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ERD

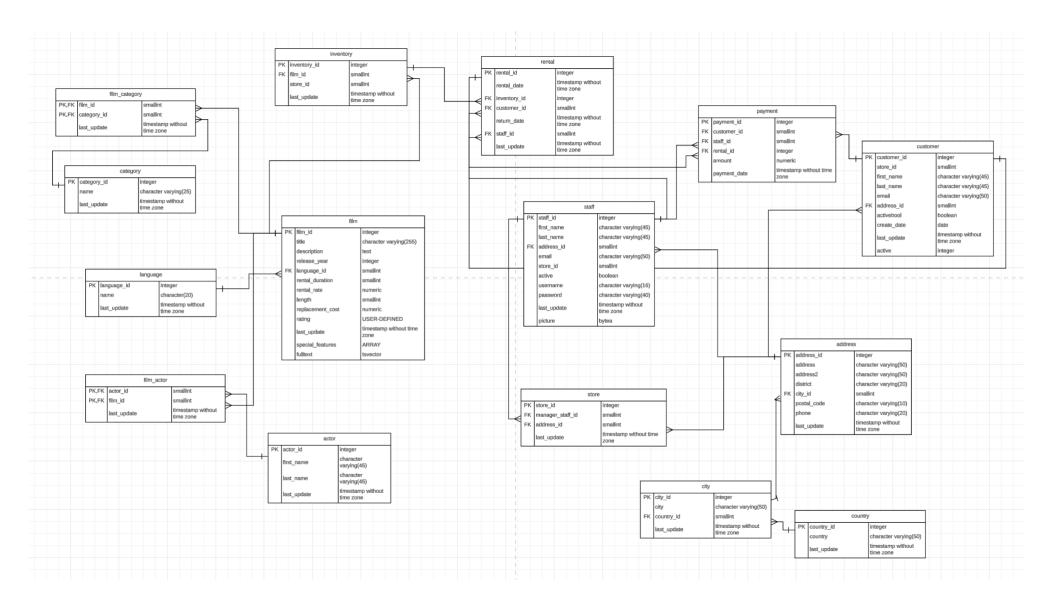
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1. Fact Tables

1.1 Fact Table: Rental

Column Name	Data Type	Description
rental_id	Integer	Primary key that uniquely identifies each rental.
rental_date	Timestamp	The date and time the rental occurred.
inventory_id	Integer	Foreign key referencing the Inventory table.
customer_id	Integer	Foreign key referencing the Customer table.
return_date	Timestamp	The date and time the rental was returned.
staff_id	Integer	Foreign key referencing the Staff table.
last_update	Timestamp	Timestamp for when the record was last updated.

Columns Linked To: Inventory (inventory_id), Customer (customer_id), Staff (staff_id).

Unique Key: rental_id

1.2 Fact Table: Payment

Column Name	Data Type	Description
payment_id	Integer	Primary key that uniquely identifies each payment.
customer_id	Integer	Foreign key referencing the Customer table.
staff_id	Integer	Foreign key referencing the Staff table.
rental_id	Integer	Foreign key referencing the Rental table.
amount	Decimal	The amount of the payment.
payment_date	Timestamp	The date and time the payment was made.

Columns Linked To: Customer (customer_id), Staff (staff_id), Rental (rental_id). Unique Key: payment_id

2. Dimension Tables

2.1 Dimension Table: Customer

Column Name	Data Type	Description
customer_id	Integer	Primary key that uniquely identifies each customer.
first_name	Varchar(45)	Customer's first name.
last_name	Varchar(45)	Customer's last name.
email	Varchar(50)	Customer's email address.
address_id	Integer	Foreign key referencing the Address table.
active	Boolean	Indicates if the customer is currently active.
create_date	Date	The date the customer record was created.
last_update	Timestamp	Timestamp for when the record was last updated.

Columns Linked To: Address (address_id).

