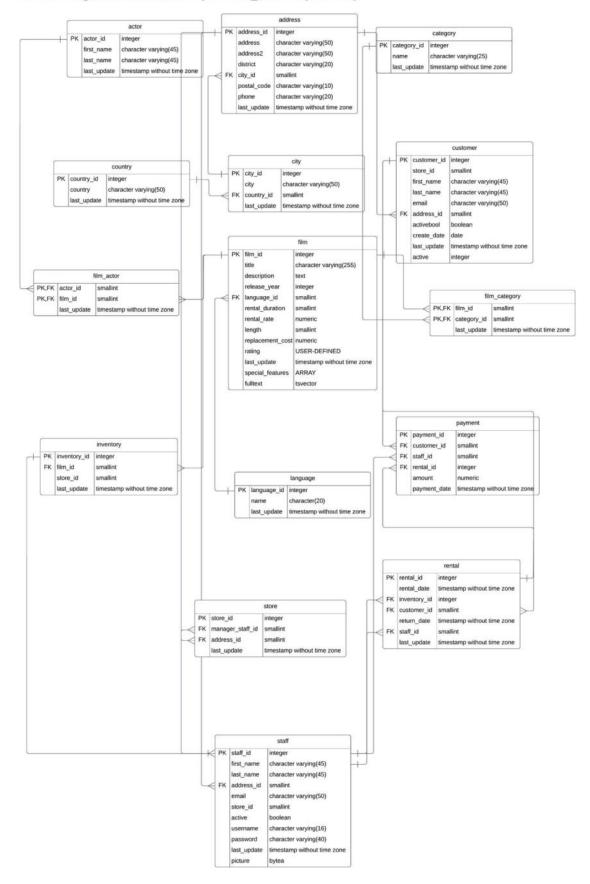


KIMBERLEY EMELIFE 25 JULY 2023

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1.0 Entity Relationship Diagram (ERD)



2.0 FACT TABLE

2.1 PAYMENT TABLE

Unique Key	Column	Data Type	Description
PK	payment_id	SERIAL	Unique Payment ID
FK	customer_id	SMALLINT	Unique Customer ID
FK	staff_id	SMALLINT	Unique Staff ID
FK	rental_id	INTEGER	Unique Staff ID
	amount	Numeric(5,2)	Rental amount
	payment_date	TIMESTAMP(6)	Date of Payment
		WITHOUT TIME ZONE	

Unique Key	Column	Description
FK	customer_id	Foreign key reference to customer table
FK	staff_id	Foreign key reference to Staff table
FK	rental_id	Foreig key reference to Rental Table

2.2 RENTAL TABLE

Rental	Column	Data Type	Description
PK	rental_id	SERIAL	Unique Rental ID
	rental_date	TIMESTAMP(6)	Date of Rental
		WITHOUT TIME ZONE	
FK	inventory_id	INTEGER	Unique Inventory ID
FK	customer_id	SMALLINT	Unique Customer ID
	return_date	TIMESTAMP(6)	Date of Return
		WITHOUT TIME ZONE	
FK	staff_id	SMALLINT	Unique Staff ID
	last_update	TIMESTAMP(6)	Last update of Table
		WITHOUT TIME ZONE	

Links to

Unique Key	Column	Description
FK	inventory_id	Foreign key reference to inventory
		table
FK	customer_id	Foreign key reference to customer
		table
FK	Staff_id	Foreign key reference to staff table

Links from

Table	Description
Payment	Foreign key reference to payment table

3.0 DIMENSIONS TABLE

3.1 Actor Table

Unique Key	Column	Data Type	Description
PK	actor_ID	SERIAL	Unique actor ID
	first_name	CHARACTER VARYING(45)	Actor first name
	last_name	CHARACTER VARYING(45)	Actor last name
	last_update	TIMESTAMP(6) WITHOUT	Last update of Table
		TIME ZONE	

3.2 Address Table

Unique Key	Column	Data Type	Description
PK	address_id	SERIAL	Unique address ID
	address	CHARACTER VARYING(50)	First line of address
	address2	CHARACTER VARYING(50)	Second line of address
	district	CHARACTER VARYING(20)	District of address
FK	city_id	SMALLINT	City ID
	postal_code	CHARACTER VARYING(10)	Post code
	phone	CHARACTER VARYING(20)	Phone number
	last_update	TIMESTAMP(6) WITHOUT	Last update of Table
		TIME ZONE	

Unique Key	Column	Description
FK	city_id	Foreign key reference to city table

3.3 Category Table

Unique Key	Column	Data Type	Description
PK	category_id	SERIAL	Category ID
	name	CHARACTER VARYING(50)	Name of category
	last_update	TIMESTAMP(6) WITHOUT	Last update of Table
		TIME ZONE	

3.4 City Table

Unique Key	Column	Data Type	Description
PK	city_id	SERIAL	ID of City
	city	CHARACTER VARYING(50)	Name of City
FK	country_id	SMALLINT	County where city is
			based
	last_update	TIMESTAMP(6) WITHOUT	Last update of Table
		TIME ZONE	

