**3.10: Presenting SQL Results**

**(Maham Rauf)**

**ROCKBUSTER STEALTH LLC**

**Data Dictionary**

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# Fact Tables:

## **PAYMENT TABLE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Payment\_id | SERIAL | A unique identifier associated with the payment transaction |
| Foreign Key | Customer\_id | SMALLINT | A unique identifier assigned to the customer |
| Foreign Key | Staff\_id | SMALLINT | A unique identifier assigned to the staff |
| Foreign Key | Rental\_id | INTEGER | A unique identifier associated with the rental transaction |
|  | Amount | NUMERICS(5,2) | The total cost of the rental |
|  | Payment\_date | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the rental was paid for |

## **Rental Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Rental\_id | INTEGER | A unique identifier associated with the rental transaction |
|  | Rental\_date | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the movie was rented |
| Foreign Key | Inventory\_id | INTEGER | A unique identifier assigned to the specific rental unit |
| Foreign Key | Customer\_id | SMALLINT | A unique identifier assigned to the customer |
|  | Return\_date | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the movie was returned |
| Foreign Key | Staff\_id | SMALLINT | A unique identifier assigned to the staff |
|  | Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the rental data was updated |

# Dimension Tables:

## **Film\_Actor Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Foreign Key | Actor\_id | SMALLINT | A unique identifier assigned to an actor in a movie |
| Foreign Key | Film\_id | SMALLINT | A unique identifier assigned to a film |
|  | Last\_update | TIMESTAMP(6) WITHOUT TIMEZONE | Date and time the data was updated |

## **Actor Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Actor\_id | SERIAL | A unique identifier of an actor |
|  | First\_name | CHARACTER VARYING(45) | First name of the actor |
|  | Last\_name | CHARACTER VARYING(45) | Last name of the actor |
|  | Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the data was updated |

## **Inventory Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Inventory\_id | SERIAL | A unique identifier assigned to the specific rental unit |
| Foreign Key | Film\_id | SMALLINT | A unique identifier assigned to a film |
|  | Store\_id | SMALLINT | A unique identifier associated with the specific Rockbuster location |
|  | Last\_update | TIMESTAMP(6) WITHOUT TIMEZONE | Date and time the data was updated |

## **Film Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Film\_id | SERIAL | A unique Identifier of the film |
|  | Title | CHARACTER VARYING(45) | Title of the film |
|  | Description | TEXT | Summary of the film |
|  | Release\_year | year | Year the film was released to the public |
| Foreign Key | Language\_id | SMALLINT | A unique identifier for the primary language spoken in the film |
|  | Rental\_duration | SMALLINT | Number of days the film is rented for |
|  | Rental\_rate | NUMERIC(4,2) | Cost to rent the film per day |
|  | Length | SMALLINT | How long the film is in minutes |
|  | Replacement \_cost | NUMBERIC(5,2) | Cost to replace the film if it is lost |
|  | Rating | mpaa\_rating | Motion Picture Association of America (MPAA) rating system |
|  | Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the data was updated |
|  | Special\_features | TEXT[] | Additional features included with rental of the film |
|  | **Fulltext** | Tsvectop | Key words associated with the film |

## **Language Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Language\_id | SERIAL | A unique identifier for the primary language spoken in the film |
|  | Name | CHARACTER VARYING(20) | Language spoken in the film |
|  | Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the data was updated |

## **Film\_CategoryTable**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Film\_id | SMALLINT | A unique identifier assigned to a film |
| Foreign Key | Category\_id | SMALLINT | A unique identifier assigned to a film category |
|  | Last\_update | TIMESTAMP(6) WITHOUT TIMEZONE | Date and time the data was updated |

## **Category Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Category\_id | SERIAL | A unique identifier assigned to a film category |
|  | Name | CHARACTER VARYING(25) | Name of film category/genre |
|  | Last\_update | TIMESTAMP(6) WITHOUT TIMEZONE | Date and time the data was updated |

## **Customer Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Customer\_id | SERIAL | A unique identifier assigned to the customer |
|  | Store\_id | SMALLINT | A unique identifier associated with the specific Rockbuster location |
|  | First\_name | CHARACTER VARYING(45) | First name of the customer |
|  | Last\_name | CHARACTER VARYING(45) | Last name of the customer |
|  | Email | CHARACTER VARYING(45) | Email address of the customer |
| Foreign Key | Address\_id | SMALLINT | Unique identifier assigned to customer address |
|  | Activebool | BOOLEAN | Identifies if customer is active in the system (true/false values) |
|  | Create\_date | DATE | Date the customer was first entered into the system |
|  | Last\_update | TIMESTAMP(6) WITHOUT TIMEZONE | Date and time the data was updated |
|  | Active | INTEGER | Identifies if customer is active in the system (integer values) |

## **Store Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Store\_id | SERIAL | A unique identifier associated with the specific Rockbuster location |
| Foreign Key | Manager\_staff\_id | SMALLINT | A unique identifier assigned to the manager of the Rockbuster location |
| Foreign Key | Address\_id | SMALLINT | A unique identifier assigned to the address of the Rockbuster location |
|  | Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the data was updated |

## **Staff Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Staff\_id | SERIAL | A unique identifier assigned to staff |
|  | First\_name | CHARACTER VARYING(45) | First name of the staff member |
|  | Last\_name | CHARACTER VARYING(45) | Last name of the staff member |
| Foreign Key | Address\_id | SMALLINT | Unique identifier assigned to staff member address |
|  | Email | CHARACTER VARYING(45) | Email address of the staff member |
|  | Store\_id | SMALLINT | A unique identifier associated with the specific Rockbuster location |
|  | Active | BOOLEAN | Identifies if staff member is active in the system (true/false values) |
|  | Username | CHARACTER VARYING(45) | Username of the staff member |
|  | Password | CHARACTER VARYING(45) | Password of the staff member |
|  | Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the data was updated |
|  | Picture | BYTEA | Picture of the staff member |

## **Address Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Address\_id | SERIAL | A unique identifier associated with staff or customer addresses |
|  | Address | CHARACTER VARYING(50) | First line of address of the staff or customer |
|  | Address2 | CHARACTER VARYING(50) | Second line of address of the staff or customer |
|  | District | CHARACTER VARYING(20) | Geographic area the staff or customer resides |
| Foreign Key | City\_id | SMALLINT | A unique identifier associated with city where the staff or customer resides |
|  | Postal\_code | CHARACTER VARYING(10) | Postal code/zip code where the staff or customer resides |
|  | Phone | CHARACTER VARYING(20) | Phone number of the staff or customer |
|  | Last\_updated | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the data was updated |

## **City Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | City\_id | SERIAL | A unique identifier associated with city where the staff or customer resides |
|  | City | CHARACTER VARYING(50) | Name of city the staff or customer resides |
| Foreign Key | Country\_id | SMALLINT | A unique identifier associated with the country where the staff or customer resides |
|  | Last\_updated | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the data was updated |

## **Country Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unique Key** | **Columns** | **Data Type** | **Description** |
| Primary Key | Country\_id | SERIAL | A unique identifier associated with the country where the staff or customer resides |
|  | Country | CHARACTER VARYING(50) | Name of the country where the staff or customer resides |
|  | Last\_updated | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time the data was updated |

# Entity Relationship Diagram (ERD):