Unique Key: customer_id

2.2 Dimension Table: Film

Column Name	Data Type	Description
film_id	Integer	Primary key that uniquely identifies each film.
title	Varchar(100)	The title of the film.
description	Text	A brief description of the film.
release_year	Integer	The release year of the film.
language_id	Integer	Foreign key referencing the Language table.
rental_duration	Integer	The duration for which the film can be rented.
rental_rate	Decimal	The rate charged for renting the film.
length	Integer	The length of the film in minutes.
replacement_cost	Decimal	The cost to replace the film.
rating	Varchar(5)	The rating of the film (e.g., PG, R, etc.).
last_update	Timestamp	Timestamp for when the record was last updated.

Columns Linked To: Language (language_id).

Unique Key: film_id

2.3 Dimension Table: Category

Column Name	Data Type	Description
category_id	Integer	Primary key that uniquely identifies each category.
name	Varchar(25)	The name of the category.
last_update	Timestamp	Timestamp for when the record was last updated.

Unique Key: category_id

2.4 Dimension Table: Staff

Column Name	Data Type	Description
staff_id	Integer	Primary key that uniquely identifies each staff member.
first_name	Varchar(45)	First name of the staff member.
last_name	Varchar(45)	Last name of the staff member.
address_id	Integer	Foreign key referencing the Address table.
email	Varchar(50)	Email address of the staff member.
store_id	Integer	Identifier for the store where the staff member works.
active	Boolean	Indicates if the staff member is active.
username	Varchar(16)	Username assigned to the staff member.
password	Varchar(40)	Password for the staff member's account.
last_update	Timestamp	Timestamp indicating when the record was last updated.
picture	Bytea	Binary data field to store the staff member's picture.

Columns Linked To: Address (address_id), Store (store_id).

Unique Key: staff_id

2.5 Dimension Table: Address

Column Name	Data Type	Description
address_id	Integer	Primary key that uniquely identifies each address.
address	Varchar(50)	Street address of the customer or staff member.
address2	Varchar(50)	Additional address information.
district	Varchar(20)	The district or region.
city_id	Integer	Foreign key referencing the City table.
postal_code	Varchar(10)	Postal code of the address.
phone	Varchar(20)	Contact number for the address.
last_update	Timestamp	Timestamp for when the record was last updated.

Columns Linked To: City (city_id).

Unique Key: address_id

2.6 Dimension Table: Language

Column Name	Data Type	Description
language_id	Integer	Primary key that uniquely identifies each language.
name	Varchar(20)	The name of the language.
last_update	Timestamp	Timestamp for when the record was last updated.

Unique Key: language_id

2.7 Dimension Table: Inventory

Column Name	Data Type	Description
inventory_id	IInteger	Primary key that uniquely identifies each inventory record.
film_id	Integer	Foreign key referencing the Film table.
store_id	Integer	Foreign key referencing the Store table.
last_update	Timestamp	Timestamp for when the record was last updated.

Columns Linked To: Film (film_id), Store (store_id).

Unique Key: inventory_id

2.8 Dimension Table: Store

Column Name	Data Type	Description
store_id	Integer	Primary key that uniquely identifies each store.
manager_staff_id	Integer	Foreign key referencing the Staff table, indicating the store manager.
address_id	Integer	Foreign key referencing the Address table.
last_update	Timestamp	Timestamp for when the record was last updated.

Columns Linked To: Staff (manager_staff_id), Address (address_id).

Unique Key: store_id

2.9 Dimension Table: City

Column Name	Data Type	Description
city_id	Integer	Primary key that uniquely identifies each city.
city	Varchar(50)	The name of the city.
country_id	Integer	Foreign key referencing the Country table.
last_update	Timestamp	Timestamp for when the record was last updated.

Columns Linked To: Country (country_id).

Unique Key: city_id

2.10 Dimension Table: Country

Column Name	Data Type	Description
country_id	Integer	Primary key that uniquely identifies each country.
country	Varchar(50)	The name of the country.
last_update	Timestamp	Timestamp for when the record was last updated.

Unique Key: country_id