Rockbuster: Market Analysis & Customer Strategy

Identifying Top Regions & Customers for Growth

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1. OVERVIEW

The purpose of this data dictionary is to provide a comprehensive documentation of the **Rockbuster Stealth** database structure, including its tables, relationships, and key attributes. This document serves as a reference for understanding the database schema, detailing both **fact and dimension tables**, their respective fields, and how they interconnect through primary and foreign keys.

By outlining the structure of the database, this data dictionary facilitates data analysis, query optimization, and overall database management, ensuring that users can effectively navigate and utilize the dataset for business insights.

2. FACT TABLES

2.1 Payment

Columns	Data Type	Description
Payment_id	SERIAL	A unique identifier associated with the payment transaction
Customer_id	SMALLINT	A unique identifier assigned to the customer
Staff_id	SMALLINT	A unique identifier assigned to the staff
Rental_id	INTEGER	A unique identifier associated with the rental transaction
Amount	NUMERICS(5,2)	The total cost of the rental
Payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time the rental was paid for

2.2 Rental

Columns	Data Type	Description
Rental_id	INTEGER	A unique identifier associated with the rental transaction
Rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time the movie was rented
Inventory_id	INTEGER	A unique identifier assigned to the specific rental unit
Customer_id	SMALLINT	A unique identifier assigned to the customer
Return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time the movie was returned
Staff_id	SMALLINT	A unique identifier assigned to the staff
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time the rental data was updated

3. DIMENSION TABLES

3.1 Film_Actor

Columns	Data Type	Description
Actor_id	SMALLINT	A unique identifier assigned to an actor in a movie
Film_id	SMALLINT	A unique identifier assigned to a film
Last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date and time the data was updated

3.2 Actor

Columns	Data Type	Description
Actor_id	SERIAL	A unique identifier of an actor
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 the data was updated

3.3 Inventory

Columns	Data Type	Description
Inventory_id	SERIAL	A unique identifier assigned to the specific rental unit
Film_id	SMALLINT	A unique identifier assigned to a film
Store_id	SMALLINT	A unique identifier associated with the specific Rockbuster location
Last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date and time the data was updated

3.4 Film

Columns	Data Type	Description
Film_id	SERIAL	A unique Identifier of the film
Title	CHARACTER VARYING(45)	Title of the film
Description	TEXT	Summary of the film
Release_year	year	Year the film was released to the public
Language_id	SMALLINT	A unique identifier for the primary language spoken in the film
Rental_duration	SMALLINT	Number of days the film is rented for
Rental_rate	NUMERIC(4,2)	Cost to rent the film per day
Length	SMALLINT	How long the film is in minutes
Replacement _cost	NUMBERIC(5,2)	Cost to replace the film if it is lost
Rating	mpaa_rating	Motion Picture Association of America (MPAA) rating system
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time the data was updated

Special_features	TEXT[]	Additional features included with rental of the film
Fulltext	Tsvectop	Key words associated with the film

3.6 Language

Columns	Data Type	Description
Language_id	SERIAL	A unique identifier for the primary language spoken in the film
Name	CHARACTER VARYING(20)	Language spoken in the film
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time the data was updated

3.7 Film_Category

Columns	Data Type	Description
Film_id	SMALLINT	A unique identifier assigned to a film
Category_id	SMALLINT	A unique identifier assigned to a film category
Last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date and time the data was updated

3.8 Category

Columns	Data Type	Description
Category_id	SERIAL	A unique identifier assigned to a film category
Name	CHARACTER VARYING(25)	Name of film category/genre
Last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date and time the data was updated

3.9 Customer

Columns	Data Type	Description
Customer_id	SERIAL	A unique identifier assigned to the customer
Store_id	SMALLINT	A unique identifier associated with the specific Rockbuster location
First_name	CHARACTER VARYING(45)	First name of the customer
Last_name	CHARACTER VARYING(45)	Last name of the customer
Email	CHARACTER VARYING(45)	Email address of the customer
Address_id	SMALLINT	Unique identifier assigned to customer address

Activebool	BOOLEAN	Identifies if customer is active in the system (true/false values)
Create_date	DATE	Date the customer was first entered into the system
Last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date and time the data was updated
Active	INTEGER	Identifies if customer is active in the system (integer values)

3.10 Store

Columns	Data Type	Description
Store_id	SERIAL	A unique identifier associated with the specific Rockbuster location
Manager_staff_id	SMALLINT	A unique identifier assigned to the manager of the Rockbuster location
Address_id	SMALLINT	A unique identifier assigned to the address of the Rockbuster location
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time the data was updated

3.11 Staff

Columns	Data Type	Description
Staff_id	SERIAL	A unique identifier assigned to staff
First_name	CHARACTER VARYING(45)	First name of the staff member
Last_name	CHARACTER VARYING(45)	Last name of the staff member
Address_id	SMALLINT	Unique identifier assigned to staff member address
Email	CHARACTER VARYING(45)	Email address of the staff member
Store_id	SMALLINT	A unique identifier associated with the specific Rockbuster location
Active	BOOLEAN	Identifies if staff member is active in the system (true/false values)
Username	CHARACTER VARYING(45)	Username of the staff member
Password	CHARACTER VARYING(45)	Password of the staff member
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time the data was updated
Picture	BYTEA	Picture of the staff member

