Rockbuster
Data Dictionary
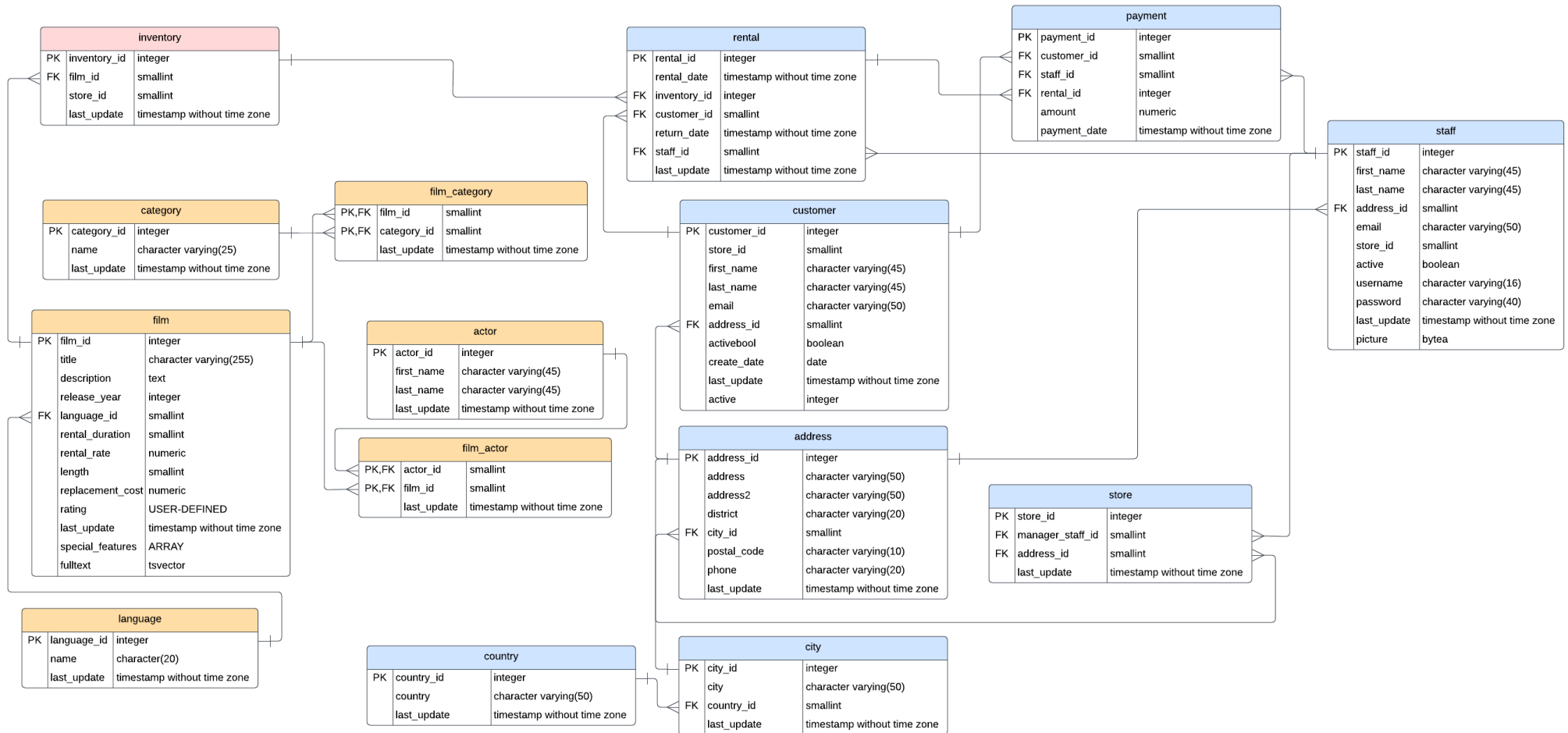
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1.Entity Relationship Diagram (ERD)

inventory
PK	inventory_id	integer
FK	film_id	smallint
	store_id	smallint
	last_update	timestamp without time zone

rental
PK	rental_id	integer
	rental_date	timestamp without time zone
FK	inventory_id	integer
FK	customer_id	smallint
	return_date	timestamp without time zone
FK	staff_id	smallint
	last_update	timestamp without time zone

payment
PK	payment_id	integer
FK	customer_id	smallint
FK	staff_id	smallint
FK	rental_id	integer
	amount	numeric
	payment_date	timestamp without time zone

staff
PK	staff_id	integer
	first_name	character varying(45)
	last_name	character varying(45)
FK	address_id	smallint
	email	character varying(50)
	store_id	smallint
	active	boolean
	username	character varying(16)
	password	character varying(40)
	last_update	timestamp without time zone
	picture	bytea

category
PK	category_id	integer
	name	character varying(25)
	last_update	timestamp without time zone

