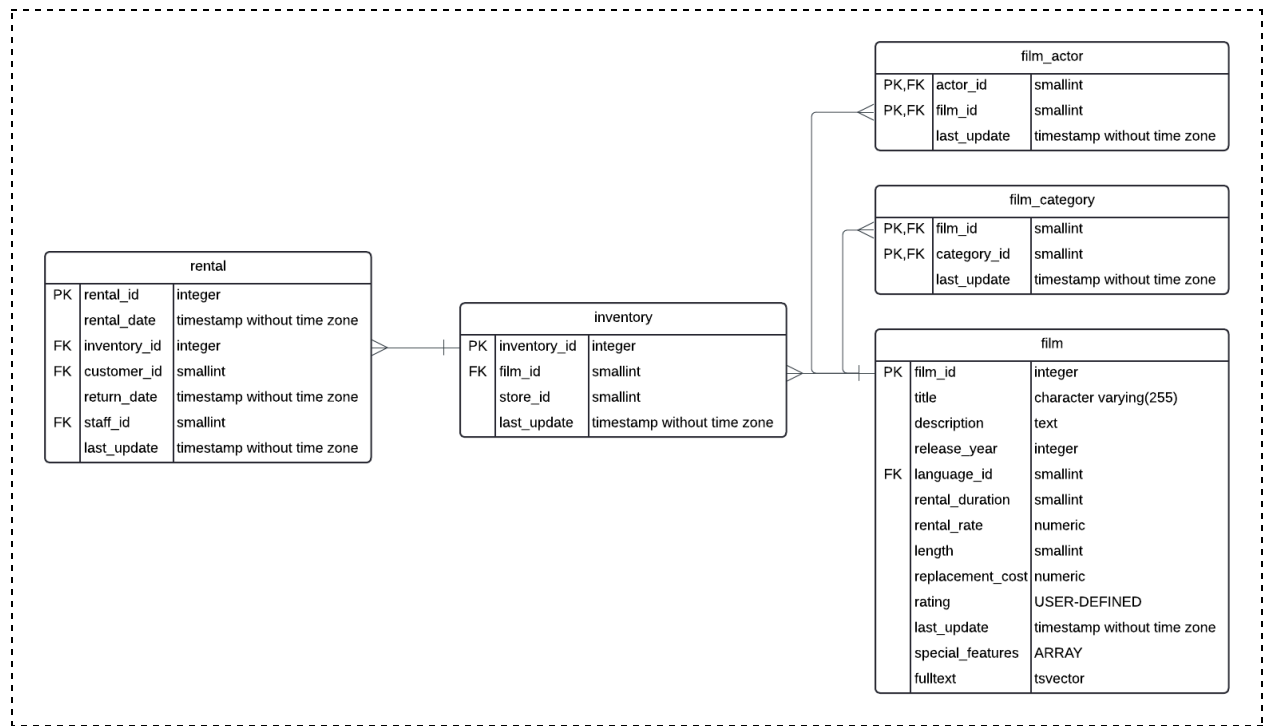
Links to

Table	Join	Title / Name / Description
film	inventory.film_id = film.film_id	Foreign Key  inventory.film_id is referencing to Primary Key  film.film_id
film_actor	inventory.film_id = film_actor.film_id	Foreign Key  inventory.film_id is referencing to Composite Key   film_actor.film_id
film_category	inventory.film_id = film_category.film_id	Foreign Key  inventory.film_id is referencing to Composite Key   film_category.film_id

Linked from

Table	Join	Title / Name / Description
rental	rental.inventory_id = inventory.inventory_id	Primary Key  inventory.inventory_id is referenced in rental tables Foreign Key  rental.inventory_id


Partial ERD





3. DIMENSION TABLES

3.1 Table: actor

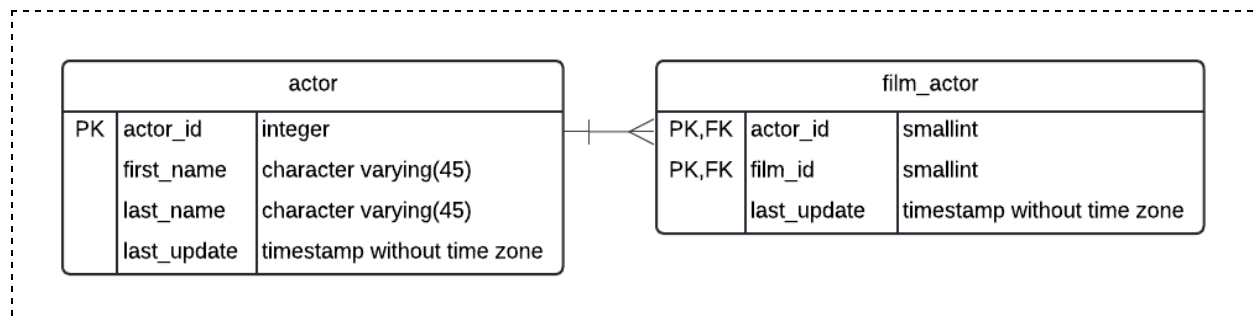
Stores information about the actors of the movie.

Key	Column Name	Data Type	Description
	actor_id	SERIAL	- Unique identification number for the actor of the movie - Primary Key
	first_name	VARCHAR (45)	- First name of actor
	last_name	VARCHAR (45)	- Surnames of actors
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	- Date and time the record was last updated

Linked from



Table	Join	Title / Name / Description
film_actor	film_actor.actor_id = actor.actor_id	Primary Key  actor.actor_id is referenced in film_actor table by Composite Key  film_actor.actor_id

Partial ERD





3.2 Table: address





Stores address information from customers

Key	Column Name	Data Type	Description
	address_id	SERIAL	- Unique identification number for an address - Primary Key
	address	VARCHAR (50)	- First street address line
	address 2	VARCHAR(50)	- Second street address line
	district	VARCHAR(20)	- Name of the district
	city_id	SMALLINT	- City stored as unique identifier - Foreign Key
	postal_code	VARCHAR (10)	- Postal code for the street address
	phone	VARCHAR (20)	- Telephone number
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	- Date and time the record was last updated