Link to

Unique Key	Column	Description
FK	country_id	Foreign key reference to city table

3.5 Country Table

Unique Key	Column	Data Type	Description
PK	country_id	SERIAL	ID of County
	country	CHARACTER VARYING(50)	Name of County
	last_update	TIMESTAMP(6) WITHOUT	Last update of Table
		TIME ZONE	

Link from

Unique Key	Column table	Description
FK	City	Foreign key reference to country table

3.6 Customer Table

Unique Key	Column	Data Type	Description
PK	customer_id	SERIAL	Customer ID
	store_id	SMALLINT	ID of Store
	first_name	CHARACTER VARYING(45)	Customer's first name
	last_name	CHARACTER VARYING(45)	Customer's last name
	email	CHARACTER VARYING(50)	Customer's email
			address
FK	address_id	SMALLINT	Customer's address
	activebool	BOOLEAN	Active status
	create_date	DATE	Customer creation
			date
	last_update	TIMESTAMP(6) WITHOUT	Last update of Table
		TIME ZONE	
	active	INTEGER	Active integer

Link to

Unique Key	Column table	Description
FK	Address	Foreign key reference to address table

Link from

Unique Key	Column table	Description

3.7 Film Table

Unique Key	Column	Data Type	Description
PK	film_id	SERIAL	ID of Film
	title	CHARACTER VARYING(255)	Title of film
	description	TEXT	Description of film
	release_year	YEAR	Year of film release
FK	language_id	SMALLINT	Language of film

rental_duration	SMALLINT	Duration of film rental
rental_rate	NUMERIC(4,2)	Rate of Film rental
length	SMALLINT	Length of film
replacement_cost	NUMERIC(5,2)	Replacement cost if
		film not returned
rating	MPAA_RATING	Film rating
last_update	TIMESTAMP(6) WITHOUT	Last update of Table
	TIME ZONE	
special features	TEXT[]	Feature of the film
fulltext	TSVECTOR	Film index

Link to

Column table	Description
Language	Foreign key reference to language table

Link from

Column table	Description
Payment	Foreign key reference to payment table
Rental	Foreign key reference to rental table

3.8 Film Actor

Unique Key	Column	Data Type	Description
PK, FK	actor_ID	SMALLINT	ID of Actor
PK, FK	film_ID	SMALLINT	ID of film actor
	last_update	TIMESTAMP(6) WITHOUT	Last update of Table
		TIME ZONE	

Link to

Column table	Description
Actor	Foreign key reference to actor table
Film	Foreign key reference to film table

Link from

Column table	Description
Actor	Foreign key reference to actor table
Film	Foreign key reference to film table

3.9 Film Category Table

Unique Key	Column	Data Type	Description
PK, FK	film_ID	SMALLINT	ID for film category
PK, FK	character_ID	SMALLINT	ID for character
	last_update	TIMESTAMP(6) WITHOUT	Last update of Table
		TIME ZONE	

Link to

Column table	Description
Film	Foreign key reference to film table
Character	Foreign key reference to character table

Link from

Column table	Description
Film	Foreign key reference to film table
Character	Foreign key reference to character
	table

3.9 Inventory Table

Unique Key	Column	Data Type	Description
PK	inventory_ID	SERIAL	ID for inventory
FK	film_ID	SMALLINT	ID for film
	store_ID	SMALLINT	ID for store
	last_update	TIMESTAMP(6) WITHOUT	Last update of Table
		TIME ZONE	

Link to

Column table	Description
Film	Foreign key reference to film table

Link from

Column table	Description
Rental	Foreign key reference to rental table

3.10 Language Table

Unique Key	Column	Data Type	Description
PK	language_ID	SERIAL	ID of language
	name	CHARACTER(20)	Name of language
	last_update	TIMESTAMP(6) WITHOUT	Last update of Table
		TIME ZONE	

Link from

Column table	Description
Film	Foreign key reference to film table

3.11 Staff Table

Unique Key	Column	Data Type	Description
PK	staff_ID	SERIAL	ID of Staff
	first_name	CHARACTER VARYING(45)	First name of Staff
	last_name	CHARACTER VARYING(45)	Last name of Staff
FK	address_ID	SMALLINT	Address of Staff

email	CHARACTER VARYING(50)	Email of Staff
store_ID	SMALLINT	Staff store ID number
active	BOOLEAN	Active status of Staff
username	CHARACTER VARYING(16)	Staff username
password	CHARACTER VARYING(40)	Staff password
last_update	TIMESTAMP(6) WITHOUT	Last update of Table
	TIME ZONE	
picture	BYTEA	Picture of staff

Link to

Column table	Description
Address	Foreign key reference to address table

Link from

Column table	Description
Rental	Foreign key reference to rental table
Payment	Foreign key reference to payment table
Store	Foreign key reference to store table

3.12 Store Table

Unique Key	Column	Data Type	Description
PK	store_ID	SERIAL	ID of Store
FK	manager_staff_ID	SMALLINT	ID of staff manager
FK	address_ID	SMALLINT	ID of store address
	last_update	TIMESTAMP(6) WITHOUT	Last update of Table
		TIME ZONE	

Link to

Column table	Description
Manager Staff	Foreign key reference to manager staff table
Address	Foreign key reference to address table

Link from

Column table	Description
Customer	Foreign key reference to customer table
Inventory	Foreign key reference to inventory table