

Data Dictionary

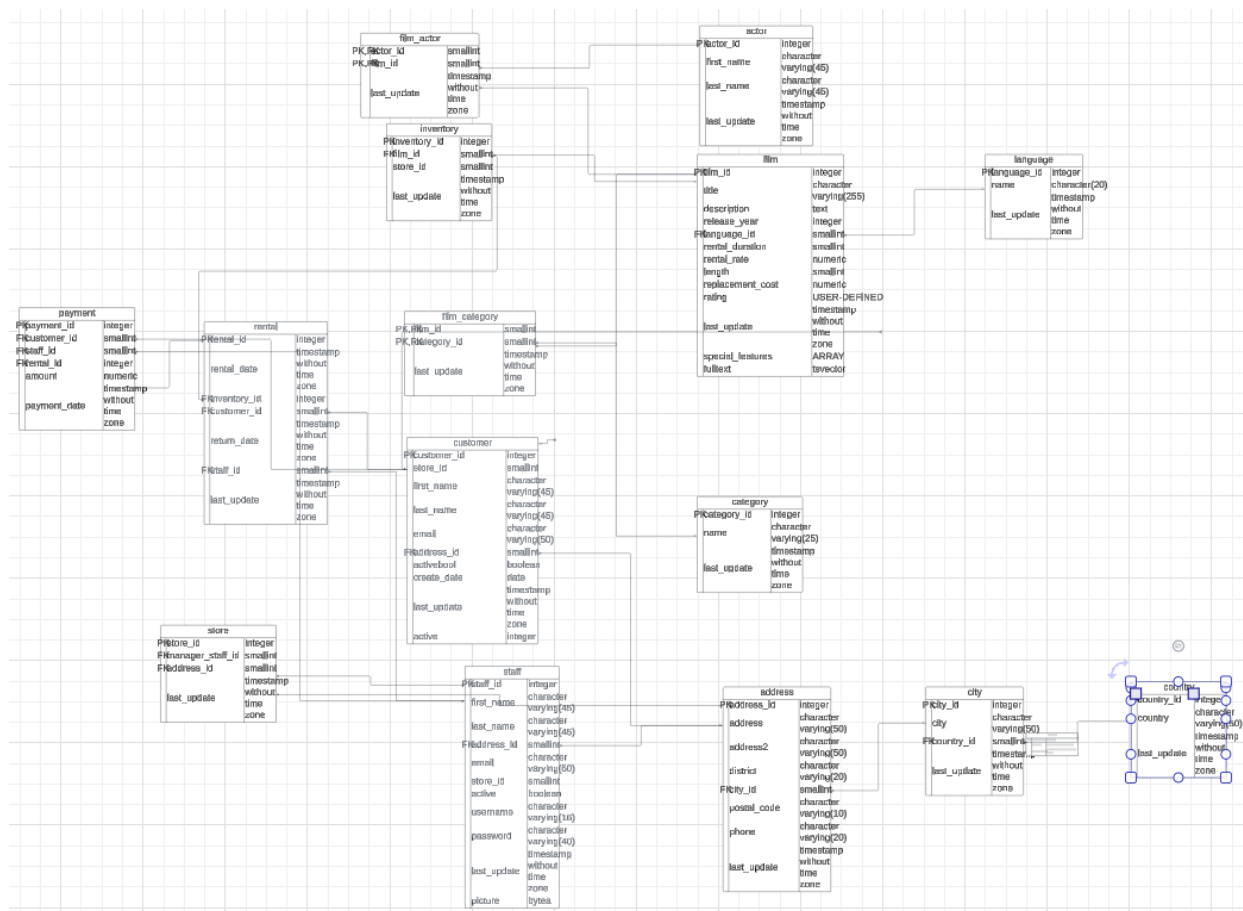
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1. ERD



2. Fact Tables

2.1 Fact Table: Payment

Columns	Data Type	Description	Links
payment_id	SERIAL	Primary key, surrogate & candidate key; 4-byte integer; unique value to ID payment	
customer_id	SMALLINT	Foreign key; 2-byte integer; unique # to ID customer	TO Customer
staff_id	SMALLINT	Foreign key; 2-byte integer; unique # used to ID staff	TO staff
rental_id	INTEGER	Foreign key; 4-byte integer; unique # used to ID rental	TO rental
amount	NUMERIC(5,2)	Floating-point #; # with max 5 digits including 2 digits in fractional part	
payment_date	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both payment time and date in form of xx-xx-xx	