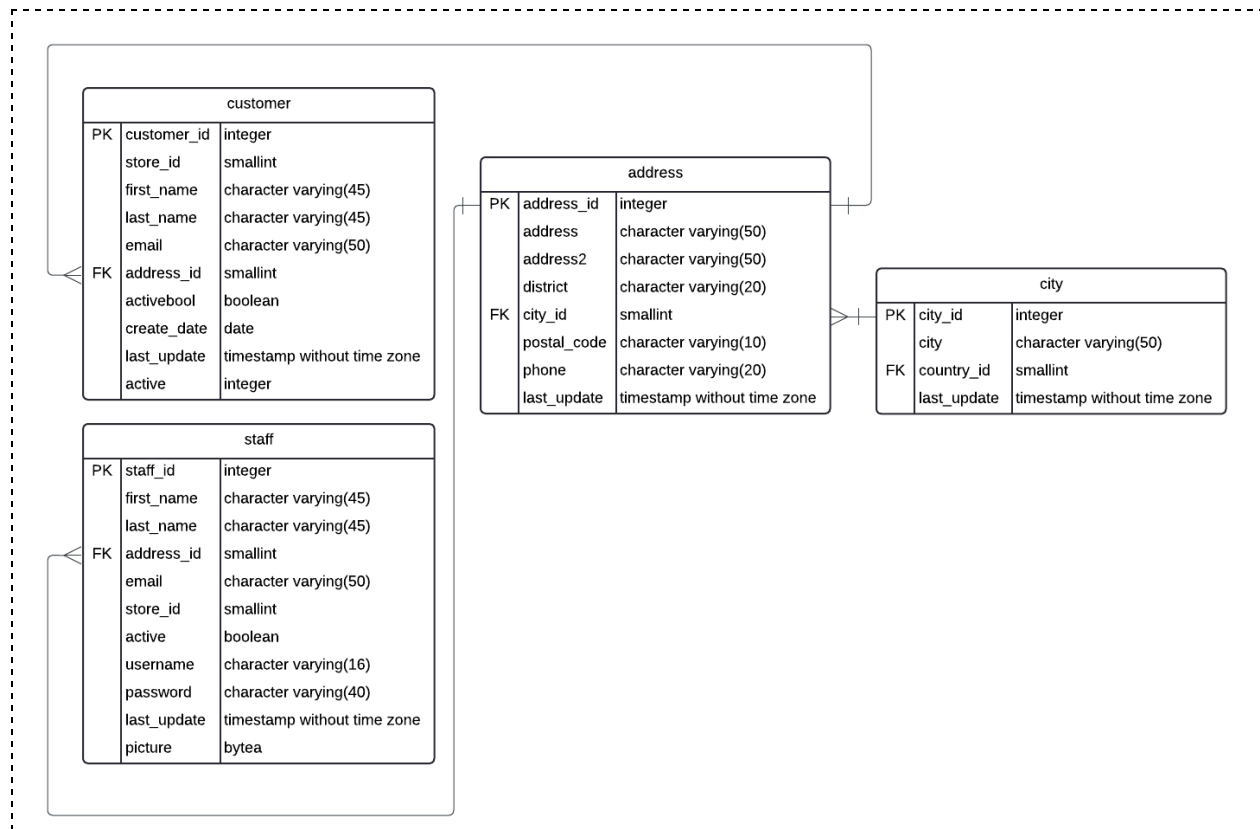
Links to

Table	Join	Title / Name / Description
city	address.city_id = city.city_id	Foreign Key  address.city_id is referencing to Primary Key  city.city_id

Linked from


Table	Join	Title / Name / Description
customer	customer.address_id = address.address_id	Primary Key  address.address_id is referenced in customer table by Foreign Key  customer.address_id
staff	staff.address_id = address.address_id	Primary Key  address.address_id is referenced in staff table by Foreign Key  staff.address_id

Partial ERD






3.3 Table: category

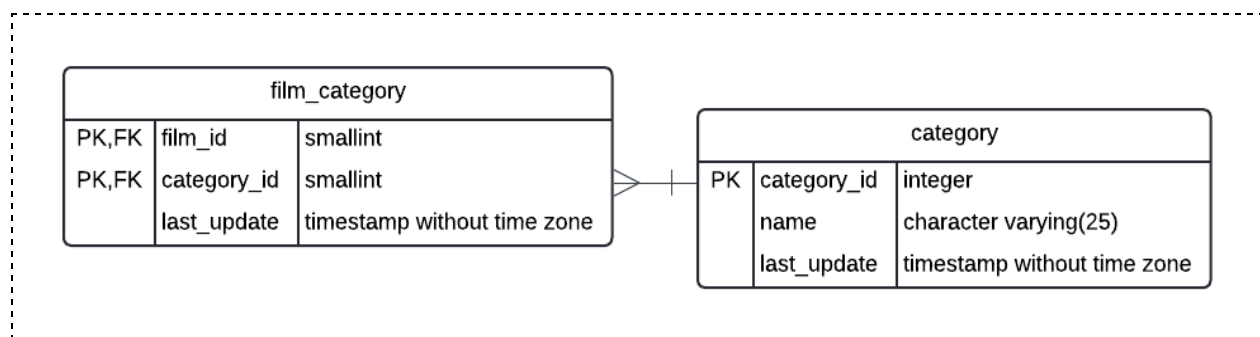
Stores movie genre information

Key	Column Name	Data Type	Description
	category_id	SERIAL	- Unique identification number for the category of the movie genre - Primary Key
	name	VARCHAR (25)	- Name of the movie genre
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	- Date and time the record was last updated

Linked from



Table	Join	Title / Name / Description
film_category	film_category.category_id = category.category_id	Primary Key  category.category_id is referenced in film_category table by Composite Key   film_category.category_id

Partial ERD




3.4 Table: city



Stores information about the city

Key	Column Name	Data Type	Description
	city_id	SERIAL	<ul style="list-style-type: none">- Unique identification number for the city of the customers address- Primary Key
	city	VARCHAR (50)	<ul style="list-style-type: none">- Name of the city of the customer address
	country_id	SMALLINT	<ul style="list-style-type: none">- Unique identification number for the country of the customers address- Foreign Key
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	<ul style="list-style-type: none">- Date and time the record was last updated

