

Data Dictionary

RockBuster Stealth LLC.



Achievement 3.10 | Presenting SQL Results

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Data Set Glossary.

Data Set

This data set that contains information about Rockbuster's film inventory, customers, and payments, staff, addresses among other things. A relationship exists between two tables if a column name is present in both tables.

Primary Key

The primary key is a column or set of columns that acts as a unique identifier for each record in a table. There can only be one primary key within a table, and it has to meet the following criteria. Primary Keys will be highlighted in black and defined as (PK) at the end of the *description* column.

Foreign Key

A foreign key is a column, or set of columns, that refers to the primary key in another table. Foreign keys are used to establish relationships between tables and are helpful in navigating from one table to another. Foreign Keys will be highlighted in blue and defined as (FK) at the end of the *description* column.

Unique Key

Is a constraint in a database that ensures all values in a specific column, or combination of columns, are distinct across all rows in a table. It is used to prevent duplicates and to help identify records uniquely. Can be more than one.

Relational Database Schema: Entity Relationship Diagram (ERD)

An entity relationship diagram (ERD) illustrates the links between the tables in a relational database.

Fact Tables

A fact table stores quantitative data related to business events. It contains the core measurements (facts) of a process and foreign keys that link to the relevant dimension tables. They represent events or transactions and hold numeric values.

Dimension Tables

Contains descriptive attributes related to the dimensions of a business process. These provide context for facts and allow users to slice and filter data in meaningful ways. Contains categorical or textual data.

