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Legend

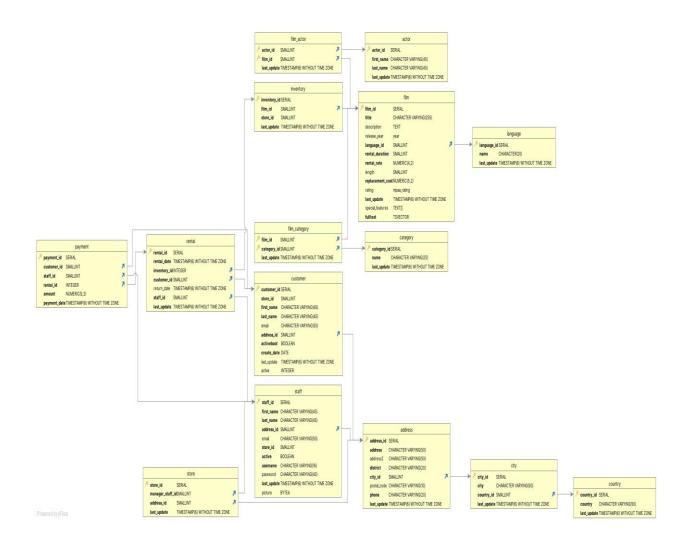


The primary key is a column or set of columns that acts as a unique identifier for each record in a table.



Foreign key - column, or set of columns, that refers to the primary key in another table. Foreign keys are used to establish relationships between tables and are helpful in navigating from one table to another.

Entity Relationship Diagram (ERD)



3. Tables

3.1 Fact Tables

3.1.1 Payment

Columns

	Name	Data Type	Description
_			Unique payment identifier-
G	payment_id	serial	primary key
•	customer_id	int2	Unique customer identifier
	staff_id	int2	Unique staff identifier
••••	rental_id	int4	Unique rental identifer
	amount	numeric	Amount of payment
			Date and time record of
	payment_date	timestamp	payment

Links to

Table Name	Join	Description
		Foreign key reference to
customer	payment.customer_id = customer.customer_id	customer table
		Foreign key reference to staff
staff	payment.staff_id = staff.staff_id	table
		Foreign key reference to
rental	payment.rental_id = rental.rental_id	rental table

Linked from X

3.1.2 Rental

Columns

	Name	Data Type	Description
•	rental_id	serial	Unique rental identifier
	rental_date	timestamp	Date and time of rental
3	inventory_id	int4	Unique inventory identifier
	customer_id	int2	Unique customer identifier
	return_date	timestamp	Date and time of rental
•	staff_id	int2	Unique staff identifer
	last_update	timestamp	Date and time of latest update

Links to

Table Name	Join	Description
		Foreign key reference to
inventory	rental.inventory_id = inventory.inventory_id	inventory table
		Foreign key reference to
customer	rental.customer_id = customer.customer_id	customer table
		Foreign key reference to staff
staff	rental.staff_id = staff.staff_id	table

Linked from

	Table Name	Join	Description
			Foreign key reference from
	payment	payment.rental_id = rental.rental_id	payment table

3.2 DimensionTables3.2.1 Store

Columns

	Name	Data Type	Description
3	store_id	serial	Store unique identifier
_			Manager staff unique
3	manager_staff_id	int2	identifier
3	address_id	int2	Unique address identifier
_	last_update	timestamp	Date and time of latest update

Links to

Table Name	Join	Description	
		Foreign key reference to staff	
staff	store.manager_staff_id = staff.staff_id	table	
		Foreign key reference to	
address	store.address id = address.address id	address table	

Linked from X

3.2.2 Staff

Columns

	Name	Data Type	Description
3			Unique staff member
	staff_id	serial	identifier
	first_name	varchar	Staff member's first name
	last_name	varchar	Staff member's last name
•	address_id	int2	Unique address identifier
	email	varchar	Staff member's email address
	store_id	int2	Unique store identifier
	active	bool	Staff members' active status
	username	varchar	Staff members' username
	password	varchar	Staff members' password
	last_update	timestamp	Date and time of latest update
	picture	bytea	Staff member's picture

Links to

Table Name	Join	Description
		Foreign key reference to
address	staff.address _id = address.address_id	address table
		Foreign key reference to store
store	staff.store _id = store.store_id	table

Linked from

Table Name	Join	Description
		Foreign key reference from
rental	rental.staff_id = staff.staff_id	rental table
		Foreign key reference from
payment	payment.staff_id = staff.staff_id	payment table

3.2.3 Address

Columns

	Name	Data Type	Description
•	address_id	serial	Address unique identifier
	address	varchar	First line of address
	address2	varchar	Second line of address
	district	varchar	Address district
•	city_id	int2	City unique identifier
	postal_code	varchar	Address' postal cod
	phone	varchar	Address' phone number
	last_update	timestamp	Date and time of latest update

Links to

	Table Name	Join	Description
			Foreign key reference to city
	city	address.city_id = city. city _id	table

Linked from

Table Name	Join	Description
		Foreign key reference from
store	store.address_id = address. address_id	store table
		Foreign key reference from
staff	staff. address _id = address . address _id	staff table
		Foreign key reference from
customer	customer. address _id = address . address _id	customer table