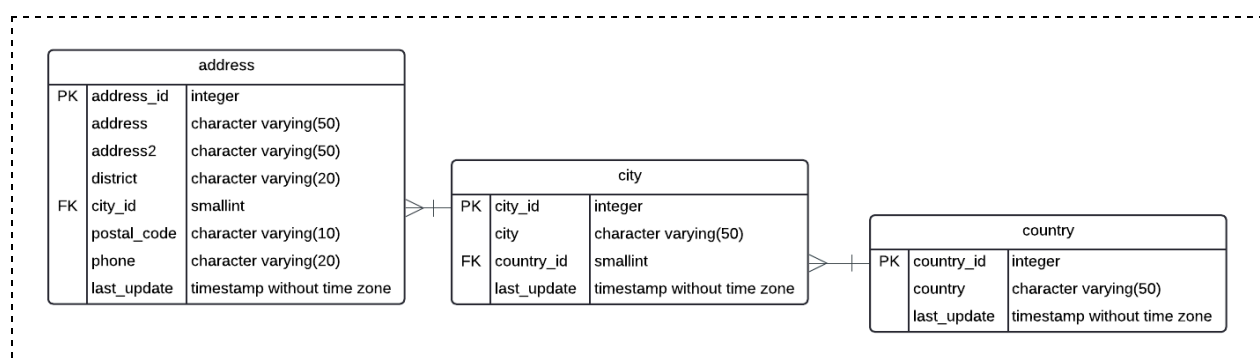
Links to

Table	Join	Title / Name / Description
country	city.country_id = country.country_id	Foreign Key  city.country_id is referencing to Primary Key  country.country_id

Linked from


Table	Join	Title / Name / Description
address	address.city_id = city.city_id	Primary Key  city.city_id is referenced in address table by Foreign Key  address.city_id

Partial ERD





3.5 Table: country

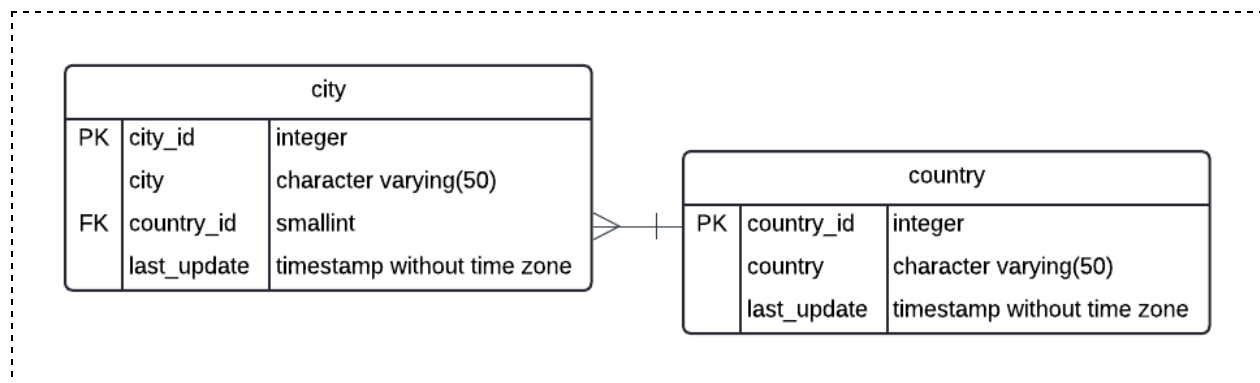
Stores country information

Key	Column Name	Data Type	Description
	country_id	SERIAL	- Unique identification number for the country of the customers address - Primary Key
	country	VARCHAR (50)	- Name of the country of the customer address
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	- Date and time the record was last updated

Linked from



Table	Join	Title / Name / Description
city	city.country_id = country.country_id	Primary Key  country.country_id is referenced in city table by Foreign Key  city.country_id

Partial ERD





3.6 Table: customer





Stores customer information

Key	Column Name	Data Type	Description
	customer_id	SERIAL	- Unique identification number for the customer record - Primary Key.
	store_id	SMALLINT	- Unique identification number for a Rockbuster store
	first_name	VARCHAR (45)	- First name of customer
	last_name	VARCHAR(45)	- Surnames of customer
	email	VARCHAR (50)	- Text field recording an email address
	address_id	SMALLINT	- Unique identification number for an address
	activebool	BOOLEAN	- Customer is active: true / false
	create_date	DATE	- Date when customer record was created
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	- Date and time the record was last updated
	active	INTEGER	- 1/0 if customer is active