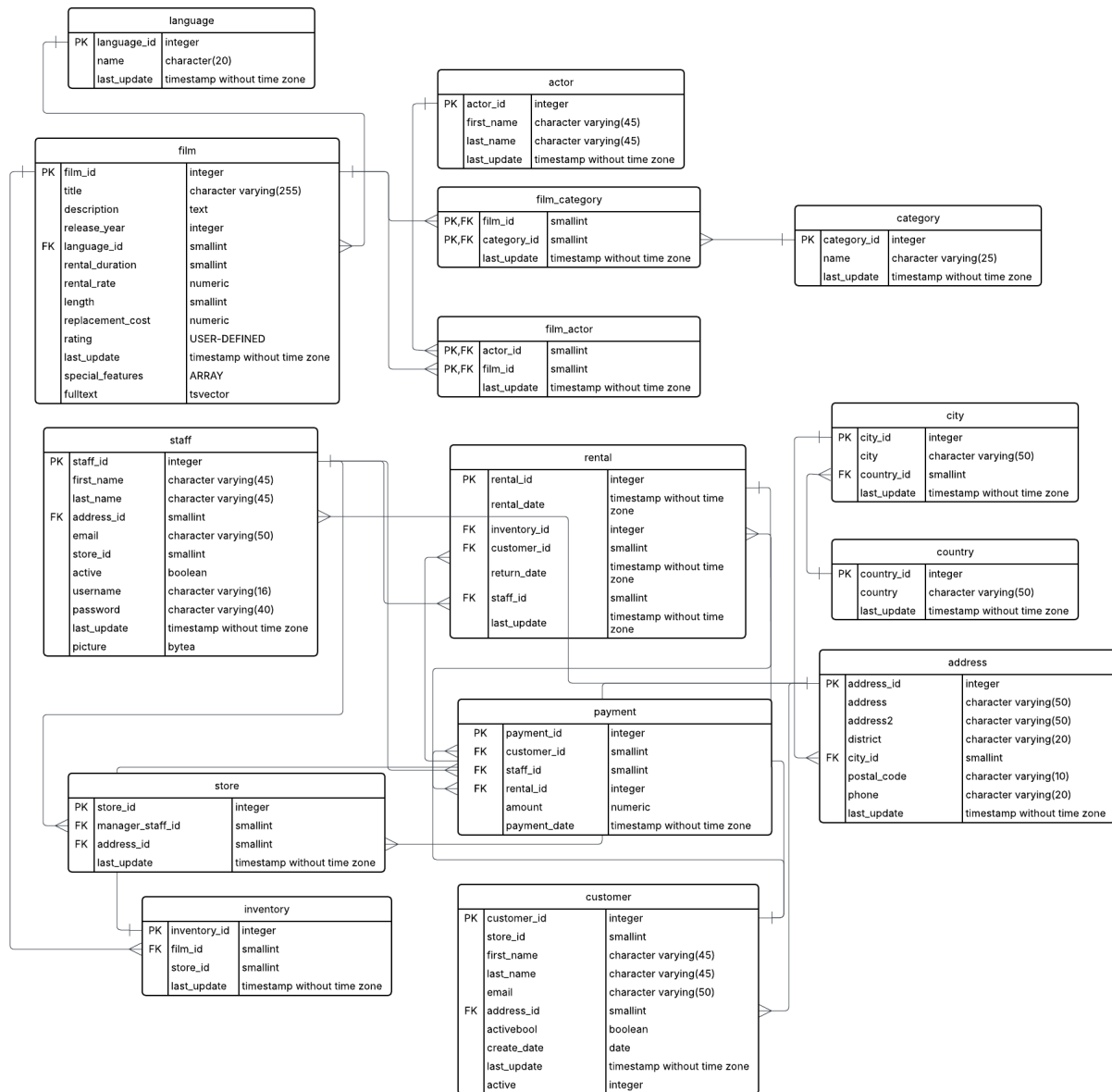
Links to

The table contains a Foreign Key that points to another table's Primary Key.

Links from

Other tables have Foreign Keys that point to this table's Primary Key.

ERD.



Fact Tables.

Fact Tables			
Name	Columns	Data type	Description / Key
payment	payment_id	INTEGER	number Id of each payment (PK)
	customer_id	SMALLINT	number id of each customer (FK)
	staff_id	SMALLINT	1 or 2 values (FK)
	rental_id	INTEGER	number id of rental (FK)
	amount	NUMERIC	value
	payment_date	TIMESTAMP W/O TIME ZONE	date of payment
rental	rentail_id	INTEGER	number id of rental (PK)
	rental_date	TIMESTAMP W/O TIME ZONE	rental date
	inventory_id	INTEGER	inventory number id (FK)
	customer_id	SMALLINT	customer number id (FK)
	return_date	TIMESTAMP W/O TIME ZONE	return date
	staff_id	SMALLINT	1 or 2 values (FK)
	last_update	TIMESTAMP W/O TIME ZONE	last update date

Dimension Tables.

Dimension Tables			
Name	Columns	Data type	Description / Key
film	film_id	INTEGER	id number of film (PK)
	title	CHARACTER VARYING (255)	film title
	description	TEXT	short description of film
	release_year	INTEGER	year
	language_id	SMALLINT	number id of language (FK)
	rental_duration	SMALLINT	value of rental duration in days
	rental_date	NUMERIC	rental date
	length	SMALLINT	length of film
	replacement_cost	NUMERIC	price of replacement
	rating	USER-DEFINED	rating
	last_update	TIMESTAMP W/O TIME ZONE	time of last update
	special_features	ARRAY	extra features
	fulltext	TSVECTOR	key words
staff	staff_id	INTEGER	Staff id number 1-2 (PK)
	first_name	CHARACTER VARYING (45)	first name
	last_name	CHARACTER VARYING (45)	second name
	address_id	SMALLINT	address number id (FK)
	email	CHARACTER VARYING (50)	email
	store_id	SMALLINT	number id of each store
	active	BOOLEAN	true or false
	username	CHARACTER VARYING(16)	user name
	password	CHARACTER VARYING(40)	staff member password
	last_update	TIMESTAMP W/O TIME ZONE	last update date and time
	picture	BYTEA	pictures data
address	adress_id	INTEGER	unique number id of address (PK)
	address	CHARACTER VARYING (50)	address
	address2	CHARACTER VARYING (50)	NULL/ empty
	district	CHARACTER VARYING(20)	district
	city_id	SMALLINT	city id number (FK)
	postal_code	CHARACTER VARYING (10)	postal code number
	phone	CHARACTER VARYING(20)	phone number
	last_update	TIMESTAMP WITHOUT TIME ZONE	last update time and date
country	country_id	INTEGER	id number of each country (PK)
	country	CHARACTER VARYING(50)	country name
	last_update	TIMESTAMP WITHOUT TIME ZONE	time and date of last update
city	city_id	INTEGER	city id number (PK)
	city	CHARACTER VARYING(50)	city name
	country_id	SMALLINT	country id number (FK)
	last_update	TIMESTAMP W/O ZONE	time and date of last update

Dimension Tables.

