ROCKBUSTER Stealth

DATA DICTIONARY | SABRENA A. LAING

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Glossary

Company Description:
Rockbuster Stealth LLC is a movie rental company that formerly operated physical stores worldwide. The company's management team intends to leverage their current movie licenses to establish an online video rental service.

Relational Database Management System:
The Rockbuster database is managed using pgAdmin4, a powerful and user-friendly GUI for PostgreSQL, which serves as the primary relational database management system for the organization.

Entity Relationship Diagram (ERD):
The Entity-Relationship Diagram (ERD) representing the structure of the relational database managed using pgAdmin4, a user-friendly GUI for PostgreSQL. It encompasses entities like Customer, Movie, Store, and License, along with their respective attributes and relationships, providing a clear overview of the data model for efficient data management and online video rental service planning.

Fact Tables:
Fact tables are entities that store ***the quantitative and numerical data***, representing business events or transactions. These events can be sales, rentals, or any measurable activity related to Rockbuster Stealth's operations. Fact tables typically contain foreign keys that link to dimension tables, and they also include measures, which are numeric values representing the performance or outcome of the events. Fact tables serve as the core of the data warehouse, enabling analysis and reporting on key business metrics.

Dimension Tables:
Dimension tables are entities that provide descriptive attributes and context to the data stored in fact tables. They contain ***the textual or qualitative data*** that categorize and describe the dimensions of the business events captured in the fact tables. For example, name, address, and contact information, and movie attributes (such as title, genre, and release date), and store information (such as location and manager's name). Dimension tables are essential for data slicing, dicing, and filtering during data analysis and reporting.

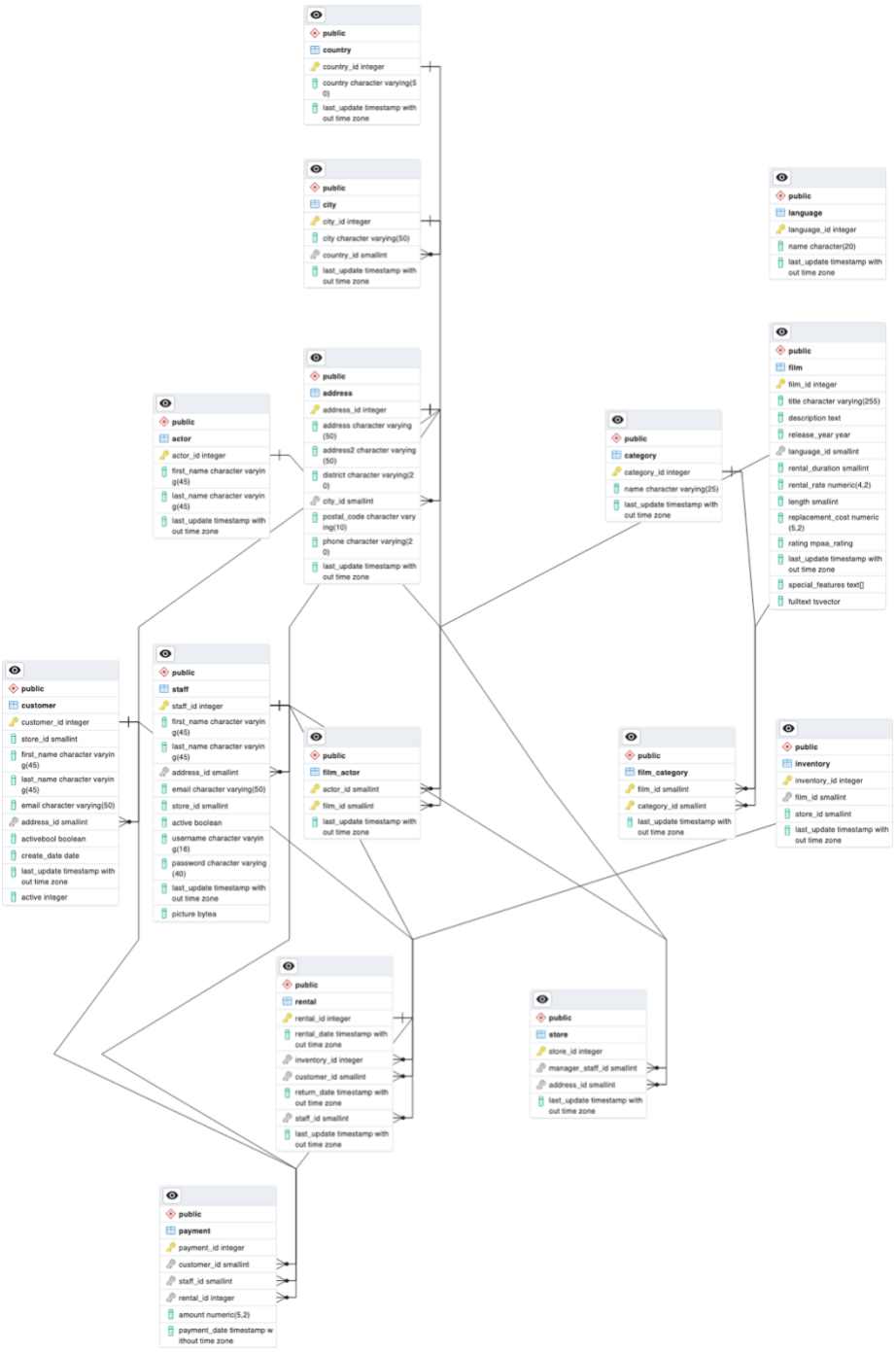
Links To:
"Links To" refers to the relationships between the fact tables and dimension tables within the database. Specifically, it denotes the foreign key columns in the fact tables that link to the primary key columns in the dimension tables. These links establish the relationships between the numerical data in the fact tables and the descriptive attributes in the dimension tables.