3.12 Address

Columns	Data Type	Description
Address_id	SERIAL	A unique identifier associated with staff or customer addresses
Address	CHARACTER VARYING(50)	First line of address of the staff or customer
Address2	CHARACTER VARYING(50)	Second line of address of the staff or customer
District	CHARACTER VARYING(20)	Geographic area the staff or customer resides
City_id	SMALLINT	A unique identifier associated with city where the staff or customer resides
Postal_code	CHARACTER VARYING(10)	Postal code/zip code where the staff or customer resides
Phone	CHARACTER VARYING(20)	Phone number of the staff or customer
Last_updated	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time the data was updated

3.13 City

Columns	Data Type	Description
City_id	SERIAL	A unique identifier associated with city where the staff or customer resides
City	CHARACTER VARYING(50)	Name of city the staff or customer resides
Country_id	SMALLINT	A unique identifier associated with the country where the staff or customer res
Last_updated	TIMESTAMP(6) WITHOUT TIME ZON	Date and time the data was updated

3.14 County

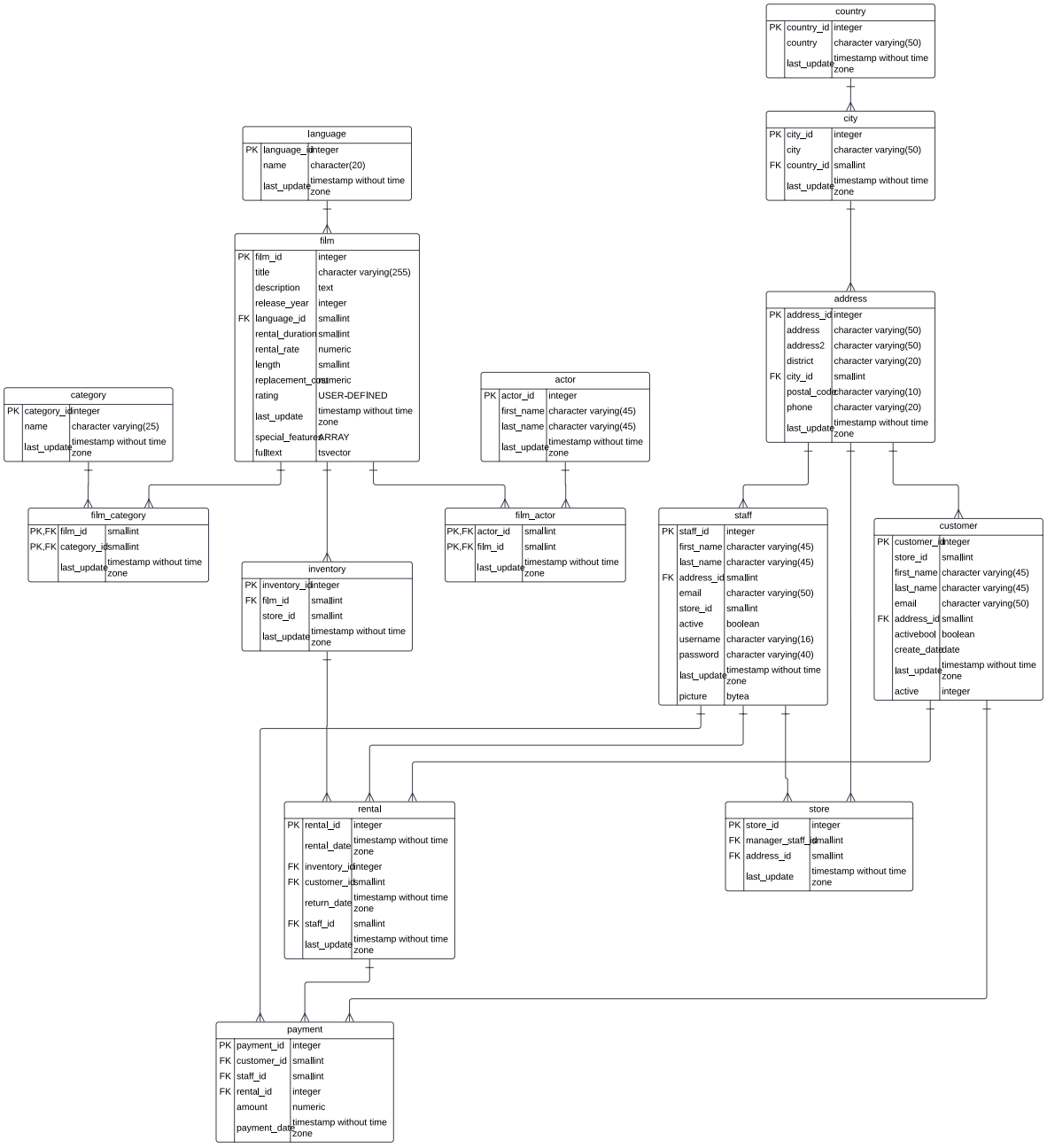
Columns	Data Type	Description
Country_id	SERIAL	A unique identifier associated with the country where the staff or customer res
Country	CHARACTER VARYING(50)	Name of the country where the staff or customer resides
Last_updated	TIMESTAMP(6) WITHOUT TIME ZON	Date and time the data was updated

4. RELATIONSHIPS AND KEYS

In the Rockbuster database, **primary keys** serve as unique identifiers for each record within a table, such as customer_id, film_id, and payment_id. **Foreign keys**, on the other hand, establish connections between tables by referencing primary keys in other tables. For example, the film_id column in the film table links to the film_actor table, creating a relationship between films and actors.

4.1 Relationships Diagram

The following diagram visually represents the key relationships between tables in the Rockbuster database:



Entity-Relationship Diagram (ERD)