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Exercise 3.10 Data Dictionary
Presenting SQL Results
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Rockbuster

Data

Dictionary



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Entity Relationship Diagram







The Rockbuster ERD is a snowflake schema since the Rental fact table is linked to dimension tables then linked to sub dimension tables.

Legend

Primary Key - 
 Foreign Key - 

Fact Table:





Rental Table

	Columns	Data Type	Description
	rental_id	Serial	Number assigned to transaction
	rental_date	Timestamp (6) without Time Zone	Date of movie rental
	inventory_id	Integer	Number assigned to movie
	customer_id	Smallint	Number assigned to customer
	return_date	Timestamp (6) without Time Zone	Date customer returned rental
	staff_id	Smallint	Number assigned to staff
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated

Links to table:	Join:
Inventory	rental.inventory_id = inventory.inventory_id
Customer	rental.customer_id = customer.customer_id
Staff	rental.staff_id = staff.staff_id




Dimension Tables:

Payment

	Columns	Data Type	Description
	payment_id	Serial	Number assigned to payment transaction
	customer_id	Smallint	Number assigned to customer
	staff_id	Smallint	Number assigned to staff
	rental_id	Integer	Number assigned to rental transaction
	amount	Numeric (5,2)	Amount for movie rental
	payment_date	Timestamp (6) without Time Zone	Date of transaction





Links to table:	Join:
customer	payment.customer_id = customer.customer_id
staff	payment.staff_id = staff.staff_id
rental	payment.rental_id = rental.rental_id

Store

	Columns	Data Type	Description
	store_id	Serial	Number assigned to Rockbuster store
	manager_staff_id	Smallint	Number assigned to store manager
	address_id	Smallint	Store address
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated



Links to table:	Join:
address	store.address_id = address.address_id
staff	store.address_id = staff.address_id

Film_Actor

	Columns	Data Type	Description
 	actor_id	smallint	Number assigned to actor
 	film_id	smallint	Number assigned to film
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated

Links to table:	Join:
actor	film_actor.actor_id = actor.actor_id
film	film_actor.film_id = film.film_id



Inventory

	Columns	Data Type	Description
	inventory_id	serial	Number assigned to movie
	film_id	smallint	Number assigned to film
	store_id	smallint	Number assigned to Rockbuster store
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated

Links to table:	Join:
film	inventory.film_id = film.film_id



Links from table:	Join:
rental	rental.inventory_id = inventory.inventory_id

Film_Category

	Columns	Data Type	Description
	film_id	Smallint	Number assigned to film
	category_id	Smallint	Movie genre id number
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated

Links to table:	Join:
category	film.category.category_id = category.category_id
film	film.category.film_id = film.film_id


Customer


	Columns	Data Type	Description
	customer_id	Serial	Number assigned to customer
	store_id	smallint	Number assigned to Rockbuster store
	first_name	Character Varying (45)	Customers first name
	last_name	Character Varying (45)	Customers last name
	email	Character Varying (50)	Customer email address
	address_id	smallint	Number assigned to customer address
	activebool	Boolean	Active: True or False
	create_date	Date	Date customer account added to database
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated
	active	Interger	Account active (1,0)

Links to table:	Join:
address	customer.address_id = address.address_id

Links from table:	Join:
rental	rental.customer_id = customer.customer_id
payment	payment.customer_id = customer.customer_id

Staff


	Columns	Data Type	Description
	staff_id	Serial	Number assigned to staff
	first_name	Character Varying (45)	Staff first name
	last_name	Character Varying (45)	Staff last name

	address_id	smallint	Number assigned to staff address
	email	Character Varying (50)	Staff email address
	store_id	smallint	Number assigned to Rockbuster store
	active	Boolean	Active: True or False
	username	Character Varying (16)	Staff username in system
	password	Character Varying (40)	Staff password in system
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated
	picture	Bytea	Staff picture

Links to table:	Join:
address	staff.address_id = address.address_id



Links from table:	Join:
rental	rental.staff_id = staff.staff_id
payment	payment.staff_id = staff.staff_id
store	store.address_id = staff.address_id

Actor

	Columns	Data Type	Description
	actor_id	smallint	Number assigned to actor
	first_name	Character Varying (45)	Actor first name
	last_name	Character Varying (45)	Actor last name
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated

Links from table:	Join:
film_actor	film_actor.actor_id = actor.actor_id

Film


	Columns	Data Type	Description
	film_id	Smallint	Number assigned to film
	title	Character Varying (255)	Title of movie
	description	Text	Description of movie rental
	release_year	year	Movie release date
	language_id	Smallint	Number assigned to language in movie rental
	rental_duration	Smallint	Duration of movie rental

	rental_rate	Numeric(4,2)	Price of movie rental
	length	Smallint	Length of movie
	replacement_cost	Numeric (5,2)	Cost to replace movie rental
	rating	mpaa_rating	Movie rating
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated
	special_features	Text	Special features included in movie rental
	fulltext	Tsvector	Keywords customers can search for film

Links to table:	Join:
language	film.language_id = language.language_id


Links from table:	Join:
film_actor	film_actor.film_id = film.film_id
film_category	film_category.film_id = film.film_id
inventory	inventory.film_id = film.film_id

Language

	Columns	Data Type	Description
	language_id	Serial	Number assigned to language
	name	Character Varying (20)	Name of language
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated


Links from table:	Join:
film	film.language_id = language.language_id


Category

	Columns	Data Type	Description
	customer_id	Serial	Number assigned to customer
	name	Character Varying (25)	Name of genre
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated

Links from table:	Join:
film_category	film_category.category_id = category.category_id

Address



	Columns	Data Type	Description
	address_id	Serial	Number assigned to address

	address	Character Varying (50)	Street address
	address2	Character Varying (50)	Street address continued
	district	Character Varying (20)	District address is located
	city_id	Smallint	City address is located in
	postal_code	Character Varying (10)	address zip code
	phone	Character Varying (20)	Phone number to address
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated

Links to table:	Join:
city	address.city_id = city.city_id

Links from table:	Join:
store	store.address_id = address.address_id
customer	customer.address_id = address.address_id
staff	staff.address_id = address.address_id


City

	Columns	Data Type	Description
	city_id	Serial	Number assigned to city
	city	Character Varying (50)	Name of city
	country_id	Smallint	Number assigned to country
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated

Links to table:	Join:
country	city.country_id = country.country_id

Links from table:	Join:
address	address.city_id = city.city_id

Country

	Columns	Data Type	Description
	Country_id	Serial	Number assigned to country
	Country	Character Varying (50)	Name of country
	last_update	Timestamp (6) without Time Zone	Date/time table was last updated

Links from table:	Join:
city	city.country_id = country.country_id