Rockbuster Stealth LLC

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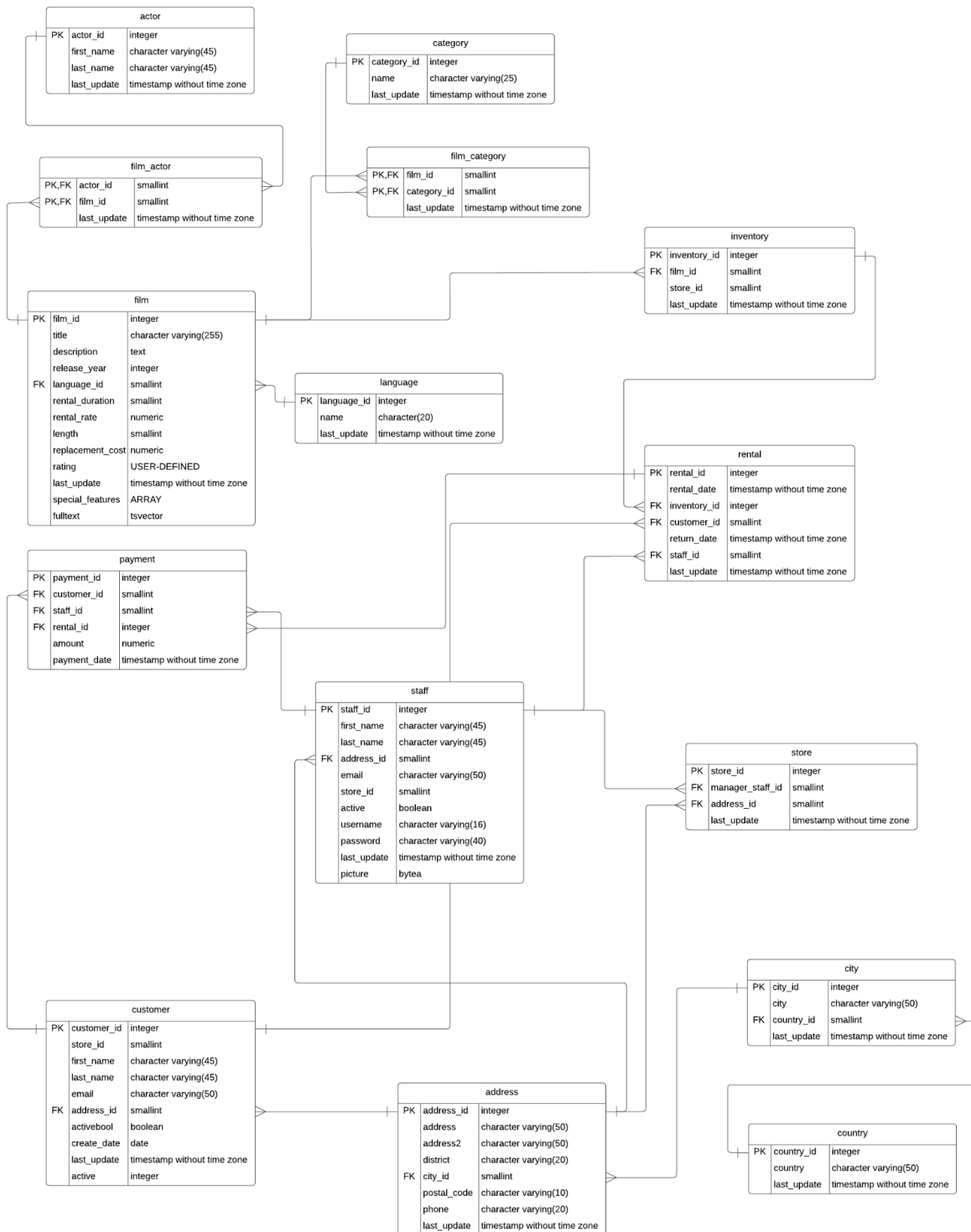
Data Dictionary

v3 _ 03.09.2023

Table of Contents

1. Entity Relationship Diagram

actor
PK	actor_id	integer
	first_name	character varying(45)
	last_name	character varying(45)
	last_update	timestamp without time zone

category
PK	category_id	integer
	name	character varying(25)
	last_update	timestamp without time zone

film_actor
PK,FK	actor_id	smallint
PK,FK	film_id	smallint
	last_update	timestamp without time zone

film_category
PK,FK	film_id	smallint
PK,FK	category_id	smallint
	last_update	timestamp without time zone

inventory
PK	inventory_id	integer
FK	film_id	smallint
	store_id	smallint
	last_update	timestamp without time zone

film
PK	film_id	integer
	title	character varying(255)
	description	text
	release_year	integer
FK	language_id	smallint
	rental_duration	smallint
	rental_rate	numeric
	length	smallint
	replacement_cost	numeric
	rating	USER-DEFINED
	last_update	timestamp without time zone
	special_features	ARRAY
	fulltext	tsvector

