



DATA DICTIONARY

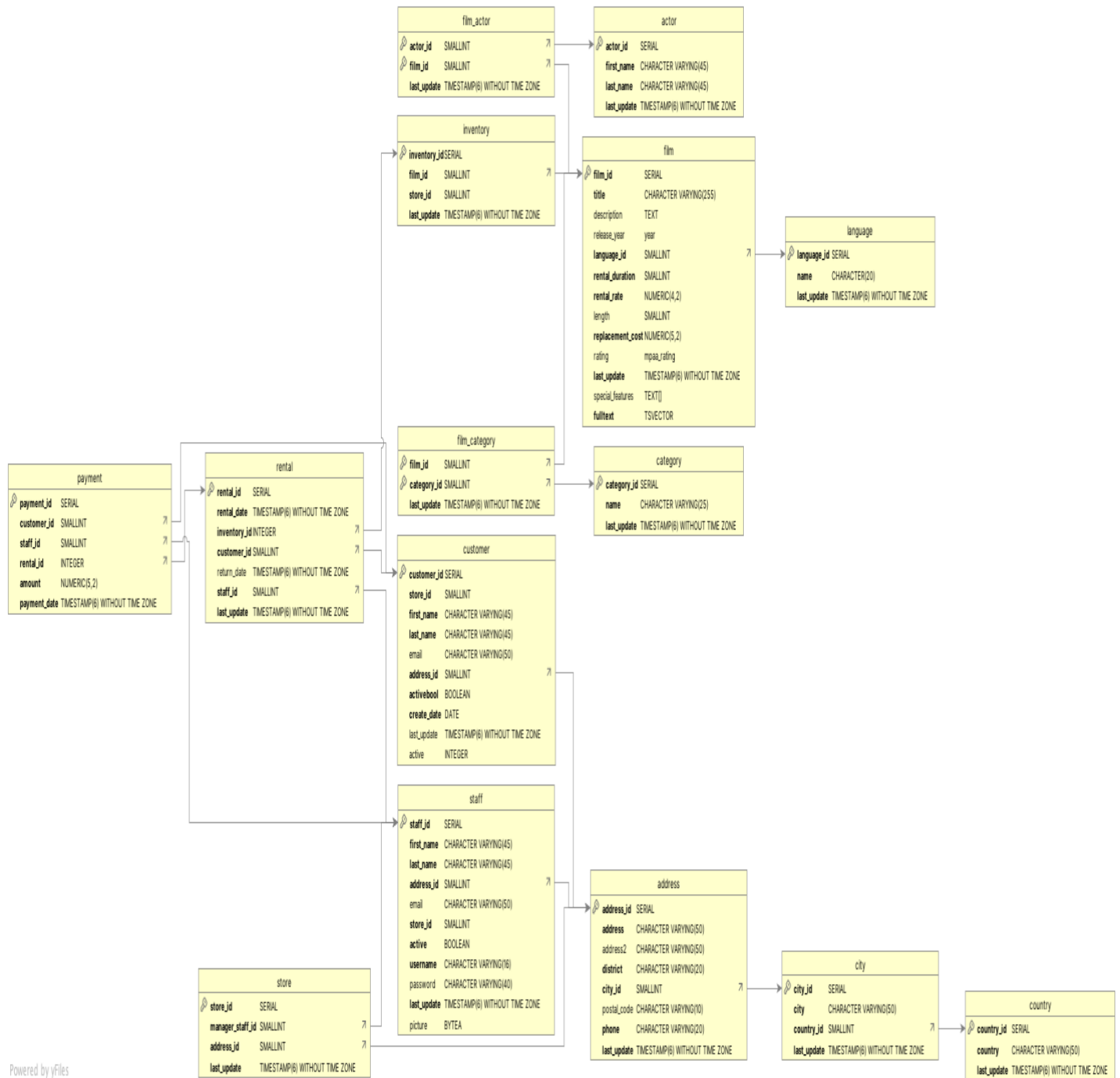
*ROCKBUSTER STEALTH
DATA ANALYSIS*

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1. Rockbuster Database ERD



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Legends






Primary Key



Foreign Key

2. Fact Tables:

Table 1: Rental Table

Key Type	Column Name	Data Type	Description
	<i>Rental_id</i>	<i>SERIAL</i>	<i>Primary key, integer, unique number to identify the rental transaction</i>
	<i>Rental_date</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time (hrs:mint:sec) used to indicate time and date when rent has started.</i>
	<i>Inventory_id</i>	<i>INTEGER</i>	<i>Foreign key, larger integer, unique number used to identify a film or item to be rented by customers</i>
	<i>Customer_id</i>	<i>SMALLINT</i>	<i>Foreign key, small integer, unique number to identify the customer.</i>
	<i>Return_date</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time (hrs:mint:sec) used to indicate time and</i>






			<i>date when rental item to be returned.</i>
	<i>Staff_id</i>	<i>SMALLINT</i>	<i>Foreign key, small integer, unique number to identify the personnel member or Rockbuster</i>
	<i>Last_update</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time (hrs:mins:sec) used to indicate time and date when rental item was last updated.</i>

