Rockbuster Stealth

Data Dictionary

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1. Glossary

Relational Database -a database structured to recognize relations among stored items of information.

Relational Database Management System (RDMS) - a language that resembles English, to communicate with the data and perform operations like insert, update, delete, and select. SQL and Postgres SQL are some examples of the computer languages used to interact with (RDMS)

Entity Relationship Diagram (ERD) - a type of structural diagram for use in database design. An ERD contains different symbols and connectors that visualize two types of important information: The major entities within the system scope, and the inter-relationships among these entities.
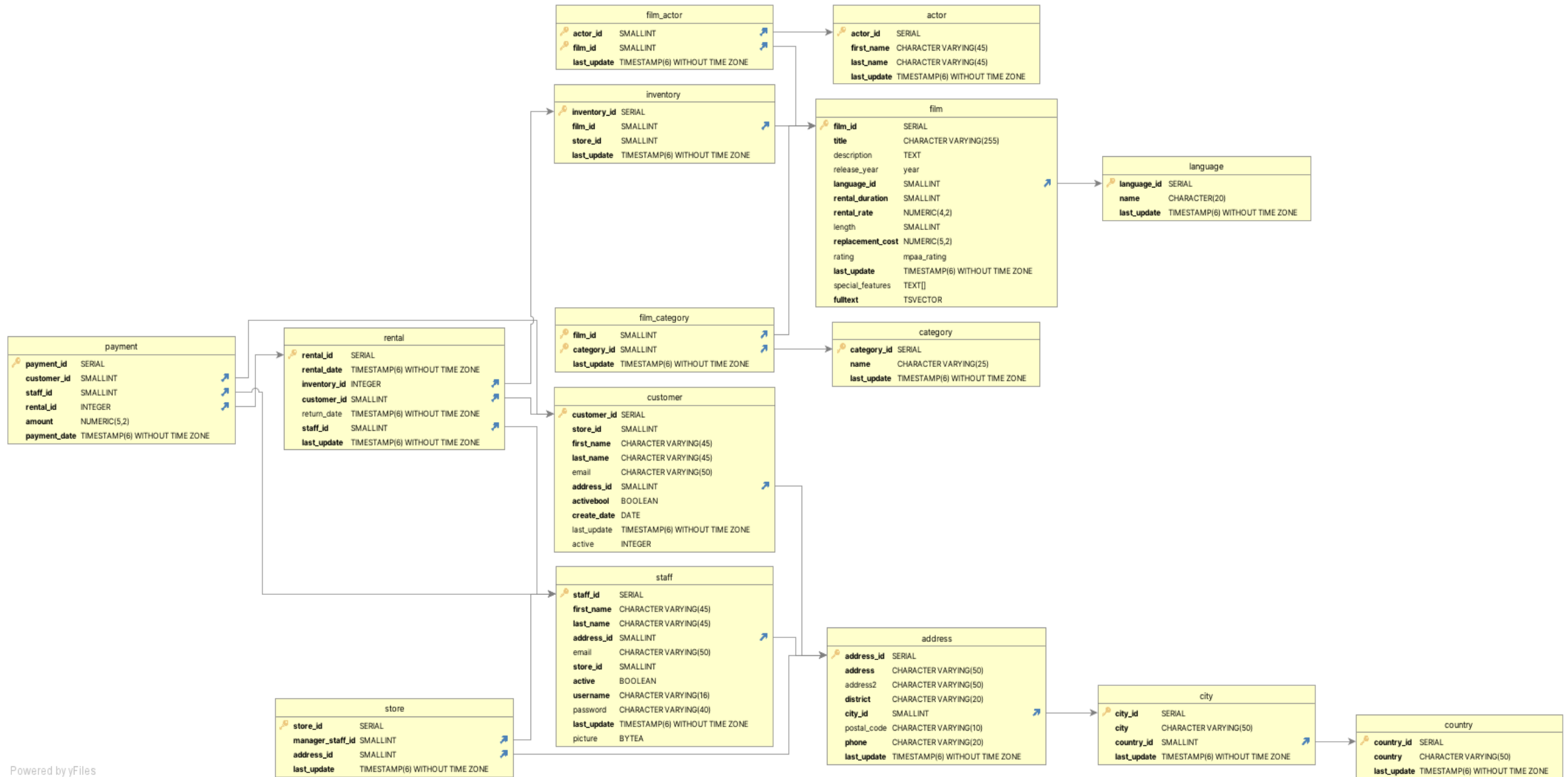
Fact Table - contains measurements, metrics, and facts about a business process, is located at the center of a star or snowflake schema, does not contain a hierarchy.