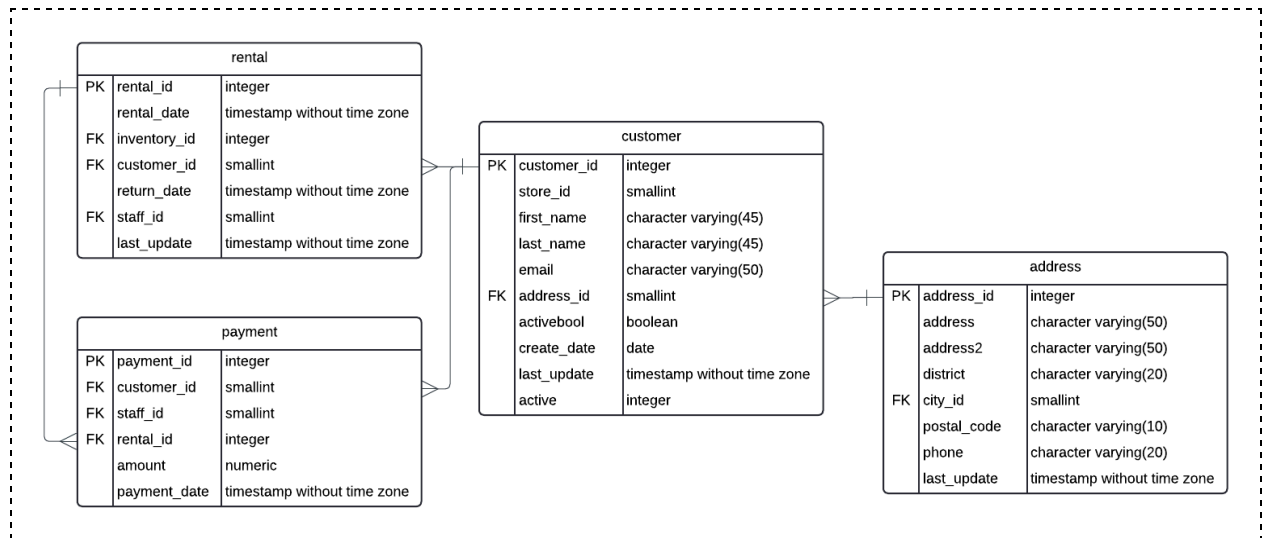
Links to

Table	Join	Title / Name / Description
address	customer.address_id = address.address_id	Foreign Key  customer.address_id is referencing to Primary Key  address.address_id

Linked from



Table	Join	Title / Name / Description
rental	rental.customer_id = customer.customer_id	Primary Key  customer.customer_id is referenced in rental table by Foreign Key  rental.customer_id
payment	payment.customer_id = customer.customer_id	Primary Key  customer.customer_id is referenced in payment table by Foreign Key  payment.customer_id

Partial ERD





3.7 Table: film






Stores movie information

Key	Column Name	Data Type	Description
	film_id	SMALLINT	- Unique identification number for a movie - Primary Key
	title	VARCHAR (45)	- Name of the title of the movie
	description	VARCHAR(45)	- Short text describing what the movie is about
	release_year	year	- The year when the movie was released
	language_id	SMALLINT	- Unique identification number for the movie language
	rental_duration	SMALLINT	- Duration of the rental written in numbers
	rental_rate	NUMERIC (4,2)	- Rating of the movie according to the Motion Picture Association film rating system
	length	SMALLINT	- Duration of the movie in minutes
	replacement_cost	NUMERIC (5,2)	- Costs to replace the movie
	rating	USER DEFINED	- Movie rating assigned by customers
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	- Date and time the record was last updated
	special_features	TEXT []	- Text field with features the movie offers
	fulltext	TSVECTOR	- Keywords for the movie optimized for text search

Links to

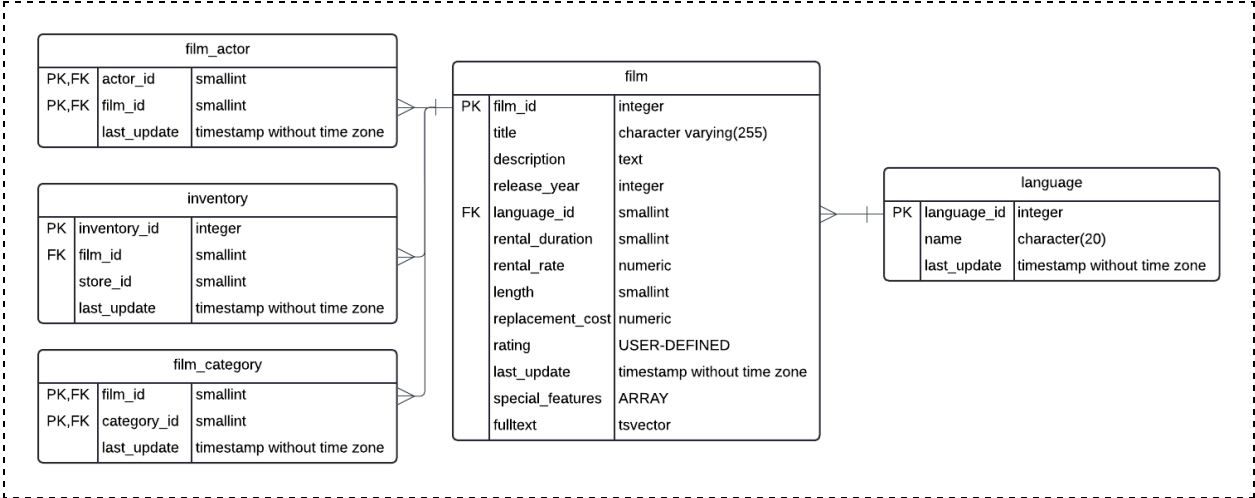
Table	Join	Title / Name / Description
language	film.language_id = language.language_id	Foreign Key  film.language_id is referencing to Primary Key  language.language_id

Linked from

Table	Join	Title / Name / Description
film_actor	film_actor.film_id = film.film_id	Primary Key  film.film_id is referenced in film_actor table by Composite Key  film_actor.film_id
inventory	inventory.film_id = film.film_id	Primary Key  film.film_id is referenced in inventory table by Composite Key  inventory.film_id
film_category	film_category.film_id = film.film_id	Primary Key  film.film_id is referenced in



		film_category table by Composite Key  film_category.film_id
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Partial ERD





