ROCKBUSTER STEALTH DATA ANALYSIS PROJECT FOR COMPANY STRATEGY IN 2020

Data Dictionary

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1. Entity Relationship Diagram (ERD)

2. Fact Tables

2.1 Rental Table

Key	Column	Data Type	Description
Primary Key	rental_id	SERIAL	Primary key of rental table
	rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the film rental starts
Foreign Key	inventory_id	INTEGER	Foreign key to inventory table
Foreign Key	customer_id	SMALLINT	Foreign key to customer table
	return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the film is returned
Foreign Key	staff_id	SMALLINT	Foreign key to staff table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

Table	Join
Inventory	Rental.inventory_id = Inventory.inventory_id
Customer	Rental.customer_id = Customer.customer_id
Staff	Rental.staff_id = Staff.staff_id

Linked from:

Table	Join
Payment	Rental.rental_id = Payment.rental_id

2.2 Payment Table

Key	Column	Data Type	Description
Primary Key	payment_id	SERIAL	Primary key of payment table
Foreign Key	customer_id	SMALLINT	Foreign key to customer table
Foreign Key	staff_id	SMALLINT	Foreign key to staff table
Foreign Key	rental_id	INTEGER	Foreign key to rental table
	amount	NUMERIC(5,2)	Amount paid by customer
	payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of the payment made

Links to:

Table	Join
Customer	Payment.customer_id = Customer.customer_id
Staff	Payment.staff_id = Staff.staff_id
Rental	Payment.rental_id = Rental.rental_id

Linked from:

Table	Join
N/A	N/A

3. Dimension Tables

3.1 Film Table

Key	Column	Data Type	Description
Primary Key	film_id	SERIAL	Primary key of film table
	title	CHARACTER VARYING(255)	Title of the film
	description	TEXT	Description of the film
	release_year	year	Release year of the film
Foreign Key	language_id	SMALLINT	Foreign key to language table
	rental_duration	SMALLINT	Rated rental duration of the film
	rental_rate	NUMERIC(4,2)	Pricing of the rated rental duration
	length	SMALLINT	The length of the film
	replacement_cost	NUMERIC(5,2)	Cost of replacement if the film is not returned
	rating	mpaa_rating	Rating of the film by Motion Picture Association of America (MPAA) – G/PG/PG-13/R/NC-17
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated
	special_features	TEXT[]	Special features of the film – Commentaries/Trailers/Behind the Scenes/Deleted Scenes
	fulltext	TSVECTOR	Index for film

Links to:

Table	Join
Language	Film.language_id = Language.language_id

Linked from:

Table	Join
Inventory	Film.film_id = Inventory_film.id
Film_category	Film.film_id = Film_category.film_id
Film_actor	Film.film_id = Film_actor.film_id

3.2 Inventory Table

Key	Column	Data Type	Description
Primary Key	inventory_id	SERIAL	Primary key of inventory table
Foreign Key	film_id	SMALLINT	Foreign key to film table
Foreign Key	store_id	SMALLINT	Foreign key to store table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

Table	Join
Film	Inventory.film_id = Film.film_id
Store	Inventory.store_id = Store.store_id

Linked from:

Table	Join
Rental	Inventory.inventory_id = Rental.inventory_id

3.3 Film_category Table

Key	Column	Data Type	Description
Foreign Key	film_id	SMALLINT	Foreign key to film table
Foreign Key	category_id	SMALLINT	Foreign key to category table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

Table	Join
Film	Film_category.film_id = Film.film_id
Category	Film_category.category_id = Category.category_id

Linked from:

Table	Join
N/A	N//A

3.4 Category Table

Key	Column	Data Type	Description
Primary Key	category_id	SERIAL	Primary key of category table
	name	CHARACTER VARYING(25)	Name of the category
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

Table	Join
N/A	N/A

Linked from:

Table	Join
Film_category	Category.category_id = Film_category.category_id

3.5 Language Table

Key	Column	Data Type	Description
Primary Key	language_id	SERIAL	Primary key of language table
	name	CHARACTER(20)	Name of the language
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

Table	Join
N/A	N/A

Linked from:

Table	Join
Film	Language.language_id = Film.language_id

3.6 Film_actor Table

Key	Column	Data Type	Description
Foreign Key	actor_id	SMALLINT	Foreign key to actor table
Foreign Key	film_id	SMALLINT	Foreign key to film table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