3.2.4 City

Columns

	Name	Data Type	Description
•	city_id	serial	City's unique identifier
	city	varchar	City name
3	country_id	int2	Country's unique identifier
	last_update	timestamp	Date and time of latest update

Links to

	Table Name	Join	Description
			Foreign key reference to
	country	city.country _id = country. country _id	country table

Linked from

Table Name	Join	Description
		Foreign key reference from
address	address.city_id = city.city_id	address table

3.2.5 Country

Columns

	Name	Data Type	Description
•	country_id	serial	Country's unique identifier
	country	varchar	Name of country
	last_update	timestamp	Date and time of latest update

Links to

Χ

Linked from

	Table Name	Join	Description
			Foreign key reference from
	city	city.country_id = country.country_id	city table

3.2.6 Customer

Columns

	Name	Data Type	Description
••••	customer_id	serial	Unique customer identifier
	store_id	int2	Unique store identifier
	first_name	varchar	Customer first name
	last_name	varchar	Customer last name
	email	varchar	Customer email
3 m	address_id	int2	Unique address identifier
	activebool	bool	Customer's active status
	create_date	date	Date of customer profile creation
	last_update	timestamp	Date and time of latest update
			Active status represented by 0
	active	int4	or 1

Links to

Та	able Name	Join	Description
			Foreign key reference to store
sto	tore	customer.store _id = store. store _id	table
			Foreign key reference to
ad	ddress	customer.address_id= address. address_id	address table

Linked from

Table Name	Join	Description
		Foreign key reference from
rental	rental.customer_id = customer. customer _id	rental table
		Foreign key reference from
payment	payment.customer_id = customer. customer _id	payment table

3.2.7 Inventory

Columns

	Name	Data Type	Description
O	inventory_id	serial	Unique inventory identifier
O	film_id	int2	Unique film identifier
	store_id	int2	Unique store identifier
	last_update	timestamp	Date and time of latest update

Links to

	Table Name	Join	Description
			Foreign key reference to film
	film	inventory.film _id = film. film _id	table
Ī			Foreign key reference to store
	store	inventory.store_id= store. store _id	table

Linked from

	Table Name	Join	Description
			Foreign key reference from
	rental	rental.inventory_id = inventory. inventory _id	rental table

3.2.8 Film

Columns

	Name	Data Type	Description
3	film_id	serial	Unique film identifier
	title	varchar	Film title
	description	text	Description of film
	release_year	year	Film release year
••••	language_id	int2	Language of film
	rental_duration	int2	Rental duration
	rental_rate	numeric	Rate
	length	int2	Length of film
	replacement_cost	numeric	Replacement cost of film
	rating	mpaa_rating	Film rating
	last_update	timestamp	Date and time of latest update
	special_features	_text	Film's special features (trailers)
	fulltext	tsvector	Film index; used for searching

Links to

Table Name	Join	Description
		Foreign key reference to
language	film.language _id = language. language _id	language table

Linked from

Table Name	Join	Description
		Foreign key reference from
film_actor	film_actor.film _id = film.film_id	film_actor table
		Foreign key reference from
inventory	inventory.film _id = film.film_id	inventory table
		Foreign key reference from
film_category	film_category.film _id = film.film_id	film_category table

3.2.9 Language

Columns

	Name	Data Type	Description
	language_id	serial	Language uniqure identifier
	name	bpchar	Language name
	last_update	timestamp	Date and time of latest update

Links to X

Linked from

Table Na	me Join	Description
		Foreign key reference from
film	film.language_id = la	anguage. language _id film table

3.2.10 Actor

Columns

	Name	Data Type	Description
O	actor_id	serial	Unique actor identifier
	first_name	varchar	Actor's first name
	last_name	varchar	Actor's last name
	last_update	timestamp	Date and time of latest update

Links to X

Linked from

Table Nam	Join	Description
		Foreign key reference from
film_actor	film_actor.actor_id = actor.actor_actor.ac	ctor_id film_actor table

3.2.11 Film_actor

Columns

		Name	Data Type	Description
•	•	actor_id	int2	Unique actor identifier
	•	film_id	int2	Unique film identifier
		last_update	timestamp	Date and time of latest update

Links to

Table N	ame Join	Description
		Foreign key reference to actor
actor	actor_actor _id	= film_actor. actor _id table
		Foreign key reference to film
film	film.film_id = file	m_actor.film_id table

Linked from X

3.2.12 Film_category

Columns

		Name	Data Type	Description
•	O	film_id	int2	Unique film identifier
•		category_id	int2	Unique category identifier
		last_update	timestamp	Date and time of latest update

Links to

٦	Table Name	Join	Description
			Foreign key reference to film
f	film	film_category.film _id = film. film _id	table
			Foreign key reference to
	category	film_category.category_id = category.category_id	category table

Linked from X

3.2.13 Category

Columns

	COTATTITIS				
		Name	Data Type	Description	
	••••	category_id	serial	Category unique identifier	
		name	varchar	Category name	
		last update	timestamp	Date and time of latest update	

Links to X

Linked from

Table Name	Join	Description
		Foreign key reference from
film_category	film_category. category _id = category. category _id	film_ category table