Links From:
"Links From" refers to the relationships between dimension tables and fact tables within the database. It represents the inverse relationship of "Links To," indicating the foreign key columns in the dimension tables that link back to the primary key columns in the fact tables.

Primary Key:
The primary key is a unique identifier assigned to each record within an entity, such as Customer, Movie, Store, or License. It serves to uniquely distinguish and access individual records in the database. The primary key ensures data integrity and facilitates efficient data retrieval and management, as it enforces uniqueness and prevents duplicate entries within the entity.

Foreign Key:
Foreign keys establish relationships between different entities within the relational database, such as the connection between Customer and Movie or Store and Movie. A foreign key is a field in one table that refers to the primary key of another table, creating a link between related data. This linkage allows for the implementation of referential integrity, ensuring that relationships between entities remain consistent and valid. Foreign keys are crucial for maintaining data integrity and enabling efficient querying and navigation across the database.

Entity Relationship Diagram:



Fact Table

RENTAL : This table captures transactional data related to rentals at Rockbuster and represents the central fact table in the schema.

Columns	Data Type	Description
rental_id 	id integer	The unique identifier for the rental.
rental_date	timestamp without time zone	The date and time when the rental transaction took place.
inventory_id 	id integer	The identifier for the inventory item being rented.
customer_id 	id smallint	The identifier for the customer who rented the item.
return_date	timestamp without time zone	The date and time when the rented item were returned.
staff_id 	id smallint	The identifier for the staff member involved in the rental transaction.
last_update	timestamp without time zone	The date and time indicating the last update made to the rental record.

Links to: INVENTORY (via inventory_id), CUSTOMER (via customer_id), STAFF (via staff_id)
Link From: None

PAYMENT : This table stores information about payments made by customers at Rockbuster.

Columns	Data Type	Description
payment_id 	id integer	The unique identifier for the payment.
customer_id 	id smallint	The identifier for the customer who made the payment.
staff_id 	Id smallint	The identifier for the staff member who processed the payment.
rental_id 	Id integer	The identifier for the rental associated with the payment.
amount	Numeric (5,2)	The amount of the payment made by the customer.
payment_date	timestamp without time zone	The date and time when the payment was made.

Link From: RENTAL (via rental_id), CUSTOMER (via customer_id), STAFF (via staff_id)
Link From: None

Dimension Table

ACTOR : This table stores information about actors involved in Rockbuster's movie collection

Columns	Data Type	Description
actor_id 	id integer	Unique identifier for each actor
First_name	character varying (45)	The first name of the actor
Last_name	character varying (45)	The last name of the actor
Last_update	timestamp without time zone	The date and time of the last update made to the actor's information.

Link To: FILM_ACTOR (via actor_id)
Link From: FILM_ACTOR (via actor_id)

ADDRESS : This table represents the addresses related to Rockbuster's movie collection.

Columns	Data Type	Description
address_id 	id integer	Unique identifier for each address.
address	character varying (50)	The primary address line.
address2 	character varying (50)	The district for the city associated with the address. It references the city table.
district	character varying (20)	The district or neighborhood associated with the address.

Links to: CITY (via city_id)
Links from: STORE (via address_id), CUSTOMER (via address_jd)

CATEGORY : This table represents the categories associated with Rockbuster's movie collection.

Columns	Data Type	Description
category_id 	id integer	Unique identifier for each category.
name	character varying (25)	The name of the category.
Last_update	timestamp without time zone	The date and time the last update made to the category information.

Link To: FILM_CATEGORY (via category_id)
Link From: FILM_CATEGORY (via category_id)

CITY : This table represents the cities related to Rockbuster's movie collection.

Columns	Data Type	Description
city_id 	id integer	Unique identifier for each city.
city	character varying (50)	The name of the city.
country_id 	id smallint	The identifier for the country associated with the city. It references the country table.
last_update	timestamp without time zone	The date and time of the last update to the city information.

Link To: COUNTRY (via country_id)
Link From: ADDRESS (via city_id)

COUNTRY : This table represents the countries related to Rockbuster's movie collection.

Columns	Data Type	Description
country_id 	id integer	Unique identifier for each country.
country	character varying (50)	The name of the country.
last_update	timestamp without time zone	The date and time of the last update made to the country information.

Link To: None
Link From: CITY (via country_id)

CUSTOMER : This table represents the customers associated with Rockbuster's movie collection.