3.8 Table: film_actor

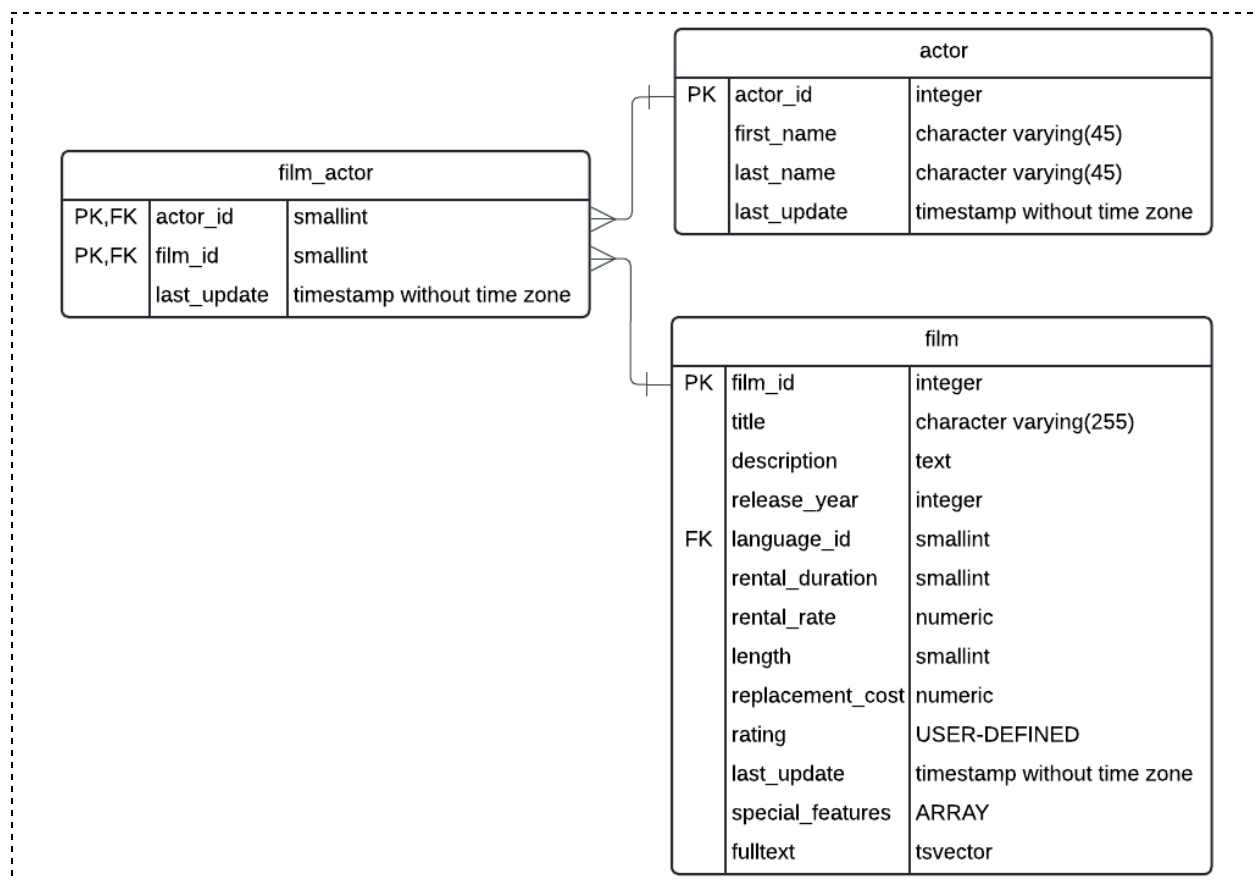
Stores information about an actor in a movie that is part of the inventory

Key	Column Name	Data Type	Description
	actor_id	SMALLINT	- Unique identification number for an actor - Composite Key
	film_id	SMALLINT	- Unique identification number for a movie - Composite Key
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	- Date and time the record was last updated

Links to



Table	Join	Title / Name / Description
actor	film_actor.actor_id = actor.actor_id	Composite Key  film_actor.actor_id is referencing to Primary Key  actor.actor_id

Partial ERD







3.9 Table: film_category

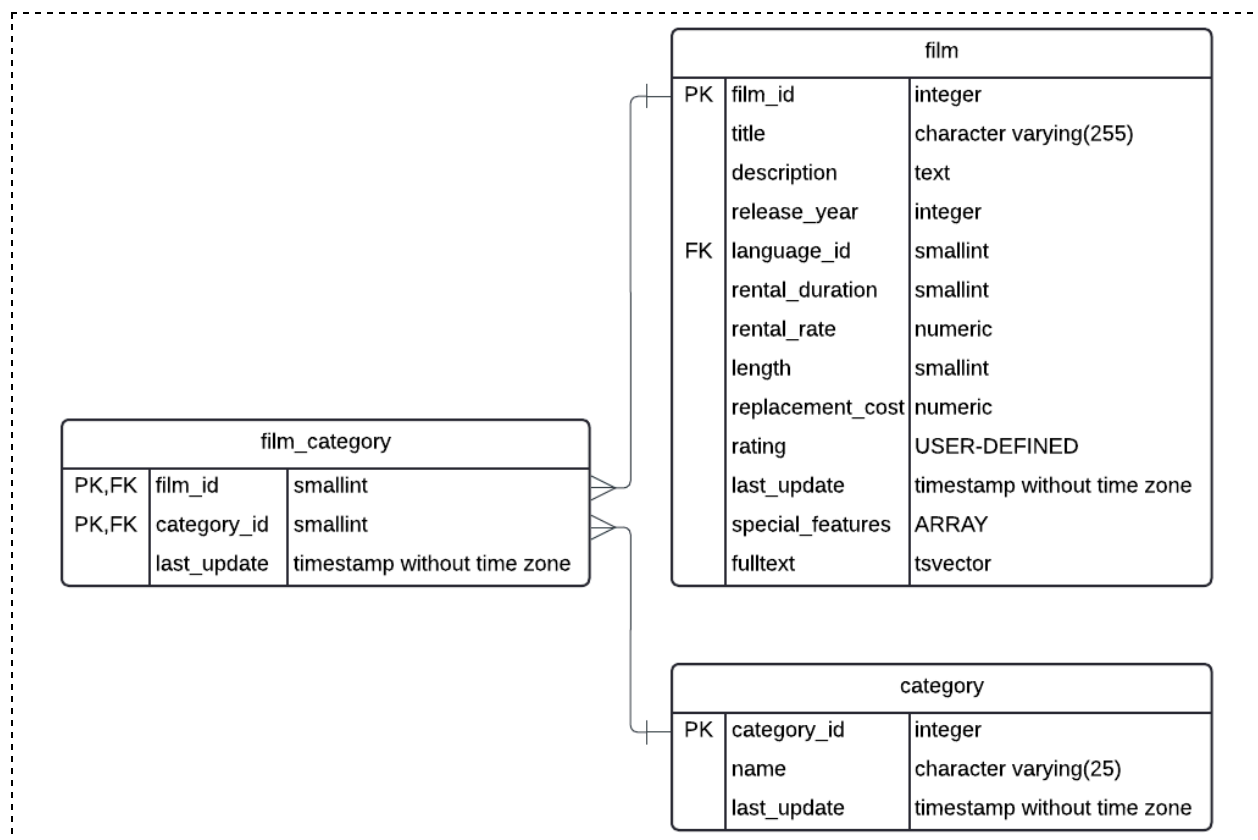
Table that combines key to film and category table

