Rockbuster: Data Dictionary

07.04.2024

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1. Rockbuster ERD

2. Fact Tables

The only identified fact tables are "Payments" and "Rental" which records transactions.

Table Name	Key	Columns	Data Type	Description
2.1. Payment	PK	payment_id	SERIAL	Primary key, unique identifier for payments.
	FK	customer_id	SMALLINT	Foreign key referring to the customer involved in the payment transaction.
	FK	staff_id	SMALLINT	Foreign key referring to the staff member processing the payment.
	FK	rental_id	INTEGER	Foreign key referring to the rental associated with the payment.
		amount	NUMERIC(5,2)	Monetary amount of the payment transaction.
		payment_date	TIMESTAMP(6)	Date and time of the payment.

Table Name	Key	Columns	Data Type	Description
2.2. Rental	PK	rental_id	SERIAL	Primary key, unique identifier for rental transactions.
		rental_date	TIMESTAMP(6)	Date and time when the rental started.
	FK	inventory_id	INTEGER	Foreign key referring to the rented inventory item.
	FK	customer_id	SMALLINT	Foreign key referring to the customer involved in the rental.
		return_date	TIMESTAMP(6)	Date and time indicating the return deadline for the rental item.
	FK	staff_id	SMALLINT	Foreign key referring to the staff member handling the rental.
		last_update	TIMESTAMP(6)	Date and time of the last update made to the rental record.

3. Dimension Tables

Examples of dimension tables include "Inventory" (inventory items and associated films), "Customer" (customer details like names and emails), "Staff" (staff information) and so on…

Table Name	Key	Columns	Data Type	Description
3.1. Inventory	PK	inventory_id	SERIAL	Primary key, unique identifier for inventory items.
	FK	film_id	SMALLINT	Foreign key referring to the associated film.
		store_id	SMALLINT	Identifier for the store where the inventory item is located.
		last_update	TIMESTAMP(6)	Date and time of the last update made to the inventory record.

Table Name	Key	Columns	Data Type	Description
3.2. Film	PK	film_id	SERIAL	Primary key, unique identifier for films.
		title	CHARACTER VARYING	Film title.
		description	TEXT	Film synopsis.
		release_year	INTEGER	The year the film was released.
	FK	language_id	SMALLINT	Foreign key referring to the language of the film audio.
		rental_duration	SMALLINT	Number of days the item can be rented for.
		rental_rate	NUMERIC(4,2)	Rental rate of the film.
		length	SMALLINT	Length of the film in minutes.
		replacement_cost	NUMERIC(5,2)	Replacement cost of the film in case of loss or damage.
		rating	VARCHAR	MPAA film rating.
		last_update	TIMESTAMP(6)	Date and time of the last update made to the film record.
3.3. Language	PK	language_id	SERIAL	Primary key, unique identifier for languages.
		name	CHARACTER(20)	Language name.
		last_update	TIMESTAMP(6)	Date and time of the last update made to the language record.

Table Name	Key	Columns	Data Type	Description
3.4. Film_actor	PK, FK	actor_id	SMALLINT	Foreign key referring to the actor involved in the film.
	PK, FK	film_id	SMALLINT	Foreign key referring to the film the actor is associated with.
		last_update	TIMESTAMP(6)	Date and time of the last update made to the film-actor relationship record.
3.5. Actor	PK	actor_id	SERIAL	Primary key, unique identifier for actors.
		first_name	CHARACTER VARYING	Actor's first name.
		last_name	CHARACTER VARYING	Actor's last name.
		last_update	TIMESTAMP(6)	Date and time of the last update made to the actor record.
3.6. Film_category	PK, FK	film_id	SMALLINT	Foreign key referring to the film associated with the category.
	PK, FK	category_id	SMALLINT	Foreign key referring to the category associated with the film.
		last_update	TIMESTAMP(6)	Date and time of the last update made to the film-category relationship record.

Table Name	Key	Columns	Data Type	Description
3.7. Category	PK	category_id	SERIAL	Primary key, unique identifier for categories.
		name	CHARACTER VARYING	Category name.
		last_update	TIMESTAMP(6)	Date and time of the last update made to the category record.
3.8. Customer	PK	customer_id	SERIAL	Primary key, unique identifier for customers.
		store_id	SMALLINT	Identifier for the store to which the customer belongs.
		first_name	CHARACTER VARYING	Customer's first name.
		last_name	CHARACTER VARYING	Customer's last name.
		email	CHARACTER VARYING	Customer's email address.
	FK	address_id	SMALLINT	Foreign key referring to the customer's address.
		active	BOOLEAN	Indicates whether the customer account is active.
		create_date	DATE	Date when the customer account was created.
		last_update	TIMESTAMP(6)	Date and time of the last update made to the customer record.
3.9. Staff	PK	staff_id	SERIAL	Primary key, unique identifier for staff members.
		first_name	CHARACTER VARYING	Staff member's first name.

Table Name	Key	Columns	Data Type	Description
		last_name	CHARACTER VARYING	Staff member's last name.
	FK	address_id	SMALLINT	Foreign key referring to the staff member's address.
		email	CHARACTER VARYING	Staff member's email address.
		store_id	SMALLINT	Identifier for the store where the staff member works.
		active	BOOLEAN	Indicates whether the staff member is active.
		username	CHARACTER VARYING	Staff member's username for login purposes.
		password	CHARACTER VARYING	Staff member's password for login purposes.
		last_update	TIMESTAMP(6)	Date and time of the last update made to the staff record.