Answers 3.2 Graphical user interface

Description automatically generated

Part 3

1. The ERD above has a star schema you can tell it is a star schema because there is no central point that each data base is connecting to, you can also tell from the tables in the bottom right of the graph how they branch off each other.
2. Fact tables and Dimensions

Payment

|  |  |  |
| --- | --- | --- |
| payment\_ID | Serial | The cards payment information |
| customer\_ID | SMALLINT | Customers ID number |
| staff\_ID | SMALLINT | Staff member that helped customer |
| rental\_ID | INTEGER | Number referring to the item being rented |
| amount | NUMERIC(5,2) | Amount of purchase |
| payment\_date | TIMESTAMP(6) WITHOUT TIME ZONE | Day the transaction took place |

Rental

|  |  |  |
| --- | --- | --- |
| rental\_id | SERIAL | Refers to the item being rented |
| rental\_Date | TIMESTAMP(6) WITHOUT TIME ZONE | Mm/dd/yy |
| inventory\_id | INTEGER | Number of the copy that was rented |
| customer\_id | SMALLINT | Customers number ID |
| return\_date | TIMESTAMP(6) WITHOUT TIME ZONE | Day the movie was retuned |
| staff\_id | SMALLINT | Id of the staff member |
| last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | When the item was updated in the system as in stock |

Store

|  |  |  |
| --- | --- | --- |
| Store\_id | Serial | Number that corresponds to store |
| Manager\_staff\_id | SMALLINT | Managers number ID |
| Address\_id | SMALLINT | The address of the store in numbers |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Time the store opens |

Film\_actor

|  |  |  |
| --- | --- | --- |
| Actor\_id | SMALLINT | Number corresponding to an actor |
| Film\_id | SMALLINT | Number corresponding to a film |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date movie was made |

Inventory

|  |  |  |
| --- | --- | --- |
| Inventory\_id | SERIAL | Number that refers to the inventory |
| Film\_id | SMALLINT | Number that refers to the film |
| Store\_id | SMALLINT | Number that refers to the store |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Last updated |

Film\_Category

|  |  |  |
| --- | --- | --- |
| Film\_id | SMALLINT | Number that refers to the film |
| Category\_id | SMALLINT | Number that refers to the category |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Last updated |

Customer

|  |  |  |
| --- | --- | --- |
| Customer\_id | SERIAL | Number that refers to the customer |
| Store\_id | SMALLINT | Number that refers to the store |
| First\_name | CHARACTER VARYING (45) | First name of customer |
| Last\_name | CHARACTER VARYING (45) | Last name of customer |
| Email | CHARACTER VARYING (45) | Email address |
| Address\_id | SMALLINT | Number relating to address of customer |
| Activebool | BOOLEAN | True or false |
| Create\_date | DATE | Date that the entry customer was created |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Last update |
| Active | INTEGER | Is the customer active |

Staff

|  |  |  |
| --- | --- | --- |
| Staff\_id | SERIAL | Number referring to staff member |
| First\_name | CHARACTER VARING(45) | First name |
| Last\_name | CHARACTER VARING(45) | Last name |
| Address\_id | SMALLINT | Address number |
| Email | CHARACTER VARING(50) | Email address |
| Store\_id | SMALLINT | Number referring to store |
| Active | BOOLEAN | True or false |
| Username | CHARACTER VARING(16) | User name for employee login |
| Password | CHARACTER VARING(40) | Password for employee login |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Last update |
| Picture | BYTEA | Employee picture |

Actor

|  |  |  |
| --- | --- | --- |
| Actor\_id | Serial | Number referring to the 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 | Last update |

Film

|  |  |  |
| --- | --- | --- |
| Film\_id | SERIAL | Number referring to film |
| Title | CHARACTER VARYING(255) | Title of film |
| Description | TEXT | Description of film |
| Release\_year | YEAR | What year movie was released |
| Language\_id | SMALLINT | Number referring to language of movie |
| Rental\_duration | SMALLINT | Length of movie rental |
| Rental\_rate | NUMERIC(4,2) | Price to rent the movie |
| Length | SMALLINT | How long the movie is |
| Replacement\_cost | NUMERIC(5,2) | Cost to replace the movie |
| rating | Mpaa\_rating |  |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Last update |
| Special\_features | TEXT[] | Special features about the in the movie like bonus scenes |
| Fulltext | TSVECTOR | Full text |

Category

|  |  |  |
| --- | --- | --- |
| Category\_id | SERIAL | Number referring to category |
| Name | CHARACTER VARYING(25) | Name of category |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Last update |

City

|  |  |  |
| --- | --- | --- |
| City\_id | SERIAL | Number referring to city |
| City | CHARACTER VARYING(50) | Name of city |
| Country\_id | SMALLINT | Id referring to country |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Last update |

Country

|  |  |  |
| --- | --- | --- |
| Country\_id | Serial | Number referring to country |
| Country | CHARACTER VARYING(50) | Name of country |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Last update |

Language

|  |  |  |
| --- | --- | --- |
| Language\_id | SERIAL | Number referring to language |
| Name | CHARACTER(20) | Name of language |
| Last\_update | TIMESTAMP(6) WITHOUT TIME ZONE | Last update |

4a) you would need the actor table and rental table.

4b) you would need the language table and film table