Columns	Data Type	Description
customer_id 	id integer	Unique identifier for each customer.
store_id 	id smallint	The identifier for the store where the customer is associated. It references the store table.
first_name	character varying (45)	The first name of the customer.
last_name	character varying (45)	The last name of the customer.
email	character varying (50)	The email address of the customer.
address_id 	id smallint	The identifier for the customer's address. It references the address table.
activebool	boolean	Indicates whether the customer is currently active or not.

create_date	date	The date when the customer record was created.
last_update	update timestamp without time zone	The date and time of the last update made to the customer information.
active	integer	Indicates the customer's active status.

Link To: PAYMENT (via customer_id)
Link From: PAYMENT (via customer_id)

FILM : This table represents the films in Rockbuster's movie collection.

Columns	Data Type	Description
film_id 	pkey id integer	Unique identifier for each film.
title	character varying (255)	The title of the film.
description	text	The description or summary of the film.
release_year	year	The year when the film was realeased.
language_id 	id smallint	The identifier for the language of the film. It references the language table.
rental_duration	smallint	The duration in days for which the film can be rented.
rental_rate	numeric (4,2)	The rental rate for the film.
length	smallint	The length of the film in minutes.
replacement_cost	numeric (5,2)	The cost to replace the film if lost or damaged.
rating	mpaa_rating	The MPAA rating of the film.

last_update	Timestamp without time zone	The date and time of the last update made to the film information.
special_features	text []	An array containing special features or attributes of the film.
fulltext	tsvector	A full-text search vector associated with the film.

Link To: FILM_ACTOR (via film_id), FILM_CATEGORY (via film_id), INVENTORY (via film_id)
Link From: FILM_ACTOR (via film_id), FILM_CATEGORY (via film_id), INVENTORY (via film_id)

LANGUAGE : This table stores information about the languages used in films at Rockbuster.

Columns	Data Type	Description
language_id 	id integer	Unique identifier for the language.
name	character (20)	The name of the language.
last_update	timestamp without time zone	The date and time of the last update made to the language.

Link To: FILM (via language_id)
Link From: FILM (via language_id)

STAFF : This table stores information about staff members who work at Rockbuster.

Columns	Data Type	Description
staff_id 	id integer	The unique identifier for the staff member.
first_name	character varying (45)	The first name of the staff member.
last_name	character varying (45)	The last name of the staff member.
address_id 	id smallint	The identifier for the staff member's address, linking it to the address table.

email	character varying (50)	The email address of the staff member.
store_id	id smallint	The identifier for the store where the staff member works, referencing the store table.
active	boolean	Indicates whether the staff member is currently active or not.

Link To: STORE (via manager_staff_id)
Link From: PAYMENT (via staff_id), STORE (via manager_staff_id)

STORE : This table represents the stores in the Rockbuster database.

Columns	Data Type	Description
store_id	id integer	The unique identifier for the store.
manager_staff_id	Id smallint	The identifier for the staff member who manages the store, referencing the staff table.
address_id	Id smallint	The identifier for the store's address, linking it to the address table.
last_update	Timestamp without time zone	The date and time the last update was made to the store's record.

Link To: ADDRESS (via address_id)
Link From: STAFF (via store_id), INVENTORY (via store_id)

Association Tables (Linking Tables):

FILM ACTOR : This table represents the association between actors and films in Rockbuster's movie collection**.**

Columns	Data Type	Description
actor_id 	id smallint	Unique identifier for the actor. It references the actor table.
film_id 	id smallint	The identifier for the film. It references the film table.
last_update	Timestamp without time zone	The date and time of the last update made to the association between an actor and a film.

Link To: ACTOR (via actor_id), FILM (via film_id)
Link From: ACTOR (via actor_id), FILM (via film_id)

FILM CATEGORY : This table represents the association between films and categories in Rockbuster's movie collection**.**

Columns	Data Type	Description
film_id 	id smallint	The identifier for the film. It references the film table.
Category_id 	Id smallint	The identifier for the category. It references the category table.
Last_update	Timestamp without time zone	The date and time of the last update made to the association between film and category.

Link To: FILM (via film_id), CATEGORY (via category_id)
Link From: FILM (via film_id), CATEGORY (via category_id)

INVENTORY : This table represents the inventory of films in Rockbuster's stores**.**

Columns	Data Type	Description
inventory_id 	id integer	Unique identifier for the inventory item.
film_id 	id smallint	The identifier for the film. It references the film table.
store_id 	id smallint	The identifier for the store. It references the store table.
last_update	timestamp without time zone	The date and time of the last update made to the inventory item.

Link To: FILM (via film_id), STORE (via store_id)
Link From: FILM (via film_id), STORE (via store_id)

Sources & Associated Documents:

Rockbuster Data Set: Download the Rockcuster data set
Download PostgreSQL database

Tableau Public : Rockbuster Steath's Customer Count in the Top 10 Countries

Power Point : Rockbuster Stealth Presentation

Excel File : Data Query Outcomes.xlsx

For questions or concerns, please contact Sabrena A. Laing at:
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