film_category
PK,FK	film_id	smallint
PK,FK	category_id	smallint
	last_update	timestamp without time zone

customer
PK	customer_id	integer
	store_id	smallint
	first_name	character varying(45)
	last_name	character varying(45)
	email	character varying(50)
FK	address_id	smallint
	activebool	boolean
	create_date	date
	last_update	timestamp without time zone
	active	integer

film
PK	film_id	integer
	title	character varying(255)
	description	text
	release_year	integer
FK	language_id	smallint
	rental_duration	smallint
	rental_rate	numeric
	length	smallint
	replacement_cost	numeric
	rating	USER-DEFINED
	last_update	timestamp without time zone
	special_features	ARRAY
	fulltext	tsvector

actor
PK	actor_id	integer
	first_name	character varying(45)
	last_name	character varying(45)
	last_update	timestamp without time zone

film_actor
PK,FK	actor_id	smallint
PK,FK	film_id	smallint
	last_update	timestamp without time zone

address
PK	address_id	integer
	address	character varying(50)
	address2	character varying(50)
	district	character varying(20)
FK	city_id	smallint
	postal_code	character varying(10)
	phone	character varying(20)
	last_update	timestamp without time zone

store
PK	store_id	integer
FK	manager_staff_id	smallint
FK	address_id	smallint
	last_update	timestamp without time zone

language
PK	language_id	integer
	name	character(20)
	last_update	timestamp without time zone

country
PK	country_id	integer
	country	character varying(50)
	last_update	timestamp without time zone

city
PK	city_id	integer
	city	character varying(50)
FK	country_id	smallint
	last_update	timestamp without time zone

2.Fact Tables

2.1 Payment Table

Unique Key	Column Name	Data Type	Brief Description
PK	payment_id	Integer	Unique payment identifier
FK	customer_id	smallint	Unique customer identifier
FK	staff_id	smallint	Unique staff identifier
FK	rental_id	Integer	Unique rental identifier
	amount	Numeric	Amount paid in numbers
	payment_date	Timestamp without time zone	Date and time record of when the payment was made.

Links to:

Table	Description
Customer	Foreign key reference to the customer table.
Staff	Foreign key reference to the staff table.
Rental	Foreign key reference to the rental table.

2.2 Rental Table

Unique Key	Column Name	Data Type	Brief Description
PK	rental_id	Integer	Unique rental identifier
	rental_date	Timestamp without time zone	Date of when the rental was made.
FK	inventory_id	Integer	Unique inventory identifier
FK	customer_id	smallint	Unique customer identifier
	return_date	Timestamp without time zone	Date of when the rented film was returned.
FK	staff_id	smallint	Unique staff identifier
	last_update	Timestamp without time zone	Date and time of the rental record was last updated.

Links to:

Table	Description
Inventory	Foreign key reference to the inventory table.
Customer	Foreign key reference to the customer table.
Staff	Foreign key reference to the staff table.

Linked from:

Table	Description
Payment	Foreign key reference to the payment table.

3.Dimension Tables

3.1 Customer Table

Unique Key	Column Name	Data Type	Brief Description
PK	customer_id	Integer	Unique customer identifier
	store_id	smallint	Unique identifier of store
	first_name	character varying(45)	First name of the customer
	last_name	character varying(45)	Last name of the customer
	email	character varying(50)	email address of the customer
FK	address_id	smallint	Unique address identifier
	activebool	boolean	categorize customers as true "active" and false "not active."
	create_date	date	Record of the date the customer subscribed.
	last_update	Timestamp without time zone	Date and time of the last time the customer was active.
	active	Integer	code of the customer active use (1) for active and (0) for not active.

Links to:

Table	Description
Address	Foreign key reference to the address table.

Linked from:

Table	Description
Payment	Foreign key reference to the payment table.
Rental	Foreign key reference to the rental table.

3.2 Address Table

Unique Key	Column Name	Data Type	Brief Description
PK	address_id	Integer	Unique address identifier
	address	character varying(50)	Primary address.
	address2	character varying(50)	Additional address (optional)
	district	character varying(50)	District Name
	city_id	smallint	Unique city identifier
FK	postal_code	character varying(10)	Postal Code
	phone	character varying(20)	Phone number
	last_update	Timestamp without time zone	Date and time of the last time the records were updated.

Links to:

Table	Description
City	Foreign key reference to the city table.

Linked from:

Table	Description
Customer	Foreign key reference to the customer table.
Staff	Foreign key reference to the staff table.
Store	Foreign key reference to the store table.

3.3 City Table

Unique Key	Column Name	Data Type	Brief Description
PK	city_id	Integer	Unique city identifier
	city	character varying(50)	name of the city
FK	country_id	smallint	Unique country identifier
	last_update	Timestamp without time zone	Date and time of the last time the records were updated.

Links to:

Table	Description
Country	Foreign key reference to the county table.