language
PK	language_id	integer
	name	character(20)
	last_update	timestamp without time zone

rental
PK	rental_id	integer
	rental_date	timestamp without time zone
FK	inventory_id	integer
FK	customer_id	smallint
	return_date	timestamp without time zone
FK	staff_id	smallint
	last_update	timestamp without time zone

payment
PK	payment_id	integer
FK	customer_id	smallint
FK	staff_id	smallint
FK	rental_id	integer
	amount	numeric
	payment_date	timestamp without time zone

staff
PK	staff_id	integer
	first_name	character varying(45)
	last_name	character varying(45)
FK	address_id	smallint
	email	character varying(50)
	store_id	smallint
	active	boolean
	username	character varying(16)
	password	character varying(40)
	last_update	timestamp without time zone
	picture	bytea

store
PK	store_id	integer
FK	manager_staff_id	smallint
FK	address_id	smallint
	last_update	timestamp without time zone

city
PK	city_id	integer
	city	character varying(50)
FK	country_id	smallint
	last_update	timestamp without time zone

customer
PK	customer_id	integer
	store_id	smallint
	first_name	character varying(45)
	last_name	character varying(45)
	email	character varying(50)
FK	address_id	smallint
	activebool	boolean
	create_date	date
	last_update	timestamp without time zone
	active	integer

address
PK	address_id	integer
	address	character varying(50)
	address2	character varying(50)
	district	character varying(20)
FK	city_id	smallint
	postal_code	character varying(10)
	phone	character varying(20)
	last_update	timestamp without time zone

country
PK	country_id	integer
	country	character varying(50)
	last_update	timestamp without time zone

2. Legend

🔑 Primary key

🔑 Foreign key

➤ Links to

➤ Linked from

3. Fact Tables

3.1. Payment

Table		Column	Data type	Description
payment	🔑	payment_id	integer	Unique ID for payment
	🔑	customer_id	smallint	Unique ID for customer
	🔑	staff_id	smallint	Unique ID for staff
	🔑	rental_id	integer	Unique ID for rental
		amount	numeric	Amount paid for rental (USD)
		payment_date	timestamp without time zone	Date of payment (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	✈	rental	Payment.rental_id = Rental.rental_id
	✈	staff	Payment.staff_id = Staff.staff_id
	✈	customer	Payment.customer_id = Customer.customer_id
Linked from	✦	-	-

		Column	Description
Unique keys	🔑	payment_id	Primary key of payment table

4. Dimension Tables

4.1. Actor

Table		Column	Data type	Description
actor	🔑	actor_id	integer	Unique ID for actor
		first_name	character varying(45)	Actor's first name
		last_name	character varying(45)	Actor's last name
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	✈	-	-
Linked from	✦	film_actor	Film_actor.actor_id = Actor.actor_id

		Column	Description
Unique keys	🔑	actor_id	Primary key of actor table

4.2. Film_actor

Table		Column	Data type	Description
film_actor	🔑	actor_id	smallint	Unique ID for actor
	🔑	film_id	smallint	Unique ID for film
		last_udpdate	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	✈	actor	Film_actor.actor_id = Actor.actor_id
	✈	film	Film_actor.film_id = Film.film_id
Linked from	✦	-	-

4.3. Film

Table		Column	Data type	Description
film	🔑	film_id	integer	Unique ID for film
		title	character varying(225)	Film title
		description	text	Film description
		release_year	integer	Film year of release
	🔑	language_id	smallint	Unique ID for language
		rental_duration	smallint	Duration of film rental (days)
		rental_rate	numeric	Rate of film rental
		length	smallint	Length of film (min)
		replacement_cost	numeric	Cost to replace film if required
		rating	PG, R, NC-17, PG-13, G	Age rating of film
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)
		special_features	text []	Special feature of film
		fulltext	tsvector	Film key words

		Table	Join
Links to	✈	language	Film.language_id = Language.language_id
Linked from	✈	inventory	Film.film_id = Inventory.film_id

		Column	Description
Unique keys	🔑	film_id	Primary key of film table

4.4. Film_category

Table		Column	Data type	Description
film_category	🔑	film_id	smallint	Unique ID for film
	🔑	category_id	smallint	Unique ID for category
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	✈	film	Film_category.film_id = Film.film_id
	✈	category	Film_category.category_id = Category.category_id
Linked from	✦	-	-

4.5. Category

Table		Column	Data type	Description
category	🔑	category_id	integer	Unique ID for category
		name	character varying(25)	Category description
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	✈	-	-
Linked from	✦	film_category	Category.category_id = Film_category.category_id

		Column	Description
Unique keys	🔑	category_id	Primary key of category table

4.6. Inventory

Table		Column	Data type	Description
inventory	🔑	inventory_id	integer	Unique ID for inventory
	🔑	film_id	smallint	Unique ID for film
	🔑	store_id	smallint	Unique ID for store
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	➤	film	Film_actor.film_id = Film.film_id
	➤	store	Inventory.store_id = Store.store_id
Linked from	➤	rental	Inventory.inventory_id = Rental.inventory_id

