

A dark blue vertical bar runs down the left side of the page. A blue arrow points to the right from the bar, containing the date. In the bottom left corner, several thin, curved lines in dark blue and light gray sweep upwards and to the right.

7/1/2023

# Rockbuster Stealth

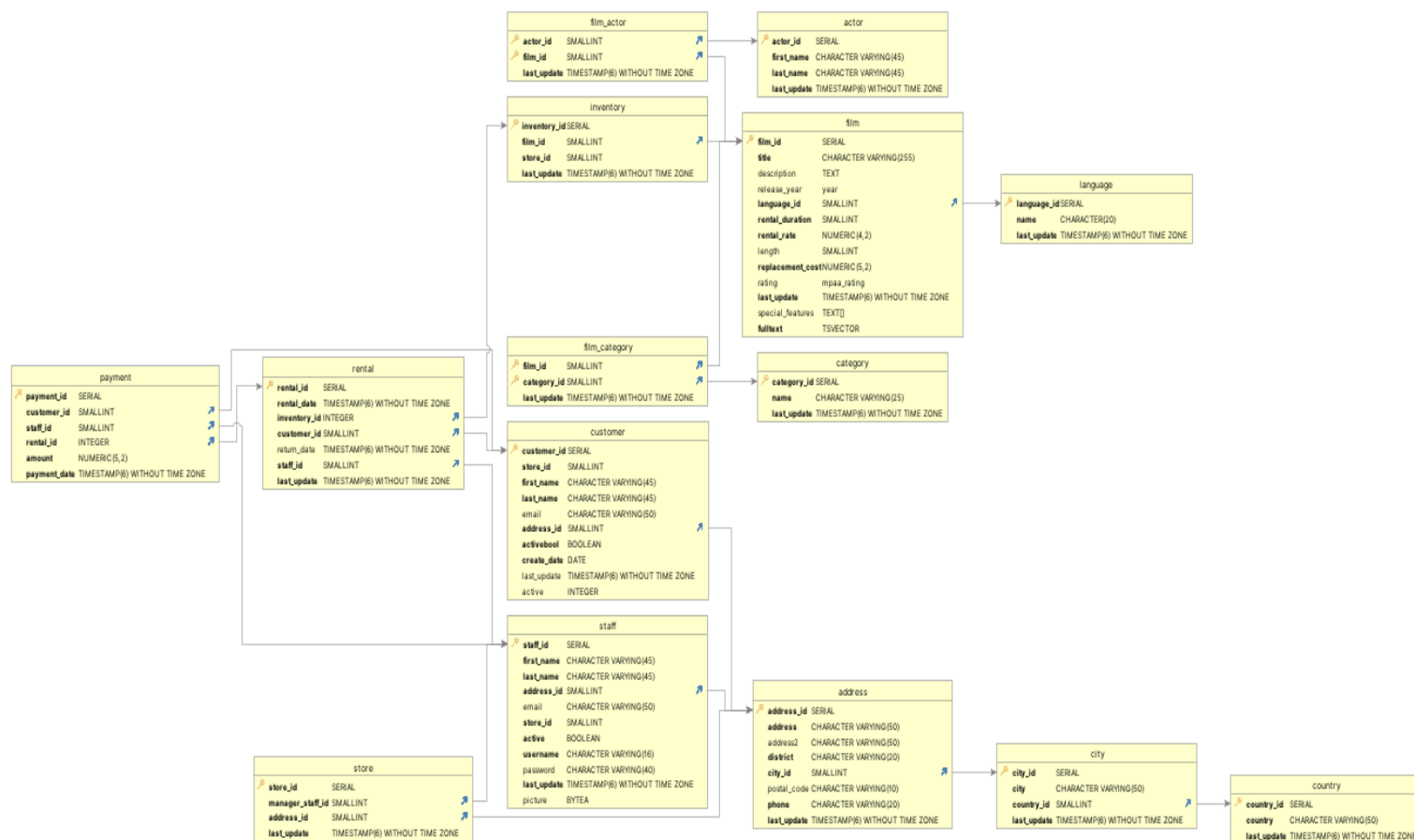
ERD & Data Dictionary

Mitchell Kubik

## Table of Contents

<b>Entity Relationship Diagram (ERD)</b>	<b>2</b>
<b>FACT TABLES</b>	<b>3</b>
<b>Payment</b>	<b>3</b>
Links to	3
<b>Rental</b>	<b>3</b>
Links to	3
Links from	3
<b>DIMENSION TABLES</b>	<b>4</b>
<b>Store</b>	<b>4</b>
Links to	4
<b>Film Actor</b>	<b>4</b>
Links to	4
<b>Inventory</b>	<b>4</b>
Links to	4
Links from	4
<b>Film Category</b>	<b>4</b>
Links to	5
<b>Customer</b>	<b>5</b>
Links to	5
Links from	5
<b>Staff</b>	<b>5</b>
Links to	6
Links from	6
<b>Actor</b>	<b>6</b>
Links From	6
<b>Film</b>	<b>6</b>
Links to	6
Links from	7
<b>Category</b>	<b>7</b>
Links from	7
<b>Address</b>	<b>7</b>
Links to	7
Links from	7
<b>Language</b>	<b>7</b>
Links from	7
<b>City</b>	<b>8</b>
Links to	8
Links From	8
<b>Country</b>	<b>8</b>
Links from	8

## Entity Relationship Diagram (ERD)



## FACT TABLES

### Payment

Key	Column	Data Type	Description
Primary	payment_id	[PK] INTEGER	Unique payment identifier
Foreign	customer_id	SMALLINT	Unique customer identifier
Foreign	staff_id	SMALLINT	Unique staff identifier
Foreign	rental_id	INTEGER	Unique rental identifier
	amount	NUMERIC (5,2)	Payment amount
	payment_date	TIMESTAMP WITHOUT TIME ZONE	Time and date of payment

### Links to

Column	Join Table	Description
customer_id	Customer	Foreign key reference to customer table
staff_id	Staff	Foreign key reference to staff table
rental_id	Rental	Foreign Key reference to rental table

### Rental

Key	Column	Data Type	Description
Primary	rental_id	[PK] INTEGER	Unique rental identifier
	rental_date	TIMESTAMP WITHOUT TIME ZONE	Time and date of rental
Foreign	inventory_id	INTEGER	Unique inventory identifier
Foreign	customer_id	SMALLINT	Unique customer identifier
	return_date	TIMESTAMP WITHOUT TIME ZONE	Time and date of return
Foreign	staff_id	SMALLINT	Unique staff identifier
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update

### Links to

Column	Join Table	Description
inventory_id	Inventory	Foreign key reference to inventory table
customer_id	Customer	Foreign key reference to customer table