Linked from:

Table	Description
address	Foreign key reference to the address table.

3.4 Country Table

Unique Key	Column Name	Data Type	Brief Description
PK	country_id	Integer	Unique country identifier
	country	character varying(50)	name of the country
FK	last_update	Timestamp without time zone	Date and time of the last time the records were updated.

Linked from:

Table	Description
City	Foreign key reference to the city table.

3.5 Store Table

Unique Key	Column Name	Data Type	Brief Description
PK	store_id	Integer	Unique store identifier
FK	manager_staff_id	smallint	Unique staff identifier
FK	address_id	smallint	Unique address identifier
	last update	Timestamp without time zone	Date and time of the last time the records were updated.

Links to:

Table	Description
Address	Foreign key reference to the address table.
Staff	Foreign key reference to the staff table.

3.6 Inventory Table

Unique Key	Column Name	Data Type	Brief Description
PK	inventory_id	Integer	Unique inventory identifier
FK	film_id	smallint	Unique film identifier
	store_id	smallint	Unique store identifier
	last update	Timestamp without time zone	Date and time of the last time the records were updated.

Links to:

Table	Description
Film	Foreign key reference to the film table.

Linked from:

Table	Description
Rental	Foreign key reference to the rental table.

3.7 Staff Table

Unique Key	Column Name	Data Type	Brief Description
PK	staff_id	Integer	Unique staff identifier
	first_name	character varying(45)	staff first name
	last_name	character varying(45)	staff last name
FK	address_id	smallint	Unique address identifier
	email	character varying(50)	staff email address
	store_id	smallint	Unique store identifier
	active	boolean	Categorize staff as true "active" and false "not active."
	username	character varying(16)	Username of the staff account
	password	character varying(40)	Password of the staff account
	last update	Timestamp without time zone	Date and time of the last time the records were updated.
	picture	bytea	staff's account profile picture.

Links to:

Table	Description
Address	Foreign key reference to the address table.

Linked from:

Table	Description
Rental	Foreign key reference to the rental table.
Payment	Foreign key reference to the payment table.
Store	Foreign key reference to the store table.

3.8 Film Table

Unique Key	Column Name	Data Type	Brief Description
PK	film_id	Integer	Unique film identifier
	title	character varying(255)	Film name
	description	text	Film description (only in text)
	release_year	Integer	The year the film was released
FK	language_id	smallint	Unique language identifier
	rental_duration	smallint	Number of days the film was rented.
	rental_rate	numeric	The film rate (out of 5)
	length	smallint	Film length in min.
	replacement_cost	numeric	Cost of film replacement
	rating	USER-DEFINED	Age restrictions (e.g., pg-13)
	last update	Timestamp without time zone	Date and time of the last time the records were updated.
	special_features	ARRAY	Videos related to the film (e.g., trailers)
	fulltext	tsvector	A string of text into tokens that are used for searching.

Links to:

Table	Description
Language	Foreign key reference to the language table.

Linked from:

Table	Description
Inventory	Foreign key reference to the inventory table.
Film Category	Foreign key reference to the film_category table.
Film Actor	Foreign key reference to the film_actor table.

3.9 Actor Table

Unique Key	Column Name	Data Type	Brief Description
PK	actor_id	Integer	Unique language identifier
	first_name	character varying(45)	Actor's first name
	last_name	character varying(45)	Actor's last name
	last update	Timestamp without time zone	Date and time of the last time the records were updated.

Linked from:

Table	Description
Film Actor	Foreign key reference to the film_actor table.

3.10 Film_Actor Table

Unique Key	Column Name	Data Type	Brief Description
PK, FK	actor_id	smallint	Unique actor identifier
PK, FK	film_id	smallint	Unique film identifier
	last update	Timestamp without time zone	Date and time of the last time the records were updated.

Links to:

Table	Description
Actor	Foreign key reference to the actor table.
Film	Foreign key reference to the film table.

3.11 Language Table

Unique Key	Column Name	Data Type	Brief Description
PK	language_id	integer	Unique language identifier
	name	character(20)	film's language name.
	last update	Timestamp without time zone	Date and time of the last time the records were updated.

Linked from:

Table	Description
Film	Foreign key reference to the film table.

3.12 Category Table

Unique Key	Column Name	Data Type	Brief Description
PK	category_id	integer	Unique category identifier
	name	character varying(25)	film's genre.
	last update	Timestamp without time zone	Date and time of the last time the records were updated.

Linked from:

Table	Description
Film Category	Foreign key reference to the film_category table.

3.13 Film_Category Table

Unique Key	Column Name	Data Type	Brief Description
PK, FK	film_id	smallint	Unique film identifier
PK, FK	category_id	smallint	Unique category identifier
	last update	Timestamp without time zone	Date and time of the last time the records were updated.

Links to:

Table	Description
Film	Foreign key reference to the film table.
Category	Foreign key reference to the category table.