

3.2 – Data Storage and Structure

Step2 : Extract ERD using LucidChart



Step3.

- a) Does the Rockbuster database have a snowflake schema or a star schema? Write a brief explanation for your answer.

The Rockbuster Database has a snowflake schema. We can clearly see from the above ERD that Dimensional tables surround the fact table and further these Dimensional tables is surrounded by sub-dimensional table.

- b) List all the fact tables and all the dimension tables in the schema. For each table, list every column and its data type, and write a brief description of the column.

FACT TABLE

RENTAL		
Column	Data Type	Description
Rental_id	Serial	Unique Id assigned to each movie rental.
Rental_date	Timestamp without time zone	Date & time when it was rented.
Inventory_id	Integer	Id assigned to record the Inventory.
Customer_id	SmallInt	Id numner allotted to the customer.
Return_date	Timestamp without TimeZone	Date & time of returning Movies
Staff_id	SmallInt	Id assigned to each Staff
Last_update	Timestamp without time Zone.	Time of last Update Status

DIMENSION TABLE		
Columns	Data type	Descriptions
CUSTOMER		
Customer_id	Serial	Id number assigned to Customer
Store_id	Smallint	Store id number assigned to each 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	Address of Customer
Activebool	Boolean	Active status of Customer
Create_date	Date	Creation date
STAFF		
Staff_id	Serial	Id assigned to each Staff
First_name	Character Varying(45)	First Name of Staff
Last_name	Character Varying(45)	Last Name of staff
Address_id	Smallint	Address of staff
Email	Character Varying(50)	Email id of Staff
Store_id	Smallint	Unique id assigned to each store

Active	Boolean	Staff active status – active or not
Username	Character Varying(40)	Username of Staff
Password	Character Varying(60)	Password of staff
Last_update	Timestamp(6) without Time Zone	Time of last updated Status
picture	Bytea	Picture of Staff
Payment		
Payment_id	Serial	Id assigned for keeping record of payment
Customer_id	Small int	Id assigned to customer
Staff_id	Smallint	Unique id assigned to each store
Rental_id	Integer	Id assigned to each movie rental
Amount	Numeric	Amount paid by the customer
Payment_date	Timestamp without time zone	Time of payment
Inventory		
Inventory_id	Serial	Id assigned for keeping record inventory
Film_id	Smallint	Unique id assigned to each film
Store_id	Smallint	Unique id assigned to each store
Last_update	Timestamp(6) without time zone	Time of last updated status
Film category		
Film_id	Smallint	Unique id assigned to each movie
Category_id	Smallint	Unique id assigned to each movie Category
Last_update	Timestamp(6) without time zone	Time of last updated Status of film Cstegory
Language		
Language_id	Serial	ID assigned to language movie is available
Name	Character(20)	Name of Language
Last_update	Timestamp(6) without time Zone	Time of last Updated status
Address		
Address_id	Serial	Postal address of store
address	Character Varying (50)	Postal address of store
Address 2	Character Varying(50)	Postal address of store
Distinct	Character Varying(20)	Time of last updated Status
City_id	Smallint	City
Postal Code	Character Varying(10)	Postal Code
Phone	Character Varying(20)	Phone number
Last_update	Timestamp(6) without Time zone	Time of last updated Status

City		
City_id	Serial	Id allotted to each city
Name	Character varying(50)	City Name
Country_id	SmallInt	Id assigned to the country
Last_update	Timestamp without time zone	Time of last Update status
Country		
Country Id	Serial	Id assigned to the country
Country	Character varying (50)	Country Name
Last_Update	Timestamp without time zone	Time of last Updated
Film		
Film_id	Serial	Film id number
Title	Character varying(255)	Movie title
Description	Text	Description of movies
Release_year	Year	Release Year
Language_id	Small int	Id number allotted to language
Rental_duration	Smallint	Length of movies
Rental_rate	Numeric(5,2)	Rent
Length	Smallint	Length of movie
Replacement_cost	Numeric(5,2)	Replacement cost
Rating	Mpaa_rating	Movies rating
Last_update	Timestamp	Last update date and time
Special_features	Text	Special Features
fulltext	Tsvector	Full text
Film Actor		
Actor_id	smallint	Id number assigned to actor
Film_id	Smallint	Id number assigned to film
Last_update	Timestamp	Last update date and time
Actor		
Actor_id	Smallint	Id number assigned to actor
First_name	Character Varying(45)	First Name of Actor
Last_name	Character varying(45)	Last Name of Actor
Last_update	Time Stamp	Last update date and time

Step4:Which actor brought rockbuster the most revenue? Film_actor,Film,Rental

What language are the majority of movies in the collection? Film and Language