Key	Column Name	Data Type	Description
	film_id	SMALLINT	<ul style="list-style-type: none">- Unique identification number for a movie- Composite Key
	category_id	SERIAL	<ul style="list-style-type: none">- Unique identification number for the category of the movie genre- Composite Key
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	<ul style="list-style-type: none">- Date and time the record was last updated

Links to

Table	Join	Title / Name / Description
film	Film_category.film_id = film.film_id	Composite Key  film_category.film_id is referencing to Primary Key  film.film_id
category	film_category.category_id = category.category_id	Composite Key  film_category.film_id is referencing to Primary Key  category.category_id

Partial ERD



3.10 Table: language

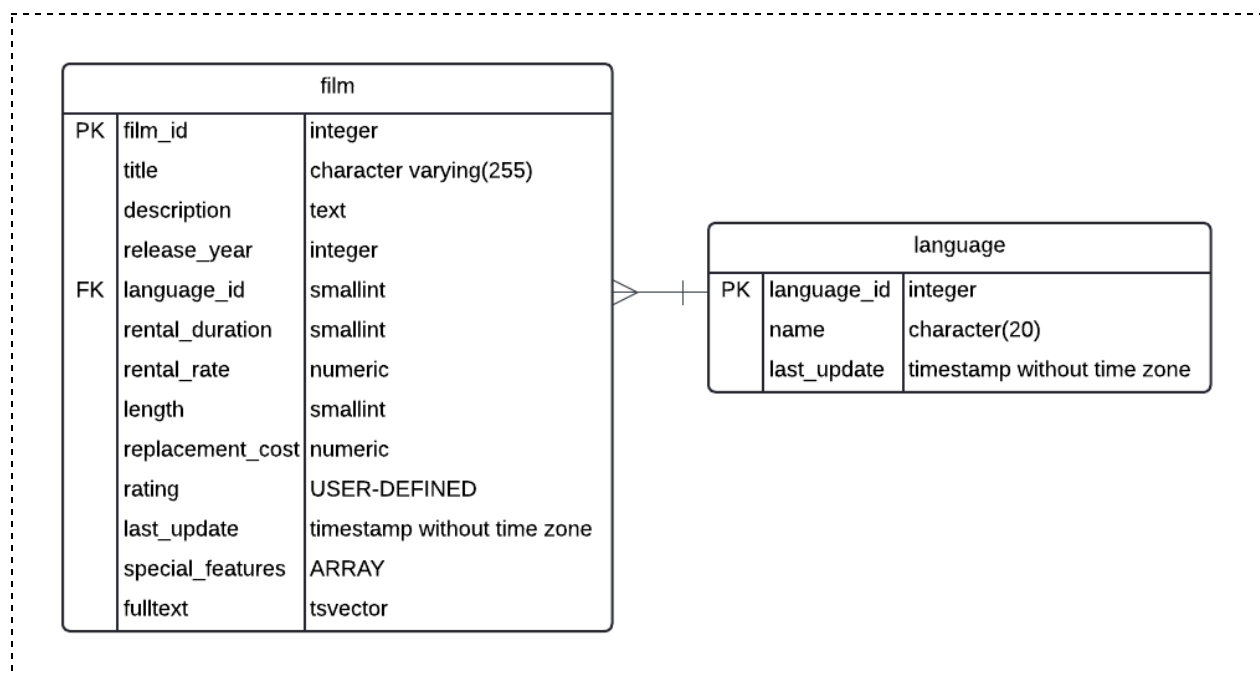
Stores information about the language of the movie

Key	Column Name	Data Type	Description
🔑	language_id	SERIAL	- Unique identification number for the movie language - Primary Key
	name	CHARACTER (20)	- Name of the language
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	- Date and time the record was last updated

Linked from





Table	Join	Title / Name / Description
film	film.language_id = language.language_id	Primary Key 🔑 language.language_id is referenced in film table by Primary Key 🔑 film_language_id

Partial ERD









3.11 Table: payment

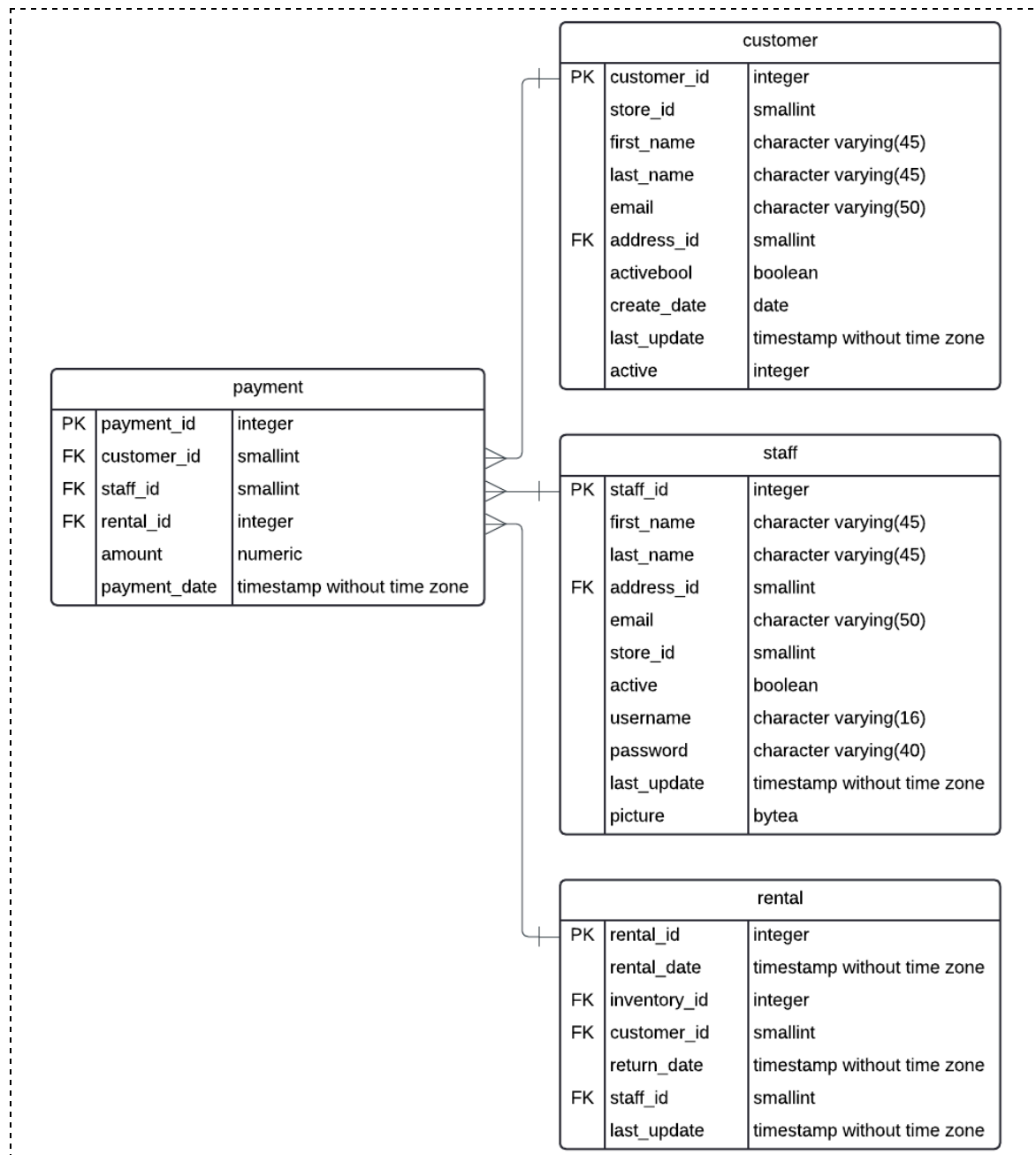
Stores information about customer payments upon rental