Table 2: Payment Table

Key Type	Column Name	Data Type	Description
	<i>payment_id</i>	<i>SERIAL</i>	<i>Primary key, integer, unique number to identify the payment</i>
	<i>customer_id</i>	<i>SMALLINT</i>	<i>Foreign key, small integer, unique number used to identify the customer.</i>
	<i>staff_id</i>	<i>SMALLINT</i>	<i>Foreign key, small integer, unique number used to identify the personnel member or Rockbuster</i>
	<i>rental_id</i>	<i>INTEGER</i>	<i>Foreign key, larger integer, unique number to identify the rental transaction</i>
	<i>amount</i>	<i>NUMERIC(5,2)</i>	<i>Total amount of sale, number with max 5 digits.</i>
	<i>Payment_date</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time(hrs:mints:sec) when payment was received/confirmed.</i>

Dimension Tables:

Table 1: Film_actor



Key Type	Column Name	Data Type	Description
	Actor_id	SMALLINT	Composite key and Foreign key, unique number used to identify the actor in the database and link to Actor table.
	Film_id	SMALLINT	Composite key and Foreign key, unique number used to identify the film in the database and link to Film table.
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data to store date and time.

Table 2: Inventory






Key Type	Column Name	Data Type	Description
	inventory_id	SMALLINT	Primary key, larger integer, unique number used to identify the item or film in inventory.
	Film_id	SMALLINT	Foreign key, unique number used to identify the film in the database and link to Film table.
	Store_id	SMALLINT	Small integer, unique number used to identify the store in Rockbuster.
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data to store date and time.

Table 3: Film

Key Type	Column Name	Data Type	Description
	<i>Film_id</i>	<i>SERIAL</i>	<i>Primary key, unique number used to identify each film as rental item.</i>
	<i>title</i>	<i>CHARACTER VARYING(255)</i>	<i>Film title, fixed-length character with max 255</i>
	<i>description</i>	<i>TEXT</i>	<i>Film description with unlimited length.</i>
	<i>Release_year</i>	<i>YEAR</i>	<i>Year of the film released.</i>
	<i>Language_id</i>	<i>SMALLINT</i>	<i>Foreign key to identify the language of film audio; linked to Language table</i>
	<i>Rental_duration</i>	<i>SMALLINT</i>	<i>Small integer, the number of days the item was rented</i>
	<i>Rental_rate</i>	<i>NUMERIC(4,2)</i>	<i>rental cost per day, number with max 4 digits</i>
	<i>length</i>	<i>SMALLINT</i>	<i>Small integer, length of film(hr:min)</i>
	<i>Replacement_cost</i>	<i>NUMERIC(5,2)</i>	<i>The cost of customer can be charged in case of lost or damage of rental item; total amount, number with max 5 digits.</i>
	<i>rating</i>	<i>Mpaa_rating</i>	<i>Film rating introduced by Movie Picture Association</i>
	<i>Last_update</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd)</i>

			<i>and time (hrs:mint:sec) used to indicate time and date when rental item was last updated.</i>
	<i>Special_features</i>	<i>TEXT[]</i>	<i>Special features available for audience</i>
	<i>fulltext</i>	<i>TSVECTOR</i>	<i>Text-searchable data where a word can be used as an index.</i>

Table 4: Language



Key Type	Column Name	Data Type	Description
	<i>Language_id</i>	<i>SERIAL</i>	<i>Primary key, unique number used to identify the language in this database</i>
	<i>name</i>	<i>CHARACTER(20)</i>	<i>The name of the language of the film audio.</i>
	<i>Last_update</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time (hrs:mint:sec) used to indicate time and date when rental item was last updated</i>

Table 5: Actor

Key Type	Column Name	Data Type	Description
	<i>actor_id</i>	<i>SERIAL</i>	<i>Primary key, unique number used to identify the actor in this database</i>

	<i>First_name</i>	<i>CHARACTER VARYING (45)</i>	<i>The First name of the actor, max 45 characters.</i>
	<i>Last_name</i>	<i>CHARACTER VARYING (45)</i>	<i>The Last name of the actor, max 45 characters.</i>
	<i>Last_update</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time (hrs:mins:sec) used to indicate time and date when rental item was last updated</i>

Table 6: Film Category







<i>Key Type</i>	<i>Column Name</i>	<i>Data Type</i>	<i>Description</i>
	<i>film_id</i>	<i>SMALLINT</i>	<i>Composite key, unique number used to identify the film in this database; Foreign key linked Film table.</i>
	<i>Category_id</i>	<i>SMALLINT</i>	<i>Composite key, unique number used to identify the film category in this database; Foreign key linked Category table</i>
	<i>Last_update</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time (hrs:mins:sec) used to indicate time and date when rental item was last updated</i>

Table 7: Category

<i>Key Type</i>	<i>Column Name</i>	<i>Data Type</i>	<i>Description</i>
	<i>category_id</i>	<i>SERIAL</i>	<i>Primary key, unique number used to identify the film category in this database</i>

