

ROCKBUSTER



STEALTH

Data dictionary

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1. Entity Relationship Diagram







2.Tables




2.1 Payment tables

2.1.1 Payment table – Fact table

Payment amount, date, and numerical IDs of payment, customer, staff, and rental.





	Variable	Data type	Description
	Payment_id	Integer	Unique identifier of payment. Primary key.
	Customer_id	Smallint	Unique identifier of customer. Foreign key.
	Staff_id	Smallint	Unique identifier of staff member. Foreign key.
	Rental_id	Integer	Unique identifier for rental transaction. Foreign key.
	Amount	Numeric (5,2)	Amount paid by customer.
	Payment_date	Timestamp without time zone	Payment date (YYYY-MM-DD HH:MM:SS) irrespective of time zone.

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

2.1.2 Rental table – Dimension table




Movie rental transactions corresponding to inventory, customer, and staff member.

Name				Data type	Description
	Rental_id	Integer	Unique identifier for rental transaction. Primary key.		
	Rental_date	Timestamp without time zone	Rental start date (YYYY-MM-DD HH:MM:SS) irrespective of time zone.		
	Inventory_id	Integer	Unique identifier of inventory item. Foreign key.		
	Customer_id	Smallint	Unique identifier of customer. Foreign key.		
	Return_date	Timestamp without time zone	Rental end date (YYYY-MM-DD HH:MM:SS) irrespective of time zone.		
	Staff_id	Smallint	Unique identifier of staff member. Foreign key.		
	Last_update	Timestamp without time zone	Last update of rental record (YYYY-MM-DD HH:MM:SS) irrespective of time zone.		

Linked from

Table		Join
	Payment	rental.rental_id = payment.rental_id




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



2.2 People tables

2.2.1 Customer table – Dimension table

Customer name, contact information, location and active status.

	Variable	Data type	Description
	Customer_id	Integer	Unique identifier of customer. Primary key
	Store_id	Smallint	Unique identifier of rental store. Foreign key.
	First_name	Character varying (45)	First name of customer.
	Last_name	Character varying (50)	Last name of customer.
	Email	Character varying (50)	Email of customer.
	Address_id	Smallint	Unique identifier of customer address. Foreign key.
	Activebool	Boolean	Status if customer is active or not.
	Create_date	Date	Date (YYYY-MM-DD) of customer entry into system.
	Last_update	Timestamp without time zone	Last update of customer record (YYYY-MM-DD HH:MM:SS) irrespective of time zone.
	Active	Integer	Integer of customer active status.

Linked from




	Table	Join
	Payment	Customer.customer_id = payment.customer_id
	Rental	Customer.customer_id = rental.customer_id

Links to




Table		Join
	Address	Customer.address_id = address.address_id

2.2.2 Staff table – Dimension table


Employee database containing staff name contact information, address, store location and login details.

	Variable	Data type	Description
	Staff_id	Integer	Unique identifier of staff member. Primary key.
	First_name	Character varying (45)	First name of staff member.
	Last_name	Character varying (45)	Last name of staff member.
	Address_id	Smallint	Unique identifier of staff address. Foreign key.
	Email	Character varying (50)	Email of staff member.
	Store_id	Smallint	Unique identifier of rental store. Foreign key.
	Active	Boolean	Status if staff member is active with company or not.
	Username	Character varying (16)	Username of staff member in online system.
	Password	Character varying (40)	Password of staff member in online system.
	Last_update	Timestamp without time zone	Last update of staff member record (YYYY-MM-DD HH:MM:SS) irrespective of time zone.
	Picture	Bytea	Picture of staff member.

Linked from

Table		Join
	Rental	Staff.staff_id = rental.staff_id
	Payment	Staff.staff_id = payment.staff_id
	Store	Staff.staff_id = store.manager_staff_id




Links to

Table		Join
	Address	Staff.address_id = address.address_id

2.3 Location tables

2.3.1 Store table – Fact table

Store locations and managing staff identification.



Variable		Data type	Description
	Store_id	Integer	Unique identifier of rental store. Primary key.
	Manager_staff_id	Smallint	Unique identifier of manager staff member. Foreign key.
	Address_id	Smallint	Unique identifier of store where purchase was made. Foreign key.
	Last_update	Timestamp without time zone	Last update of store record (YYYY-MM-DD HH:MM:SS) irrespective of time zone.

Links to




Table		Join
	Staff	Store.manager_staff_id = staff.staff_id
	Address	Store.address_id = address.address_id

2.3.2 Address table – Dimension table

Table containing customer, staff, and store addresses.

	Variable	Data type	Description
	Address_id	Integer	Unique identifier for customer or staff address. Primary key.
	Address	Character varying (50)	Customer or staff address.
	Address2	Character varying (50)	Second line of customer or staff address.
	District	Character varying (50)	District address is located in.
	City_id	Smallint	Unique identifier of city location. Foreign key.
	Postal_code	Character varying (10)	Postal code of address.
	Phone	Character varying (20)	Phone number of customer or staff member.
	Last_update	Timestamp without time zone	Last update of address (YYYY-MM-DD HH:MM:SS) irrespective of time zone.

Linked from



Table		Join
	Customer	Address.address_id = customer.address_id
	Staff	Address.address_id = staff.address_id
	Store	Address.address_id = store.address_id

Links to

Table		Join
	City	Address.city_id = city.city_id

2.3.3 City table – Dimension table

City locations of customers and staff.

	Variable	Data type	Description
	City_id	Integer	Unique identifier of city location. Primary key.
	City	Character varying (50)	Name of city.
	Country_id	Smallint	Unique identifier of country location. Foreign key.
	Last_update	Timestamp without time zone	Last update of city (YYYY-MM-DD HH:MM:SS) irrespective of time zone.