2.2 Fact Table: rental

Columns	Data Type	Description	Links
Rental_id	SERIAL	Primary key, surrogate & candidate key; 4-byte integer; unique value to ID rental	FROM payment
Rental_date	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both rental time and date in form of xx-xx-xx	
Inventory_id	INTEGER	Foreign key; 4-byte integer; unique # used to ID inventory	TO inventory
Customer_id	SMALLINT	Foreign key; 2-byte integer; unique # to ID customer	TO customer
Return_date	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both return time and date in form of xx-xx-xx	
Staff_id	SMALLINT	Foreign key; 2-byte integer; unique # used to ID staff	TO staff
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	

3. Dimension Tables

3.1 Dimension Table: store

Columns	Data Type	Description	Links
Store_id	SERIAL	Primary key, surrogate & candidate key; 4-byte integer; unique value to ID store	
Manager_staff_id	SMALLINT	Foreign key; 2-byte integer; unique # to ID manager staff	TO staff (staff_id)
Address_id	SMALLINT	Foreign key; 2-byte integer; unique # used to ID address of store	TO address
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	

3.2 Dimension table: film_actor

Columns	Data Type	Description	Links
Actor_id	SMALLINT	Combination key; 2-byte integer; unique # to ID actor	TO actor
Film_id	SMALLINT	Combination key; 2-byte integer; unique # to ID film	TO film
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	

3.3 Dimension Table: inventory

Columns	Data Type	Description	Links
inventory_id	SERIAL	Primary key, surrogate & candidate key; 4-byte integer; unique # to ID inventory	FROM rental
Film_id	SMALLINT	Foreign key; 2-byte integer; unique # to ID film	TO film
Store_id	SMALLINT	2-byte integer; unique value to ID store	
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	

3.4 Dimension Table: film_category

Columns	Data Type	Description	Links
Film_id	SMALLINT	Combination & Foreign key; 2-byte integer; unique # to ID film	TO film
Category_id	SMALLINT	Combination & Foreign key; 2-byte integer; unique # to ID category	TO category
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	

3.5 Dimension Table: customer

Columns	Data Type	Description	Links
Customer_id	SERIAL	Primary key, surrogate & candidate key; 4-byte integer; unique # to ID inventory	FROM payment rental
Store_id	SMALLINT	2-byte integer; unique value to ID store	
First_name	CHARACTER VARYING(45)	Character data; name is a variable-length character string; max 45 characters	
Last_name	CHARACTER VARYING(45)	Character data; name is a variable-length character string; Max 45 characters	
email	CHARACTER VARYING(50)	Character data; email address is a variable-length character string; Max 50 characters	
Address_id	SMALLINT	Foreign key; 2-byte integer; unique # used to ID address	TO address
activebool	BOOLEAN	Data type can hold 1 of 3 possible values: true, false, or null; is customer active?	
Create_date	DATE	Temporal data; stores date only; original date customer data was entered into database	
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	
active	INTEGER	4-byte integer; unique # indicating whether customer is active or not	

3.6 Dimension Table: staff

Columns	Data Type	Description	Links
Staff_id	SERIAL	Primary key , surrogate & candidate key; 4-byte integer; unique # to ID staff	FROM payment Rental Store (manager_staff_id)
First_name	CHARACTER VARYING(45)	Character data; name is a variable-length character string; max 45 characters	
Last_name	CHARACTER VARYING(45)	Character data; name is a variable-length character string; Max 45 characters	
Address_id	SMALLINT	Foreign key ; 2-byte integer; unique value to ID address of staff member	TO address
email	CHARACTER VARYING(50)	Character data; email address is a variable-length character string; Max 50 characters	
Store_id	SMALLINT	2-byte integer; unique # used to ID store	
active	INTEGER	4-byte integer; unique # used to ID whether staff member is active employee or not	
username	CHARACTER VARYING(16)	Character data; username is a variable-length character string; Max 16 characters	
password	CHARACTER VARYING(40)	Character data; password is a variable-length character string; Max 40 characters	
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	
picture	BYTEA	Digital image stored as binary string	