	<i>name</i>	<i>CHARACTER(20)</i>	<i>The name of the film category, max 25 characters.</i>
	<i>Last_up date</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time (hrs:mint:sec) used to indicate time and date when rental item was last updated</i>

Table 8: Customer

Key Type	Column Name	Data Type	Description
	<i>Customer_id</i>	<i>SERIAL</i>	<i>Primary key, unique number used to identify the customer in this database</i>
	<i>Store_id</i>	<i>SMALLINT</i>	<i>Small integer, unique number used to identify the store in rockbuster</i>
	<i>First_name</i>	<i>CHARACTER VARYING(45)</i>	<i>Customer's first name, max 45 length</i>
	<i>Last_name</i>	<i>CHARACTER VARYING(45)</i>	<i>Customer's Last Name, max 45 length</i>
	<i>Email</i>	<i>CHARACTER VARYING(50)</i>	<i>Customer's email, max 50 length</i>
	<i>Address_id</i>	<i>SMALLINT</i>	<i>Foreign key, customer's address and linked to Address table</i>
	<i>Activebool</i>	<i>BOOLEAN</i>	<i>True or False to indicate customer account status. It can be null value</i>
	<i>Create_date</i>	<i>DATE</i>	<i>Temporal data, The date when Customer created the account</i>
	<i>Last_update</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time (hrs:mint:sec) used to indicate time and date when customer details were last updated</i>

	<i>Active</i>	<i>INTEGER</i>	<i>Integer, customer's account is still active or not</i>
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Table 9: Staff




Key Type	Column Name	Data Type	Description
	<i>Staff_id</i>	<i>SERIAL</i>	<i>Primary key, unique number to identify the personnel member</i>
	<i>First_name</i>	<i>CHARACTER VARYING(45)</i>	<i>Employee's first name , max 45 length</i>
	<i>Last_name</i>	<i>CHARACTER VARYING(45)</i>	<i>Employee's last name, max 45 length</i>
	<i>Address_id</i>	<i>SMALLINT</i>	<i>Foreign key, employee's address, linked to Address table</i>
	<i>Email</i>	<i>CHARACTER VARYING(50)</i>	<i>Employee's email, max length 50</i>
	<i>Store_id</i>	<i>SMALLINT</i>	<i>Small integer, unique number to identify the store in database</i>
	<i>Active</i>	<i>BOOLEAN</i>	<i>True or False</i>
	<i>Username</i>	<i>CHARACTER VARYING(16)</i>	<i>Employee's username/ login for internal account, max length 16 characters</i>
	<i>Password</i>	<i>CHARACTER VARYING(40)</i>	<i>Employee's password used to login the account, max length 40</i>
	<i>Last_update</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time (hrs:mint:sec) .</i>
	<i>Picture</i>	<i>BYTEA</i>	<i>Employee's picture; Bytea data type is used to store raw binary data such as image.</i>

Table 10: Store





Key Type	Column Name	Data Type	Description
	<i>Store_id</i>	<i>SERIAL</i>	<i>Primary key, unique number to identify the store in database</i>
	<i>Manager_staff_id</i>	<i>SMALLINT</i>	<i>Foreign key, unique number to identify the store manager in database, linked to Staff table</i>
	<i>Address_id</i>	<i>SMALLINT</i>	<i>Foreign key, unique number to identify the store address in database, linked to Address table</i>
	<i>Last_update</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time (hrs:mint:sec) .</i>

Table 11: Address

Key Type	Column Name	Data Type	Description
	<i>Address_id</i>	<i>SERIAL</i>	<i>Primary key, unique number to identify the address in database</i>
	<i>Address</i>	<i>CHARACTER VARYING(50)</i>	<i>Address in this database- Line 1; street number and street name)</i>


	Address2	CHARACTER VARYING(50)	Line 2 as a secondary address such as apartment number or building name
	District	CHARACTER VARYING(20)	District/state/region name
	City_id	SMALLINT	Foreign key, unique number to identify the city in database, linked to City table
	Postal_code	CHARACTER VARYING(10)	Postal code, max 10 length
	Phone	CHARACTER VARYING(20)	Phone number related to the address, max 20 length
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date(yyyy-mm-dd) and time (hrs:mins:sec) .

Table 12: City




Key Type	Column Name	Data Type	Description
	City_id	SERIAL	Primary key, unique number to identify the city in the database
	City	CHARACTER VARYING(50)	City name in the address in this database
	Country_id	SMALLINT	Foreign key, unique number to identify the country in database, linked to Country table
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date(yyyy-mm-dd) and time (hrs:mins:sec) .

Table 13: Country

Key Type	Column Name	Data Type	Description
	<i>Country_id</i>	<i>SERIAL</i>	<i>Primary key, unique number to identify the country in the database</i>
	<i>Country</i>	<i>CHARACTER VARYING(50)</i>	<i>Country name in the address, max length 50</i>
	<i>Last_update</i>	<i>TIMESTAMP(6) WITHOUT TIME ZONE</i>	<i>Temporal data, store both date(yyyy-mm-dd) and time (hrs:mins:sec) .</i>