Rockbuster Stealth

Data Dictionary

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1. Overview.

Rockbuster Stealth LLC is a movie rental company that is planning to use its existing movie licenses to launch an online video rental service in order to stay competitive.

The purpose of this analysis is to help with the launch strategy for the new online video service.

2. Facts Tables

2.1 Payment table. Tracks payment transactions

COLUMN	DATA TYPE	DESCRIPTION
Payment_id	SERIAL	Unique identifier for payment transactions.
Customer_id	SMALLINT	Unique identifier for each customer.
Staff_id	SMALLINT	Unique identifier for staff member.
Rental_id	INTEGER	Unique identifier of rental transaction
Amount	NUMERIC	Amount of payment
Payment_date	TIMESTAMPT W/OUT TIME ZONE	Time and date payment was received

2.2 Rental table. Tracks rental transactions

COLUMN	DATA TYPE	DESCRIPTION
Rental_id	SERIAL	Unique identifier for rental transaction

Rental_date	TIMESTAMP W/OUT TIME ZONE	Time and date the rental was taken out
Inventory_id	INTEGER	Unique identifier for specific rental unit
Customer_id	SMALLINT	Unique identifier for specific customer
Return_date	TIMESTAMP W/OUT TIME ZONE	Time and date rental is due to be returned
Staff_id	SMALLINT	Unique identifier for staff member

3. Dimension Tables.

3.1 Store table. Tracks payment transactions.

COLUMN	DATA TYPE	DESCRIPTION
Store_id	SERIAL	Unique identifier for individual store
Manager_staff_id	SMALLINT	Unique identifier for store manager
Address_id	SMALLINT	Unique identifier for store location
Last_update	TIMESTAMP W/OUT TIME ZONE	Last time/date transaction was updated

3.2 Film actor table. Tracks actor records.

COLUMN	DATA TYPE	DESCRIPTION

Actor_id	SMALLINT	Unique identifier for specific actor
Film_id	SMALLINT	Unique identifier for film
Last_update	TIMESTAMP W/OUT TIME ZONE	Date and time of last record update

3.3 Film category table. Track film records.

COLUMN	DATA TYPE	DESCRIPTION
Category_id	SMALLINT	Unique identifier for specific actor
Film_id	SMALLINT	Unique identifier for film type
Last_update	TIMESTAMP W/OUT TIME ZONE	Date and time of last record update

3.4 Inventory table. Track inventory records.

COLUMN	DATA TYPE	DESCRIPTION
Inventory_id	SMALLINT	Unique identifier for inventory items
Film_id	SMALLINT	Unique identifier for film type
Store_id	SMALLINT	Unique store identifier
Last_update	TIMESTAMP W/OUT TIME ZONE	Date and time of last record

3.5 Customer table. Track customer records.

COLUMN	DATA TYPE	DESCRIPTION
Customer_id	SERIAL	Unique identifier of customer
Store_id	SMALLINT	Unique store identifier
First_name	CHARACTER VARYING	Customer's first name
Last_name	CHARACTER VARYING	Customer's last name
Email	CHARACTER VARYING	Customer's email
Address_id	SMALLINT	Unique identifier for customer's address
Activebool	BOOLEAN	It shows if the customer is still active or not, true or false.
Create_date	DATE	Date customer entry was created
Last_update	TIMESTAMP W/OUT TIME ZONE	Last time and date transaction was updated
Active	INTEGER	It shows if the customer is still active or not

3.6 Category table. Track category records.

COLUMN	DATA TYPE	DESCRIPTION
Category_id	SERIAL	Unique identifier for actor category
Name	CHARACTER VARYING	Actor's name
Last_update	TIMESTAMP W/OUT TIME ZONE	Time/date transaction last updated

3.7 Staff table. Track staff records.

COLUMN	DATA TYPE	DESCRIPTION
Staff_id	SERIAL	Unique identifier for staff member
First_name	CHARACTER VARYING	Staff member first name
Last_name	CHARACTER VARYING	Staff member last name
Address_id	SMALLINT	Unique identifier for staff's address
Email	CHARACTER VARYING	Staff member's email
Store_id	SMALLINT	Unique identier for individual store
Active	BOOLEAN	It shows if the staff member is still active or not
Username	CHARACTER VARYING	Staff member's username
Password	CHARACTER VARYING	Staff member's password
Last_update	TIMESTAMP W/OUT TIME ZONE	Time and date transaction was last updated
Picture	BYTEA	Photo of staff member

3.8 Address table. Track address records.

COLUMN	DATA TYPE	DESCRIPTION
Address_id	SERIAL	Unique identifier for address
Address	CHARACTER VARYING	Address details
Address2	CHARACTER VARYING	Additional address details
District	CHARACTER VARYING	Name of the district

City_id	SMALLINT	Unique identifier for city
Postal_code	CHARACTER VARYING	City zip code
Phone	CHARACTER VARYING	Phone number
Last_update	TIMESTAMP W/OUT TIME ZONE	Last time the transaction was updated

3.9 Film table. Track film details records.

COLUMN	DATA TYPE	DESCRIPTION
Film_id	SERIAL	Unique identifier for film
Title	CHARACTER VARYING	Title of the film
Description	TEXT	Description of the film
Release_year	YEAR	Year the film was released
Language_id	SMALLINT	Unique identifier for the film's language
Rental_duration	SMALLINT	Number of days film was rented
Rental_rate	NUMERIC	Cost of rental per day
Length	SMALLINT	Length of film in minutes
Replacement_cost	NUMERIC	Cost to replace film if not returned
Rating	MPAA_RATING	Film's rating
Last_update	TIMESTAMP W/OUT TIME ZONE	Last time and date transaction was updated
Special_features	TEXT	Special feature of the film
Fulltext	TVSECTOR	Text in the film

3.10 Language table. Track language records.

COLUMN	DATA TYPE	DESCRIPTION
Language_id	SERIAL	Unique identifier for film's language
Name	CHARACTER VARYING	Actor's name
Last_update	TIMESTAMP W/OUT TIME ZONE	Time/date transaction last updated

3.11 Country table. Track country records

COLUMN	DATA TYPE	DESCRIPTION
Country_id	SERIAL	Unique identifier for film's country
Country	CHARACTER VARYING	Country name
Last_update	TIMESTAMP W/OUT TIME ZONE	Date transaction last updated

3.12 City table. Track city records.

COLUMN	DATA TYPE	DESCRIPTION
City_id	SERIAL	Unique identifier for film's city
City	CHARACTER VARYING	City name
Country_id	SMALLINT	Unique identifier for film's country

Last_update	TIMESTAMP W/OUT	Time/date transaction last updated
	TIME ZONE	

4. Relationships and keys.

Primary keys: Unique identifiers for a record in the database table. It ensures that each record can be uniquely distinguished from others. Such as customer_id, film_id etc.

Foreign keys: Field or collection of fields in one table that refers to the primary key in another table. Foreign keys are used to established and enforce a link between the data in the two tables, creating a relationship between them. For example, film_id in fil table links to film_actor table.

4.1 Relationships diagram

Below is a visual representation of the relationships between tables in the Rockbuster database:

PK = Primary Key)

FK = Foreign Key)