		Column	Description
Unique keys	🔑	inventory_id	Primary key of inventory table

4.7. Language

Table		Column	Data type	Description
language	🔑	language_id	integer	Unique ID for language
		name	character(20)	Language description
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	➤	-	-
Linked from	➤	film	Language.language_id = Film.language_id

		Column	Description
Unique keys	🔑	language_id	Primary key of language table

4.8. Rental

Table		Column	Data type	Description
rental	🔑	rental_id	integer	Unique ID for rental
		rental_date	timestamp without time zone	Date of start of rental (yyyy-mm-dd hh:mm:ss)
	🔑	inventory_id	integer	Unique ID for inventory
	🔑	customer_id	smallint	Unique ID for customer
		return_date	timestamp without time zone	Date of film return (yyyy-mm-dd hh:mm:ss)
	🔑	staff_id	smallint	Unique ID for staff
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	⟫	inventory	Rental.inventory_id = Inventory.inventory_id
	⟫	customer	Rental.customer_id = Customer.customer_id
	⟫	staff	Rental.staff_id = Staff.staff_id
Linked from	⟨	payment	Payment.rental_id = Rental.rental_id

		Column	Description
Unique keys	🔑	rental_id	Primary key of rental table

4.9. Staff

Table		Column	Data type	Description
staff	🔑	staff_id	integer	Unique ID for staff
		first_name	character varying(45)	Staff first name
		last_name	character varying(45)	Staff last name
	🔑	address_id	smallint	Unique ID for address
		email	character varying(50)	Staff email
		store_id	smallint	Unique ID for store

	active	boolean	Staff status (active/inactive)
	username	character varying(16)	Staff username
	password	character varying(40)	Staff password
	last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)
	picture	bytes	Staff picture

		Table	Join
Links to	✈	address	Staff.address_id = Address.address_id
Linked from	✈	payment	Staff.staff_id = Payment.staff_id

		Column	Description
Unique keys	🔑	staff_id	Primary key of staff table

4.10. Store

Table		Column	Data type	Description
store	🔑	store_id	integer	Unique ID for store
	🔑	manager_staff_id	smallint	Unique ID for staff manager
	🔑	address_id	smallint	Unique ID for address
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	✈	staff	Store.manager_staff_id = Staff.staff_id
	✈	address	Store.address_id = Address.address_id
Linked from	✈	-	-

		Column	Description
Unique keys	🔑	store_id	Primary key of store table

4.11. Customer

Table		Column	Data type	Description
customer	🔑	customer_id	integer	Unique ID for customer
		store_id	smallint	Unique ID for store
		first_name	character varying(45)	Customer first name
		last_name	character varying(45)	Customer last name
		email	character varying(50)	Customer email
	🔑	address_id	smallint	Unique ID for address
		activebool	boolean	Customer status (active/inactive)
		create_date	date	Date of creation of customer account (yyyy-mm-dd)
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)
		active	integer	Status (active 1/ inactive 0)

		Table	Join
Links to	✈	address	Customer.address_id = Address.address_id
Linked from	⚔	rental	Customer.customer_id = Rental.customer_id

		Column	Description
Unique keys	🔑	customer_id	Primary key of customer table

4.12. Address

Table		Column	Data type	Description
address	🔑	address_id	integer	Unique ID for address
		address	character varying(50)	Customer address line 1
		address2	character varying(50)	Customer address line 1
		district	character varying(20)	Customer address district
	🔑	city_id	smallint	Unique ID for city
		postal_code	character varying(10)	Customer address postcode

		Column	Data type	Description
		phone	character varying(20)	Customer phone number
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	✈	city	Address.city_id = City.city_id
	✦	store	Address.address_id = Store.address_id
Linked from	✦	staff	Address.address_id = Staff.address_id
	✦	customer	Address.address_id = Customer.address_id

		Column	Description
Unique keys	🔑	address_id	Primary key of address table

4.13. City

Table		Column	Data type	Description
city	🔑	city_id	integer	Unique ID for city
		city	character varying(50)	City name
	🔑	country_id	smallint	Unique ID for country
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	✈	country	City.country_id = Country.country_id
Linked from	✦	address	City.city_id = Address.city_id

		Column	Description
Unique keys	🔑	city_id	Primary key of city table

4.14. Country

Table		Column	Data type	Description
country	🔑	country_id	integer	Unique ID for country
		country	character varying(50)	Country name
		last_update	timestamp without time zone	Last update of info (yyyy-mm-dd hh:mm:ss)

		Table	Join
Links to	⤙	-	-
Linked from	⤛	city	Country.country_id = City.country_id

		Column	Description
Unique keys	🔑	country_id	Primary key of country table

5. Version updates

v2 updates:
Format added in dates (several columns/tables) Units added in currency to amount (payment) Units added to rental_duration (film) Data type updated for rating (film)
v3 updates:
Keys updated for film_actor table and film_category table