Dimension Table - contains descriptive attributes to be used as query constraining, is located at the edges of the star or snowflake schema, contains detailed data and hierarchies.

Primary Key - A primary key uniquely specifies a row of data specified by the entity. There can only be one primary key within a table, and it has to meet the following criteria: 1. It has to be unique for each row, 2. It cannot be null for any record 3. The values of the primary key can't be modified if it's linked to another table.

Foreign Key – a foreign key is a field in a table that uniquely identifies a row in another table or the same table. Foreign keys are used to establish relationships between tables and are helpful in navigating from one table to another

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3. <u>Tables</u>

3.1 Fact Tables

3.1.1 Payment Table
This table stores information about payments made by Rockbusters customers.

Name of Table	Column	Data Type	Description
Payment	payment_id	Serial	Primary key acts as Unique Payment Identifier
	customer_id	SMALLINT	Foreign key for customer ID that connects to the customer's table primary key.
	staff_id	SMALLINT	Foreign key for staff ID that connects to the staff's table primary key.
	rental_id	Integer	Foreign key for rental ID that connects to the rental's table primary key.
	amount	Numeric (5,2)	Cost of rental
	payment_date	Timestamp without time zone	Date and time record of payment made

3.1.2
Rental Table

This table stores information about rentals made by made by Rockbusters customers.

Name of Table	Column	Data Type	Description
Rental	rental_id	Serial	Primary key that acts as a unique identifier for rental records
	rental_date	Timestamp without time zone	Date of when the rental was made.
	inventory_id	Integer	Foreign key for inventory ID that connects to the inventory's table primary key.
	customer_id	smallint	Foreign key for customer ID that connects to the customer's table primary key.
	return_date	Timestamp without time zone	Date of when the rented film was returned.
	staff_id	Small int	Foreign key for staff ID that connects to the staff's table primary key
	last_update	Timestamp without time zone	Date and time of the rental record was last updated.

3.2 Dimension Tables

3.2.1 Actor Table

The table contains the first and last names of actors who appear in films from Rockbusters library.

Name of Table	Column	Data Type	Description
Actor Table	actor_id 🔑	integer	A primary key that acts as a unique identifier for actor records
	first_name	character varying(45)	actors first name
	last_name	character varying(45)	actors last name
	last update	Timestamp without time zone	Date and time of the last time the records were updated.

Links from Film_actor (actor_id)

3.2.2 Address Table

The table contains address data of people associated with the company, employees and clients.

Name of Table	Column	Data Type	Description
Address Table	address_id 🔑	integer	Primary key that acts as a unique identifier for address records
	address	character varying(50)	Primary address
	address2	character varying(50)	additional address (optional)
	district	character varying(50)	District name
	city_id 🔑	smallint	Foreign key for City ID that connects to the City's table primary key.
	postal_code	character varying(10)	postal code
	phone	character varying(20)	phone number
	last_update	Timestamp without time zone	Date and time of the last time the records were updated.

Links to City (city_id)
Links from Staff (address_id), store (address_id), customer (address_id)

3.2.3 Category Table
This table contains categories of movies from Rockbuster's library.

Name of Table	Column	Data Type	Description
Category Table	category_id 🔑	integer	A primary key that acts as a unique identifier for language records
	name	character varying(25)	films genre
	last_update	Timestamp without time zone	Date and time of the last time the records were updated.

Links from Film_category (category_id)

3.2.4 City Table
This table contains cities the cities related to Rockbusters movie collection.

Name of Table	Column	Data Type	Description
City Table	city_id 🔑	integer	Primary key that acts as a unique identifier for city records
	city	character varying(50)	name of the city
	country_id 🔑	smallint	Foreign key for country ID that connects to the country's table primary key
	last_update	Timestamp without time zone	Date and time of the last time the records were updated.

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3.2.5 Country Table

This table contains countries the cities related to Rockbusters movie collection.

Name of Table	Column	Data Type	Description
Country Table	country_id 🔑	integer	Primary key that acts as a unique identifier for country records
	country	character varying(50)	name of country
	last_update	Timestamp without time zone	Date and time of the last time the records were updated.