staff_id	Staff	Foreign Key reference to staff table

### Links from

Column	Join Table	Description
rental_id	Payment	Foreign key reference from payment table

## DIMENSION TABLES

### Store

Key	Column	Data Type	Description
Primary	store_id	SERIAL	Unique store identifier
Foreign	manager_staff_id	SMALLINT	Unique manager identifier
Foreign	address_id	SMALLINT	Unique address identifier
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update

### Links to

Column	Join Table	Description
Staff_id	Staff	Foreign key reference to staff table
Address_id	Address	Foreign key reference to address table

### Film Actor

Key	Column	Data Type	Description
Primary/Foreign	actor_id	SMALLINT	Unique actor identifier
Primary/Foreign	film_id	SMALLINT	Unique film identifier
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update

### Links to

Column	Join Table	Description
Actor_id	Actor	P/F key reference to staff table
Film_id	Film	P/F key reference to film table

### Inventory

Key	Column	Data Type	Description
Primary	inventory_id	SERIAL	Unique inventory identifier
Foreign	film_id	SMALLINT	Unique film identifier
	store_id	SMALLINT	Unique store identifier
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update

### Links to

Column	Join Table	Description
Film_id	Film	Foreign Key reference to film table

### Links from

Column	Join Table	Description
Inventory_id	Rental	Primary key reference from rental table

### Film Category

Key	Column	Data Type	Description
Primary/Foreign	film_id	SMALLINT	Unique film identifier
Primary/Foreign	category_id	SMALLINT	Unique category identifier

	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update
--	-------------	-----------------------------	------------------------------

Links to

Column	Join Table	Description
Film_id	Film	P/F key reference to film table
Category_id	Category	P/F key reference to category table

## Customer

Key	Column	Data Type	Description
Primary	customer_id	SERIAL	Unique customer identifier
	store_id	SMALLINT	Unique store identifier
	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	address_id	SMALLINT	Unique address identifier
	activebool	BOOLEAN	Customer active/inactive tatus
	create_date	DATE	Date of customer profile creation
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update
	active	INTEGER	

Links to

Column	Join Table	Description
Address_id	Address	Foreign key reference to address table