Key	Column Name	Data Type	Description
	payment_id	INTEGER	- Unique identification number for the movie language - Primary Key
	customer_id	SMALLINT	- Unique identification number for the customer record - Foreign key
	staff_id	SMALLINT	- Unique identification number of a Rockbuster employee - Foreign key
	rental_id	INTEGER	- Unique identification number of a rental record - Foreign key
	amount	NUMERIC (5,2)	- The amount of the payment for the rental
	payment_date	TIMESTAMP (6) WITHOUT ZONE TIME	- The date when the payment was made

Links to





Table	Join	Title / Name / Description
customer	payment.customer_id = customer.customer_id	Foreign Key  payment.customer_id is referencing to Primary Key  customer.customer_id
staff	payment.staff_id = staff.staff_id	Foreign Key  payment.staff_id is referencing to Primary Key  staff.staff_id
rental	payment.rental_id = rental.rental_id	Foreign Key  payment.rental_id is referencing to Primary Key  rental.rental_id

Partial ERD









3.12 Table: rental



Stores information about a movie rental

Key	Column Name	Data Type	Description
	rental_id	SERIAL	- Unique identification number of a rental record - Primary Key
	rental_date	TIMESTAMP (6) WITHOUT ZONE TIME	- Date when the rental started
	inventory_id	INTEGER	- Unique identification number for the inventory
	customer_id	SMALLINT	- Unique identification number for the customer record
	return_date	TIMESTAMP (6) WITHOUT ZONE TIME	- Date when the rental ended
	staff_id	SMALLINT	- Unique identification number of a Rockbuster employee
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	- Date and time the record was last updated