3.2.6 Customer Table
This table contains data about Rockbusters customers.

Name of Table	Column	Data Type	Description
Customer Table	customer_id	integer	Primary key that acts as a unique identifier for customers records
	store_id	smallint	Unique identifier of store
	first_name	character varying(45)	First name of customer
	last_name	character varying(45)	Last name of customer
	email	character varying(50)	Email address of customer
	address_id	smallint	Foreign key for address ID that connects to the address's table primary key
	activebool	boolean	categorize customers as true "active" and false "not active."
	create_date	date	Record of the date the customer subscribed.
	last_update	Timestamp without time zone	Date and time of the last time the customer was active
	active	integer	code of the customer active use (1) for active and (0) for not active.

Links to Store (store_id), address (address_id)
Links from Payment (customer_id), rental (customer_id)

3.2.7 Film Table

This table contains data about movies from the Rockbusters library.

Name of Table	Column	Data Type	Description
Film Table	film_id	integer	A primary key that acts as a unique identifier for film records
	title	character varying(255)	film name
	description	text	Film description (only in text)
	release_year	integer	the year the film was released
	language_id	smallint	The foreign key for language ID connects to the language's table primary key.
	rental_duration	smallint	number of days the film was rented.
	rental_rate	numeric	the film rate (out of 5)
	length	smallint	film length in min.
	replacement_cost	numeric	cost of film replacement
	rating	USER-DEFINED	age restrictions (e.g., PG-13)
	last_update	Timestamp without time zone	Date and time of the last time the records were updated.
	special_features	ARRAY	videos related to the film (e.g., trailers)
	fulltext	tsvector	a string of text into tokens that are used for searching.

Links to Language (language_id)
Links from Film_actor (film_id), inventory (film_id), film_category (film_id)

3.2.8 Film actor Table

This table represents the association between actors and films in Rockbuster's movie library.

Name of Table	Column		Data Type	Description
Film_Actor Table	actor_id	🔑	smallint	The foreign key for actor ID connects to the actor's table primary key.
	film_id	🔑	smallint	The foreign key for film ID connects to the film's table primary key.
	last_update		Timestamp without time zone	Date and time of the last time the records were updated.

Links to Film (film_id)

3.2.9 Film category Table

This table represents the association between films and categories in Rockbuster's movie library.

Name of Table	Column		Data Type	Description
Film_Category Table	film_id	🔑	smallint	The foreign key for film ID connects to the film's table primary key.
	category_id	🔑	smallint	The foreign key for category ID connects to the category's primary key.
	last_update		Timestamp without time zone	Date and time of the last time the records were updated

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Links to Film (film_id), category (category_id)

3.2.10 Inventory Table
This table contains inventory data of Rockbuster's movie library.

Name of Table	Column	Data Type	Description
Inventory Table	inventory_id	integer	A primary key that acts as a unique identifier for inventory records
	film_id	smallint	The foreign key for film ID connects to the film's table primary key.
	store_id	smallint	Unique identifier of store
	last update	Timestamp without time zone	Date and time of the last time the records were updated.

Links to Film (film_id), Store (store_id)
Links from Rental (inventory_id)

3.2.11 Language Table

This table contains data about languages of movies from the Rockbusters library.

Name of Table	Column	Data Type	Description
Language Table	language_id	integer	A primary key that acts as a unique identifier for language records
	name	character(20)	film's language name.
	last update	Timestamp without time zone	Date and time of the last time the records were updated.

Links from Film (language_id)

3.2.12 Staff Table
This table contains data about staff members of Rockbuster.

Name of Table	Column	Data Type	Description
Staff Table	staff_id 🔑	integer	Primary key that acts as a unique identifier for staff records
	first_name	character varying(45)	staff first name
	last_name	character varying(45)	staff last name
	address_id 🔑	smallint	Foreign key for address ID that connects to the address's table primary key.
	email	character varying(50)	staff email address
	store_id	smallint	Unique identifier of store
	active	boolean	Categorize staff as true "active" and false "not active."
	username	character varying(16)	username of staff account
	password	character varying(40)	password of staff account
	last_update	Timestamp without time zone	Date and time of the last time the records were updated.
	picture	bytea	staff's account profile picture.

3.2.13 Store Table
This table contains data about stores of Rockbuster.

Name of Table	Column		Data Type	Description
Store Table	store_id	🔑	integer	Primary key that acts as a unique identifier for store records
	manager_staff_id	🗝	smallint	Foreign key for manager staff ID that connects to the staff's table primary key.
	address_id	🗝	smallint	Foreign key for address ID that connects to the address's table primary key.
	last update		Timestamp without time zone	Date and time of the last time the records were updated.

Links to Address (address_id)
Links from Staff (store_id), inventory (store_id)