Dimension Tables			
Name	Columns	Data type	Description / Key
category	category_id	INTEGER	category id number (PK)
	name	CHARACTER VARYING(25)	category name
	last_update	TIMESTAMP WITHOUT TIME ZONE	time and date of last update
actor	actor_id	INTEGER	actor assigned id number (PK)
	first_name	CHARACTER VARYING(45)	actors first name
	last_name	CHARACTER VARYING(45)	actor second name
	last_update	TIMESTAMP WITHOUT TIME ZONE	time and date of last update
film_category	film_id	SMALLINT	film number id (PK) (FK)
	category_id	SMALLINT	category number id (PK) (FK)
	last_update	TIMESTAP WITHOUT TIME ZONE	time and date of last update
film_actor	actor_id	SMALLINT	actor number id (PK) (FK)
	film_id	SMALLINT	film number id (PK) (FK)
	last_update	TIMESTAMP WITHOUT TIME ZONE	time and date of last update
store	store_id	INTEGER	number id 1 or 2 (PK)
	manager_staff_id	SMALLINT	number id 1or 2 (FK)
	address_id	SMALLINT	number id 1 or 2 (FK)
	last_update	TIMESTAMP WITHOUT TIME ZONE	time and date of last update
customer	customer_id	INTEGER	customer number id (PK)
	store_id	SMALLINT	store number id 1 or 2
	first_name	CHARACTER VARYING(45)	customer first name
	last_name	CHARACTER VARYING(45)	customer last name
	email	CHARACTER VARYING(40)	email
	address_id	SMALLINT	address id number (FK)
	activebool	BOOLEAN	true or false
	create_date	DATE	date of creation
	last_update	TIME STAMP WITHOUT TIME ZONE	time and date of last update
inventory	inventory_id	INTEGER	inventory number id (PK)
	film_id	SMALLINT	film number id (FK)
	store_id	SMALLINT	store number id
	last_update	TIMESTAMP W/O TIME ZONE	time and date of last update
language	language_id	INTEGER	id number of language (PK)
	name	CHARACTER VARYING(20)	name of language
	last_update	TIME STAMP WITHOUT TIME ZONE	time and date of last update

Table links.

- ***Table: film***

Unique Key: film_id

Links From:

- inventory via film_id
- film_actor via film_id
- film_category via film_id

Links To:

- language via language_id

- ***Table: actor***

Unique Key: actor_id

Links From:

- film_actor via actor_id

Links To: 0

- ***Table: film_actor***

Unique Key: actor_id + film_id

Links From: 0

Links To:

- film via film_id
- actor via actor_id

- ***Table: inventory***

Unique Key: inventory_id

Links From:

- rental via inventory_id

Links To:

- film via film_id
- store via store_id

- ***Table: rental***

Unique Key: rental_id

Links From:

- payment via rental_id

Links To:

- inventory via inventory_id
- customer via customer_id
- staff via staff_id

- ***Table: customer***

Unique Key: customer_id

Links From:

- rental via customer_id
- payment via customer_id

Links To:

- address via address_id
- store via store_id

- ***Table: payment***

Unique Key: payment_id

Links From: 0

Links To:

- customer via customer_id
- staff via staff_id
- rental via rental_id

- ***Table: staff***

Unique Key: staff_id

Links From:

- rental via staff_id
- payment via staff_id
- store via staff_id

Links To:

- address via address_id
- store via store_id

- ***Table: store***

Unique Key: store_id

Links From:

- customer via store_id
- inventory via store_id

Links To:

- staff via staff_id
- address via address_id

- ***Table: address***

Unique Key: address_id

Links From:

- staff via address_id
- store via address_id
- customer via address_id

Links To:

- city via city_id

- ***Table: city***

Unique Key: city_id

Links From:

- address via city_id

Links To:

- country via country_id

- ***Table: country***

Unique Key: country_id

Links From:

- city via country_id

Links To: 0

- ***Table: category***

Unique Key: category_id

Links From:

- film_category via category_id

Links To: 0

- ***Table: film_category***

Unique Key: film_id, category_id

Links From: 0

Links To: film via film_id,
category via category_id

- ***Table: language***

Unique Key: language_id

Links From: film via language_id

Links To: 0