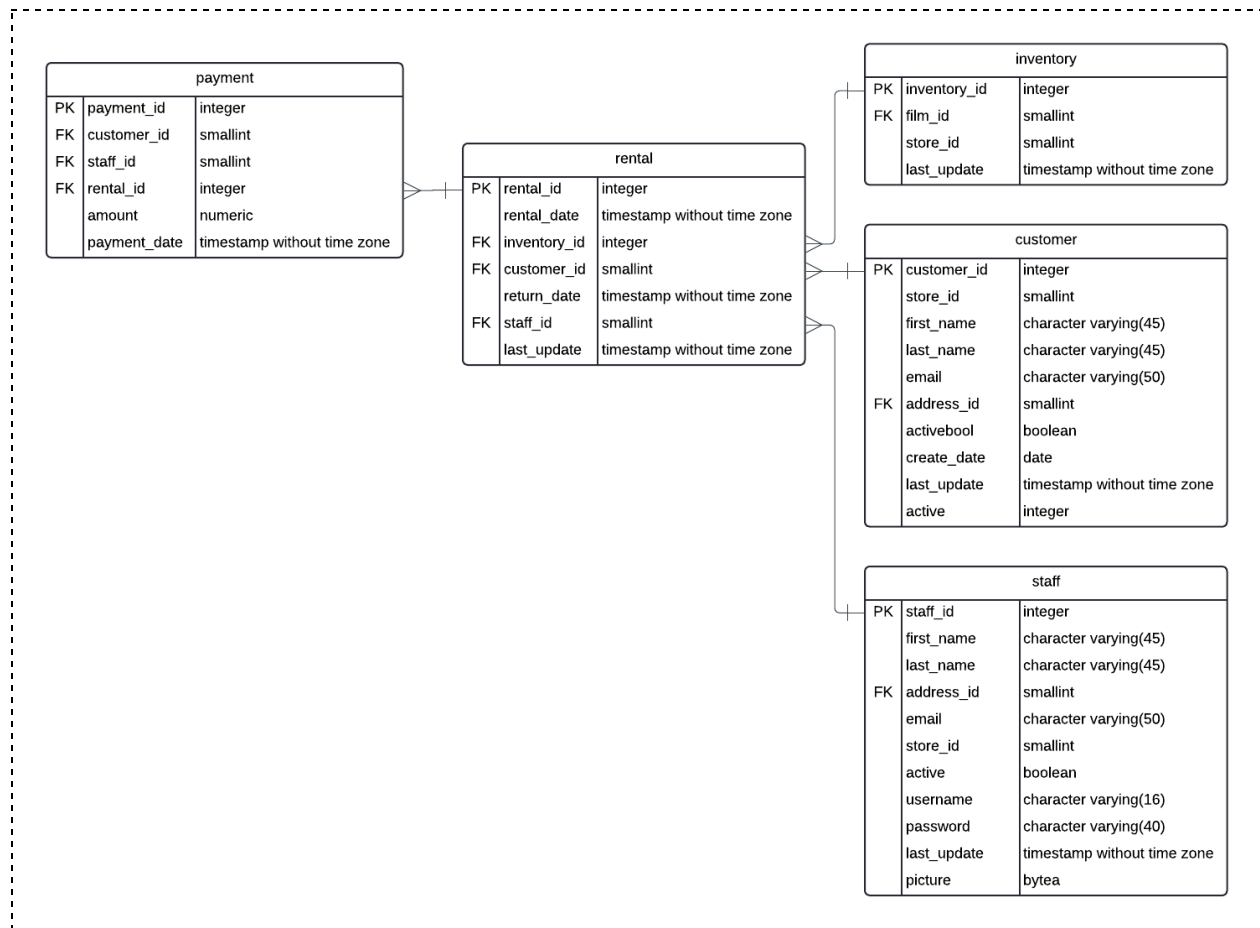
Links to

Table	Join	Title / Name / Description
inventory	rental.inventory_id = inventory.inventory_id	Foreign Key  rental.inventory_id is referencing to Primary Key  inventory.inventory_id
customer	rental.customer_id = customer.customer_id	Foreign Key  rental.customer_id is referencing to Primary Key  customer.customer_id
staff	rental.staff_id = staff.staff_id	Foreign Key  rental.staff_id is referencing to Primary Key  staff.staff_id

Linked from



Table	Join	Title / Name / Description
payment	payment.rental_id = rental.rental_id	Primary Key  rental.rental_id is referenced in payment table by Primary Key  payment.rental_id

Partial ERD





3.13 Table: staff





Stores information about Rockbuster staff

Key	Column Name	Data Type	Description
	staff_id	SERIAL	- Unique identification number of a Rockbuster employee - Primary Key
	first_name	VARCHAR(45)	- First name of Rockbuster employee
	last_name	VARCHAR (45)	- Surname of Rockbuster employee
	address_id	SMALLINT	- Unique identification number of address - Foreign Key
	email	VARCHAR (50)	- Text field recording an email address
	store_id	SMALLINT	- Unique identification number for a Rockbuster store
	active	BOOLEAN	- Employee is active: true / false
	username	VARCHAR (16)	- Text field storing username of the employee
	password	VARCHAR (40)	- Text field storing password of the employee
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	- Date and time the record was last updated
	picture	BYTEA	- Storing the employee picture

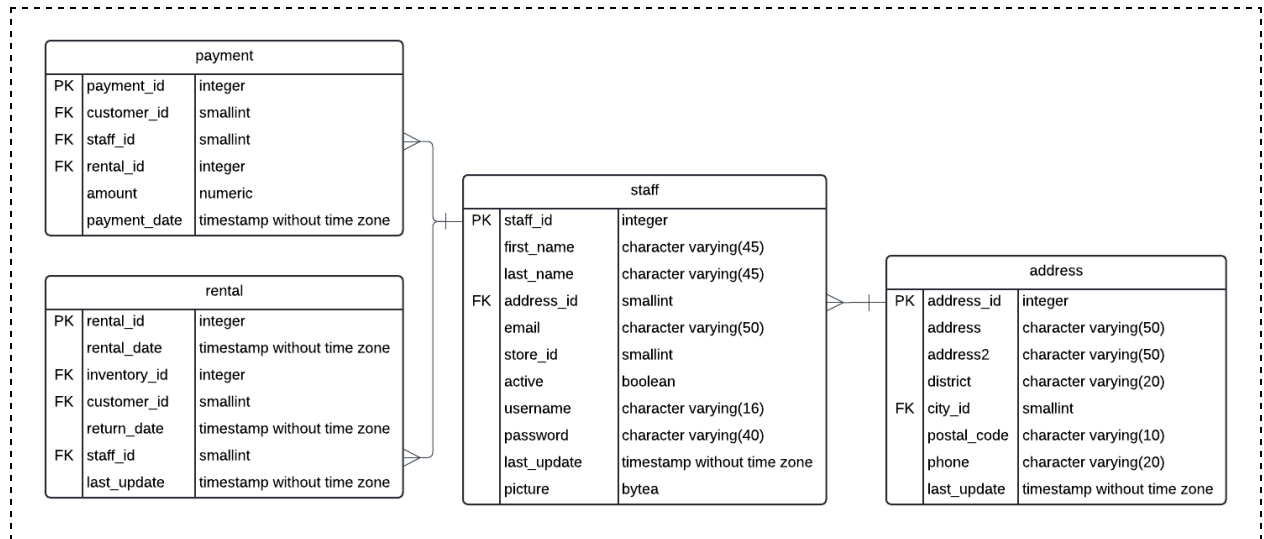
Links to

Table	Join	Title / Name / Description
address	staff.address_id = address.address_id	Foreign Key  staff.address_id is referencing to Primary Key  address.address_id

Linked from




Table	Join	Title / Name / Description
payment	payment.staff_id = staff.staff_id	Primary Key  staff.staff_id is referenced in payment table by Primary Key  payment.staff_id
rental	rental.staff_id = staff.staff_id	Primary Key  staff.staff_id is referenced in payment table by Primary Key  rental.staff_id

Partial ERD





3.14 Table: store

Stores information about a Rockbuster store

Key	Column Name	Data Type	Description
	store_id	SERIAL	- Unique identification number for a Rockbuster store - Primary Key
	manager_staff_id	SMALLINT	- Unique identification number of a Rockbuster store manager - Foreign Key
	address_id	SMALLINT	- Unique identification number for an address - Foreign Key
	last_update	TIMESTAMP (6) WITHOUT ZONE TIME	- Date and time the record was last updated

Links to

Table	Join	Title / Name / Description
address	store.address_id = address.address_id	Foreign Key  store.address_id is referencing to Primary Key  address.address_id

Partial ERD