Linked from


Table		Join
	Address	City.city_id = address.city_id

Links to

Table		Join
	Country	City.country_id = country.country_id

2.3.4 Country table – Dimension table

Country locations of customer and staff addresses.

Variable	Data type		Description
	Country_id	Integer	Unique identifier of country location. Primary key.
	Country	Character varying (50)	Name of country.
	Last_update	Timestamp without time zone	Last update of country (YYYY-MM-DD HH:MM:SS) irrespective of time zone.




Linked from

Table		Join
	City	Country.country_id = city.country_id

2.4 Film tables

2.4.1 Inventory table – Dimension table



Unique identifiers of inventory and film numbers and which stores they are located in.

	Variable	Data type	Description
	Inventory_id	Integer	Unique identifier for inventory item. Primary key.
	Film_id	smallint	Unique identifier of film in inventory. Foreign key
	Store_id	Smallint	Unique identifier of rental store. Foreign key.
	Last_update	Timestamp without time zone	Last update of inventory item (YYYY-MM-DD HH:MM:SS) irrespective of time zone.

Linked from

Table		Join
	Rental	Inventory.inventory_id = rental.inventory_id

Links to




Table		Join
	Film	Inventory.film_id = film.film_id
	Store	Inventory.store_id = store.store_id

2.4.2 Film table – Dimension table


Database of films in company inventory and their various characteristics.

	Variable	Data type	Description
	Film_id	Integer	Unique identifier of film. Primary key.
	Title	Character varying (255)	Title of film.
	Description	Text	Short description of film plot.
	Release_year	Integer	Year film released.
	Language_id	Smallint	Unique identifier of film language. Foreign key.
	Rental_duration	Smallint	Average number in days of rental length.
	Rental_rate	Numeric (4,2)	Film customer ranking out of 5.
	Length	Smallint	Length of movie in minutes.
	Replacement_cost	Numeric (5,2)	Cost in dollars to replace film.
	Rating	Mpaa_rating	Motion picture association audience suitability rating.
	Last_update	Timestamp without time zone	Last update of film record (YYYY-MM-DD HH:MM:SS) irrespective of time zone.
	Special_features	Text	Other included film content in addition to the film disc.
	Fulltext	Tsvector	Index of film features.

Linked from



	Table	Join
	Film_actor	Film.film_id = film_actor.film_id
	Inventory	Film.film_id = inventory.film_id
	Film_category	Film.film_id = film_category.film_id

Links to

	Table	Join
	Language	Film.language_id = language.language_id

2.4.3 Film actor table – Fact table

Unique identifiers of film actors


	Variable	Data type	Description
	Actor_id	Smallint	Unique identifier of film actor. Primary key.
	Film_id	Smallint	Unique identifier of film in inventory. Foreign key.
	Last_update	Timestamp without time zone	Last update of film record (YYYY-MM-DD HH:MM:SS) irrespective of time zone.

Links to

	Table	Join
	Actor	Film_actor.actor_id = actor.actor_id
	Film	Film_actor.film_id = film.film_id

2.4.4 Actor table – Dimension table

Movie actor numerical identifier and name.



	Variable	Data type	Description
	Actor_id	Integer	Unique identifier of film actor. Primary key.
	First_name	Character varying (45)	First name of actor.
	Last_name	Character varying (45)	Last name of actor.
	Last_update	Timestamp without time zone	Last update of actor record (YYYY-MM-DD HH:MM:SS) irrespective of time zone.

Linked from

	Table	Join
	Film_actor	Actor.actor_id = film_actor.actor_id

2.4.5 Film category table – Fact table

Corresponding film genres for each movie.


	Variable	Data type	Description
	Film_id	Smallint	Unique identifier of film in inventory. Primary key.
	Category_id	Smallint	Unique identifier of film category. Foreign key.
	Last_update	Timestamp without time zone	Last update of film record (YYYY-MM-DD HH:MM:SS) irrespective of time zone.

Links to

Table		Join
➤	Film	Film_category.film_id = film.film_id
➤	Category	Film_category.category_id = category.category_id

2.4.6 Category table – Dimension table

Corresponding names of film genre for each unique identifier.


Variable		Data type	Description
	Category_id	Integer	Unique identifier of film category. Primary key.
	Name	Character varying (25)	Name of film category.
	Last_update	Timestamp without time zone	Last update of film category (YYYY-MM-DD HH:MM:SS) irrespective of time zone.

Linked from


Table		Join
➤	Film_category	Category.category_id = film_category.category_id

2.4.7 Language table – Dimension table

Name of each language corresponding to the unique identifier.

Variable		Data type	Description
	Language_id	Integer	Unique identifier of film language. Primary key.
	Name	Character (20)	Name of language
	Last_update	Timestamp without time zone	Last update of language (YYYY-MM-DD HH:MM:SS) irrespective of time zone.

Linked from

Table		Join
	Film	Language.language_id = film.language_id

3. Visualization links

Film characteristics:

<https://public.tableau.com/app/profile/nikki.pirtel/viz/filmdatabasecharacteristics/Dashboard3?publish=yes>

Map of revenue and customer list:

<https://public.tableau.com/app/profile/nikki.pirtel/viz/mapandcustomerlist/Dashboard1?publish=yes>

Revenue by genre:

<https://public.tableau.com/app/profile/nikki.pirtel/viz/totalrevenuebygenre/Totalrevenuegenre?publish=yes>

Revenue of top 10 films:

<https://public.tableau.com/app/profile/nikki.pirtel/viz/totalrevenueoftop10films/Toprevenuefilms?publish=yes>

Locations of top 5 customers:

<https://public.tableau.com/app/profile/nikki.pirtel/viz/locationsoftop5customers/Dashboard2?publish=yes>