Table	Join
Actor	Film_actor.actor_id = Actor.actor_id
Film	Film_actor.film_id = Film.film_id

Linked from:

Table	Join
N/A	N/A

3.7 Actor Table

Key	Column	Data Type	Description
Primary Key	actor_id	SERIAL	Primary key of actor table
	first_name	CHARACTER VARYING(45)	First name of the actor
	last_name	CHARACTER VARYING(45)	Last name of the actor
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

Table	Join
N/A	N/A

Linked from:

Table	Join
Film_actor	Actor.actor_id = Film_actor.actor_id

3.8 Customer Table

Key	Column	Data Type	Description
Primary Key	customer_id	SERIAL	Primary key of customer table
Foreign Key	store_id	SMALLINT	Foreign key to store table
	first_name	CHARACTER VARYING(45)	First name of the customer
	last_name	CHARACTER VARYING(45)	Last name of the customer
	email	CHARACTER VARYING(50)	Email address of the customer
Foreign Key	address_id	SMALLINT	Foreign key to address table
	activebool	BOOLEAN	True = active; False = non-active
	create_date	DATE	Date when the customer signs up
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated
	active	INTEGER	An integer regarding the customer's activeness

Links to:

Table	Join
Store	Customer.store_id = Store.store_id
Address	Customer.address_id = Address.address_id

Linked from:

Table	Join
Rental	Customer.customer_id = Rental.customer_id
Payment	Customer.customer_id = Payment.customer_id

3.9 Staff Table

Key	Column	Data Type	Description
Primary Key	staff_id	SERIAL	Primary key of staff table
	first_name	CHARACTER VARYING(45)	First name of the staff
	last_name	CHARACTER VARYING(45)	Last name of the staff
Foreign Key	address_id	SMALLINT	Foreign key to address table
	email	CHARACTER VARYING(50)	Email address of the staff
Foreign Key	store_id	SMALLINT	Foreign key to store table
	active	BOOLEAN	True = active; False = non-active
	username	CHARACTER VARYING(16)	Username of the staff
	password	CHARACTER VARYING(40)	Password of the staff
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated
	picture	BYTEA	Picture of the staff

Links to:

Table	Join
Address	Staff.address_id = Address.address_id
Store	Staff.store_id = Store.store_id

Linked from:

Table	Join
Rental	Staff.staff_id = Rental.staff_id
Payment	Staff.staff_id = Payment.staff_id

3.10   Store Table

Key	Column	Data Type	Description
Primary Key	store_id	SERIAL	Primary key of store table
Foreign Key	manager_staff_id	SMALLINT	Foreign key to staff table
Foreign Key	address_id	SMALLINT	Foreign key to address table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

Table	Join
Staff	Store.manager_staff_id = Staff.staff_id
Address	Store.address_id = Address.address_id

Linked from:

Table	Join
Inventory	Store.store_id = Inventory.store_id
Customer	Store.store_id = Customer.store_id
Staff	Store.store_id = Staff.store_id

3.11   Address Table

Key	Column	Data Type	Description
Primary Key	address_id	SERIAL	Primary key of address table
	address	CHARACTER VARYING(50)	1st line of the address
	address2	CHARACTER VARYING(50)	2nd line of the address
	district	CHARACTER VARYING(20)	District of the address
Foreign Key	city_id	SMALLINT	Foreign key to city table
	postal_code	CHARACTER VARYING(10)	Postal code of the address
	phone	CHARACTER VARYING(20)	Phone contact for the address
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

Table	Join
City	Address.city_id = City.city_id

Linked from:

Table	Join
Customer	Address.address_id = Customer.address_id
Staff	Address.address_id = Staff.address_id
Store	Address.address_id = Store.address_id

3.12   City Table

Key	Column	Data Type	Description
Primary Key	city_id	SERIAL	Primary key of city table
	city	CHARACTER VARYING(50)	City name
Foreign Key	country_id	SMALLINT	Foreign key to country table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

Table	Join
Country	City.country_id = Country.country_id

Linked from:

Table	Join
Address	City.city_id = Address.city_id

3.13   Country Table

Key	Column	Data Type	Description
Primary Key	country_id	SERIAL	Primary key of country table
	country	CHARACTER VARYING(50)	Country name
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

Table	Join
N/A	N/A

Linked from:

Table	Join
City	Country.country_id = City.country_id