3.7 Dimension Table: actor

Columns	Data Type	Description	Links
Actor_id	SERIAL	Primary key , surrogate & candidate key; 4-byte integer; unique # to ID actor	FROM film_actor
First_name	CHARACTER VARYING(45)	Character data; name is a variable-length character string; max 45 characters	
Last_name	CHARACTER VARYING(45)	Character data; name is a variable-length character string; max 45 characters	
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	

3.8 Dimension Table: film

Columns	Data Type	Description	Links
Film_id	SERIAL	Primary key , surrogate & candidate key; 4-byte integer; unique # to ID actor	FROM film_actor Inventory Film_category
Title	CHARACTER VARYING(45)	Character data; title is a variable-length character string; max 45 characters	
description	TEXT	Character data; description data is unlimited length, variable-length character string	
Release_year	year	Year film was released	
Language_id	SMALLINT	Foreign key ; 2-byte integer; unique # used to ID language	TO language
Rental_duration	SMALLINT	2-byte integer; unique # used to ID rental duration	
Rental_rate	NUMERIC(4,2)	Floating-point #; monetary amount w/ max 4 digits including 2 digits in fractional part	
length	SMALLINT	2-byte integer; unique # used for length measurement	
Replacement_cost	NUMERIC(5,2)	Floating-point #; monetary amount w/ max 5 digits including 2 digits in fractional part	
rating	Mpaa_rating	data type contains familiar ratings for films like PG or R	
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	
Special_features	TEXT	Character data; special features data is unlimited length, variable-length character string	
fulltext	T5VECTOR	Data type in PostgreSQL allows us to represent the documents in a form optimized for text search	

3.9 Dimension Table: category

Columns	Data Type	Description	Links
Category_id	SERIAL	Primary key, surrogate & candidate key; 4-byte integer; unique # to ID actor	FROM film_category
name	CHARACTER VARYING(45)	Character data; category name is a variable-length character string; max 45 characters	
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	

3.10 Dimension Table: address

Columns	Data Type	Description	Links
Address_id	SERIAL	Primary key, surrogate & candidate key; 4-byte integer; unique # to ID address	FROM customer Staff store
address	CHARACTER VARYING(50)	Character data; address is a variable-length character string; max 50 characters	
address2	CHARACTER VARYING(50)	Character data; address is a variable-length character string; max 50 characters	
district	CHARACTER VARYING(50)	Character data; district name is a variable-length character string; max 50 characters	
City_id	SMALLINT	Foreign key; 2-byte integer; unique # used to ID city	TO city
Postal_code	CHARACTER VARYING(10)	Character data; postal code is a variable-length character string; max 10 characters	
phone	CHARACTER VARYING(20)	Character data; phone # is a variable-length character string; max 20 characters	
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	

3.11 Dimension Table: language

Columns	Data Type	Description	Links
Language_id	SERIAL	Primary key, surrogate & candidate key; 4-byte integer; unique # used to ID language	FROM film
name	CHARACTER VARYING(45)	Character data; name of language is a variable-length character string; max 45 characters	
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	

3.12 Dimension Table: city

Columns	Data Type	Description	Links
City_id	SERIAL	Primary key, surrogate & candidate key; 4-byte integer; unique # used to ID city	FROM address
city	CHARACTER VARYING(50)	Character data; city name is a variable-length character string; max 50 characters	
Country_id	SMALLINT	Foreign key; 2-byte integer; unique # used to ID country	TO country
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	

3.13 Dimension Table: country

Columns	Data Type	Description	Links
Country_id	SERIAL	Primary key, surrogate & candidate key; 4-byte integer; unique # used to ID country	FROM city
country	CHARACTER VARYING(50)	Character data; country name is a variable-length character string; max 50 characters	
Last_update	TIMESTAMP(6) W/O TIME ZONE	Temporal data; stores both time and date of last update to record in form of xx-xx-xx	