Rockbuster Stealth LLC

Entity Relationship Diagram (ERD)

actor
- *actor_id* SERIAL
- first_name CHARACTER VARYING(45)
- last_name CHARACTER VARYING(45)
- last_update TIMESTAMP(6) WITHOUT TIME ZONE

film
- *film_id* SERIAL
- title CHARACTER VARYING(255)
- description TEXT
- release_year year
- *language_id* SMALLINT
- rental_duration SMALLINT
- rental_rate NUMERIC(4,2)
- length SMALLINT
- replacement_cost NUMERIC(5,2)
- rating mpaa_rating
- last_update TIMESTAMP(6) WITHOUT TIME ZONE
- special_features TEXT[]
- fulltext TSVECTOR

language
- *language_id* SERIAL
- name CHARACTER(20)
- last_update TIMESTAMP(6) WITHOUT TIME ZONE

category
- *category_id* SERIAL
- name CHARACTER VARYING(25)
- last_update TIMESTAMP(6) WITHOUT TIME ZONE

film_actor
- *actor_id* SMALLINT
- *film_id* SMALLINT
- last_update TIMESTAMP(6) WITHOUT TIME ZONE

inventory
- *inventory_id* SERIAL
- *film_id* SMALLINT
- *store_id* SMALLINT
- last_update TIMESTAMP(6) WITHOUT TIME ZONE

film_category
- *film_id* SMALLINT
- *category_id* SMALLINT
- last_update TIMESTAMP(6) WITHOUT TIME ZONE

customer
- *customer_id* SERIAL
- store_id SMALLINT
- first_name CHARACTER VARYING(45)
- last_name CHARACTER VARYING(45)
- email CHARACTER VARYING(50)
- *address_id* SMALLINT
- activebool BOOLEAN
- create_date DATE
- last_update TIMESTAMP(6) WITHOUT TIME ZONE
- active INTEGER

staff
- *staff_id* SERIAL
- first_name CHARACTER VARYING(45)
- last_name CHARACTER VARYING(45)
- *address_id* SMALLINT
- email CHARACTER VARYING(50)
- store_id SMALLINT
- active BOOLEAN
- username CHARACTER VARYING(16)
- password CHARACTER VARYING(40)
- last_update TIMESTAMP(6) WITHOUT TIME ZONE
- picture BYTEA

address
- *address_id* SERIAL
- address CHARACTER VARYING(50)
- address2 CHARACTER VARYING(50)
- district CHARACTER VARYING(20)
- *city_id* SMALLINT
- postal_code CHARACTER VARYING(10)
- phone CHARACTER VARYING(20)
- last_update TIMESTAMP(6) WITHOUT TIME ZONE

city
- *city_id* SERIAL
- city CHARACTER VARYING(50)
- *country_id* SMALLINT
- last_update TIMESTAMP(6) WITHOUT TIME ZONE

country
- *country_id* SERIAL
- country CHARACTER VARYING(50)
- last_update TIMESTAMP(6) WITHOUT TIME ZONE

rental
- *rental_id* SERIAL
- rental_date TIMESTAMP(6) WITHOUT TIME ZONE
- *inventory_id* INTEGER
- *customer_id* SMALLINT
- return_date TIMESTAMP(6) WITHOUT TIME ZONE
- *staff_id* SMALLINT
- last_update TIMESTAMP(6) WITHOUT TIME ZONE

store
- *store_id* SERIAL
- *manager_staff_id* SMALLINT
- *address_id* SMALLINT
- last_update TIMESTAMP(6) WITHOUT TIME ZONE

payment
- *payment_id* SERIAL
- *customer_id* SMALLINT
- *staff_id* SMALLINT
- *rental_id* INTEGER
- amount NUMERIC(5,3)
- payment_date TIMESTAMP(6) WITHOUT TIME ZONE

Fact Tables

Rental Table

Key	Column	Data type	Description
Primary Key	Rental_id	SERIAL	Code reference for rental
	Rental_date	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time when film was rented
Foreign Key	Inventory_id	INTEGER	How many copies are in stock
Foreign Key	Customer_id	SMALLINT	Code reference for customer
	Return_date	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time when film was returned
Foreign Key	Staff_id	SMALLINT	Code reference for staff
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated

Links to:

Link	Table
Inventory	Rental.inventory_id=Inventory.Inventory_id
Customer	Rental.customer_id=Customer.customer_id
Staff	Rental.staff_id=Staff.staff_id

Links from:

Link	Table
payment	Payment.rental_id=Rental.rental_id

Payment Table

Key	Column	Data type	Description
Primary Key	Payment_id	SERIAL	Code reference for payment
	Customer_id	SMALLINT	Code reference for customer
	Staff_id	SMALLINT	Code reference for staff member
	Rental_id	INTEGER	Code reference for rental
	Amount	NUMERIC (5,2)	How much the customer paid
	Payment_date	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of payment

Links to:

Table	Link
customer	Payment.customer_id=Customer.customer_id
staff	Payment.staff_id=Staff.staff_id
rental	Payment.rental_id=Rental.rental_id

Links from:
N/A

Dimension Tables

Actor Table

Key	Column	Data type	Description
Primary Key	Actor_id	SERIAL	Code reference for actor
	First_name	CHARACTER VARYING (45)	First name of actor
	Last_name	CHARACTER VARYING (45)	Last name of actor
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated

Links to:
N/A
Links from:

Table	Link
Film_actor	Actor.actor_id=film_actor.actor_id

Film Actor Table

Key	Column	Data type	Description
Primary Key, Foreign Key	Actor_id	SMALLINT	Code reference for actor
Primary Key, Foreign Key	Film_id	SMALLINT	Code reference for film
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated

Links to:

Table	Link
Actor	Film_actor.actor_id=Actor.actor_id
Film	Film_actor.film_id=Film.film_id

Links from:
N/A

Film Table

Key	Column	Data type	Description
Primary Key	Film_id	SERIAL	Code reference for film
	Title	CHARACTER VARYING (255)	Name of film
	Description	TEXT	What the movie is about
	Release_year	Year	Year in which movie was released
Foreign Key	Language_id	SMALLINT	Code reference of language
	Rental_duration	SMALLINT	Length of time which film is rented for
	Rental_rate	NUMERIC (4,2)	Price of rental
	Length	SMALLINT	Length of movie
	Replacement_cost	NUMERIC (4,2)	Cost to replace movie

	Rating	Mpaa-rating	Movie rating
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated
	Special_features	Text[]	Any features like blu-ray
	Fulltext	TSVECTOR	You can look for key words

Links to:

Table	Link
Language	Film.language_id=Language.Language_id

Links from:

Table	Link
Film_actor	Film_actor.film_id=Film.film_id
Film_category	Film_category.film_id=Film.film_id

Language Table

Key	Column	Data type	Description
Primary Key	Language_id	SERIAL	Code reference for language
	Name	CHARACTER(20)	Name of language
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated

Links to:
N/A

Links from:

Table	Link
Film	Film.language_id=Language.language_id

Inventory Table

Key	Column	Data type	Description
Primary Key	Inventory_id	SERIAL	Code reference for stock
Foreign Key	Film_id	SMALLINT	Code reference for film
Foreign Key	Store_id	SMALLINT	Code reference for store
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated

Links to:

Table	Link
Film	Inventory.film_id=Film.film_id

Links from:

Table	Link
Rental	Rental.inventory_id=Inventory.inventory_id

Film Category Table

Key	Column	Data type	Description
Primary Key, Foreign Key	Film_id	SMALLINT	Code reference for film
Primary Key, Foreign Key	Category_id	SMALLINT	Code reference for movie category
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated

Links to:

Table	Link
Film	Film_category.film_id=Film.film_id
Category	Film_category.category_id=Category.category_id

Links from:
N/A

Category Table

Key	Column	Data type	Description
Primary Key	Category_id	SERIAL	Code reference for movie category
	Name	CHARACTER VARYING (25)	Name of category
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated

Links to:
N/A

Links from:

Table	Link
Film Category	Category.category_id=film_category.category_id

Customer Table

Key	Column	Data type	Description
Primary Key	Customer_id	SERIAL	Code reference of customer
Foreign Key	Store_id	SMALLINT	Code reference 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
Foreign Key	Address_id	SMALLINT	Code reference of customer's address
	Activeboo!	BOOLEAN	Whether the customer is active or not
	Create_date	DATE	The date of the creation of the customer's record
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated
	Active	INTEGER	Status of customer

Links to:

Table	Link
Address	Customer.address_id=address.address_id
Store	Customer.store_id=store.store_id

Links from:

Table	Link
Rental	Rental.customer_id=customer.customer_id

Staff Table

Key	Column	Data type	Description
Primary Key	Staff_id	SERIAL	Code reference for staff
	First_name	CHARACTER VARYING (45)	First name of staff
	Last_name	CHARACTER VARYING (45)	Last name of staff
Foreign Key	Address_id	SMALLINT	Code reference of staff address
	Email	CHARACTER VARYING (50)	Email address of staff member
Foreign Key	Store_id	SMALLINT	Code reference of store
	Active	BOOLEAN	Whether the staff member is active or not
	Username	CHARACTER VARYING (16)	The username of staff member
	Password	CHARACTER VARYING (40)	The password of staff member
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated
	Picture	BYTEA	Picture of staff member

Links to:

Table	Link
Address	Staff.Address_id=Address.address_id

Links from:

Table	Link
Rental	Rental.Staff_id=Staff.staff_id
Store	Store.store_id=staff.store_id

Store Table

Key	Column	Data type	Description
Primary Key	Store_id	SERIAL	Code reference of store
Foreign Key	Manager_staff_id	SMALLINT	Code reference of manager
Foreign Key	Address_id	SMALLINT	Postal address of store
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated

Links to:

Table	Link
Staff	Store.Manager_staff_id=Staff.staff_id
Address	Store.Address_id=Address.address_id

Address Table

Key	Column	Data type	Description
Primary Key	Address_id	SERIAL	Code reference of address
	Address	CHARACTER VARYING (50)	The first line of address
	Address2	CHARACTER VARYING (50)	The second line of address
	District	CHARACTER VARYING (20)	The region in which the store is located
Foreign Key	City_id	SMALLINT	Code reference of City
	Postal_code	CHARACTER VARYING (10)	Post code of store
	Phone	CHARACTER VARYING (20)	Phone number of store
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated

Links to:

Table	Link
City	Address.City_id=City.city_id

Links from:

Table	Link
Customer	Customer.Address_id=Address.address_id
Store	Store.Address_id=Address.address_id
Staff	Staff.Address_id=Address.address_id

City Table

Key	Column	Data type	Description
Primary Key	city_id	SERIAL	Code reference of City
	city	CHARACTER VARYING (50)	City in which store is located
Foreign Key	country_id	SMALLINT	Code reference of country
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated

Links to:

Table	Link
Country	City.country_id=Country.country_id

Links from:

Table	Link
Address	Address.city_id=City.city_id

Country Table

Key	Column	Data type	Description
Primary Key	country_id	SERIAL	Code reference of country
	country	CHARACTER VARYING (50)	Name of country
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time of when the record was last updated

Links to: N/A
Links from:

Table	Link
city	City.city_id=Country.city_id