Links from

Column	Join Table	Description
Customer_id	Payment	Foreign key reference from payment table
Customer_id	Rental	Foreign key reference from rental table

## Staff

Key	Column	Data Type	Description
Primary	staff_id	SERIAL	Unique Staff Identifier
	first_name	CHARACTER VARYING (45)	First name of employee
	last_name	CHARACTER VARYING (45)	Last name of employee
Foreign	address_id	SMALLINT	Unique address identifier
	email	CHARACTER VARYING (50)	Employee email address
	store_id	SMALLINT	Unique store identifier
	active	BOOLEAN	Employee working status
	username	CHARACTER VARYING (16)	Employee username
	password	CHARACTER VARYING (40)	Employee password
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update
	picture	BYTEA	Photo of employee

Links to

Column	Join Table	Description
Address_id	Address	Foreign key reference to address table

Links from

Column	Join Table	Description
Staff_id	Payment	Foreign key reference from payment table
Staff_id	Rental	Foreign key reference from rental table
Manager_staff_id	Store	Foreign Key reference from store table

## Actor

Key	Column	Data Type	Description
Primary	actor_id	SERIAL	Unique actor identifier
	first_name	CHARACTER VARYING (45)	First name of actor
	last_name	CHARACTER VARYING (45)	Last name of actor
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update

Links From

Column	Join Table	Description
Actor_id	Film actor	Primary key reference from film actor table

## Film

Key	Column	Data Type	Description
Primary	film_id	SERIAL	Unique film identifier
	title	CHARACTER VARYING (255)	Title of film
	description	TEXT	Description of film
	release_year	YEAR	Year the film was released
Foreign	language_id	SMALLINT	Unique language identifier
	rental_duration	SMALLINT	Length of rental duration
	rental_rate	NUMERIC (4,2)	Cost of rental per rental duration
	length	SMALLINT	Length of film in minutes
	replacement_cost	NUMERIC (5,2)	Cost to replace inventory
	rating	MPAA_RATING	Motion picture association rating
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update
	special_features	TEXT	Deleted scenes/trailers/ ets
	fulltext	TSVECTOR	Film index

Links to

Column	Join Table	Description
Language_id	Language	Foreign key reference to language table

Links from

Column	Join Table	Description
Film_id	Film_actor	P/F key reference from film_actor table
Film_id	Inventory	Foreign key reference from inventory table
Film_id	Film_category	P/F key reference from film_category table

## Category

Key	Column	Data Type	Description
Primary	category_id	SERIAL	Unique category identifier
	name	CHARACTER VARYING (25)	Genre name
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update

Links from

Column	Join Table	Description
Category_id	Film_category	P/F key reference from film_category table

## Address

Key	Column	Data Type	Description
Primary	address_id	SERIAL	Unique address identifier
	address	CHARACTER VARYING (50)	Address line 1
	address2	CHARACTER VARYING (50)	Address line 2
	district	CHARACTER VARYING (20)	Location
Foreign	city_id	SMALLINT	Unique city identifier
	postal_code	CHARACTER VARYING (10)	Postal code
	phone	CHARACTER VARYING (20)	Phone number
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update

Links to

Column	Join Table	Description
City_id	City	Foreign key reference to city table

Links from

Column	Join Table	Description
Address_id	Store	Foreign key reference from store table
Address_id	Customer	Foreign key reference from customer table
Address_id	Staff	Foreign key reference from staff table

## Language

Key	Column	Data Type	Description
Primary	language_id	SERIAL	Unique language identifier
	name	CHARACTER (20)	Name of language
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update

Links from

Column	Join Table	Description
--------	------------	-------------



Language_id	Film	Foreign key reference from film table
-------------	------	---------------------------------------

## City

Key	Column	Data Type	Description
Primary	city_id	SERIAL	Unique city identifier
	city	CHARACTER VARYING (50)	City
Foreign	country_id	SMALLINT	Unique country identifier
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update

## Links to

Column	Join Table	Description
Country_id	Country	Foreign key reference to country table

## Links From

Column	Join Table	Description
City_id	Address	Primary key reference from address table

## Country

Key	Column	Data Type	Description
Primary	country_id	SERIAL	Unique country identifier
	country	CHARACTER VARYING (50)	Name of country
	last_update	TIMESTAMP WITHOUT TIME ZONE	Time and date of last update

## Links from

Column	Join Table	Description
Country_id	city	Foreign key reference from city table