I will have to change some part of my database before I can transfer the data to the new one.

Main table:

* Works table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Current table:*   |  | | --- | | **All\_works** | | wk-itemalpha  wk-itemnumber | | wk-name  wk-description  wk-type  wk-subtype  wk-author  wk-date\_complete  wk-date\_accquire  wk-insurance\_value  wk-claim  wk-potray\_with | | *New group table:*   |  | | --- | | **Works** | | wk-IDAlpha  wk-IDNumeric | | wk-worksName  wk-type  wk-subtype  wk-Creator  wk-completionDate  wk-acquisitionDate  wk-workDexcription  wk-ownership  wk-question  wk-answer | |

For this table, my current table already look identical to it, including the primary key, although there are still some differences.

The table that the group agree on will not contain the **insurance\_value** value of the item because that value will be record as the temporal data for the new table *WorksInsuranceValue*. So, I will need to add all the current item value to that table and set the same date range for all of them. Because there aren’t any change in the insurance value, so all the end\_date value will be null.

* Locations table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Current:*   |  | | --- | | **Galleries** | | lc-name | | lc-dimension  lc-min\_capacity  lc-max\_capacity | | *New:*   |  | | --- | | **Locations** | | lc-name  lc-museumName | | lc-telStartDate  lc-telEndDate  lc-dimension  lc-minNumWorks  lc-maxNumWorks  ls-availableDate | |

For the location table, because we will combine the data of all the group members together, we need to distinguish each member location by adding the attribute **museumName** and make it as a part of the PK. So, even when our locations the same names, it does not violet the PK unique rule. Therefore, I just need to add the name of my museum for each row of location information.

Now, even though my old table already have the attributes like: dimension, min and max capacity, we decided to add more attributes for the locations of the traveling exhibitions later. So, the **telStartdate** and **telEndDate** will be used to tell, for a temporary location, when the exhibition will be held and end at that place. So, because I have stored the date information in the *exhibition\_info* table of my old database, I will use it for this 2 attribute. However, for the locations that are in the main museum, they will never held a traveling exhibition and therefore, this 2 attributes will be null for them.

The **availableDate** is used for when the location is not occupied and can be used. It is most likely the end date of the exhibitions. So, for now I will only need to update this attribute with the date after the exhibitions end, and then later I can create a trigger or a rule that can used this attribute to plan the exhibition in the future.

* Exhibitions table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Current:*   |  | | --- | | **exhibitions\_info** | | ex-exhibition\_id | | ex-theme  ex-ex\_descripton  ex-number\_of\_items  ex-start\_date  ex-end\_date  ex-location\_name | | *New:*   |  | | --- | | **exhibitions** | | ex-exhibitionName  ex-exhibitionStartDate  ex-museumName | | ex-istraveling  ex-exhibitionDescription  ex-exhibitonEndDate | |

In my old table, I used the **exhibition\_id** as the set of 3 characters to counter the problem that is 2 exhibitions can have the same name. However, our group decide to go with using the **exhibitionName** and the **exhibitionStartDate** as a part of the PK to counter the problem. We also add the **museumName** attribute to distinguish our exhibitions from each other. So, for me, I have to create a new set of PK and like in the Location tables, I will add my museum name for each row of exhibitions information. I will also have to drop the **exhibition\_id** as I won’t use it in the future.

I also have to drop the number\_of\_items and location\_name as they will be store elsewhere in the database. However, I will have another attribute **istraveling** which is a Boolean. My data will have difference from my group as for a travelling exhibition, they will use it as a whole, but I divided it into 5 exhibitions for each temporary location with the different start date. So, I can add **istraveling** to tell whether or not the 5 exhibitions is actually one or not, but the way I represent the traveling exhibition will be different from my groupmates.

Temporal data Table:

* TempExhibitionsLocations table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Current:*   |  | | --- | | **Temporary\_location** | | tel-name\_location FK-lc | | tel-sponsor  tel-address  tel-head\_of\_security  tel-insurance | | *New:*   |  | | --- | | **TempExhibitionsLocations** | | tel-lcname FK-lc  tel-lcMuseumName FK-lc  tel-tempexhibitionLocationStartDate | | tel-sponsor  tel-security  tel-insurance  tel-tempExhibitionLocationEndDate  tel-tempExhibitionLocationAddress | |

In my old table database, I forgot to add the situation that the temporary location can be reused in the future and this table can be used as a temporal data storage. Now, our group decide to add the **tempexhibitionLocationStartDate** attribute to know the time the temporary location is used and also make it a part of the PK. Moreover, because this table is connected to the *TempExhibitionsLocations* table it also need to add the **lcMuseumName** attribute to be a part of the PK and the FK to *locations* table as the PK in the *locations* table is changed. So, what I need to do here is to change the part of add the museum attribute and change the set of PK and the FK in the *Temporary\_location* table.

The **startDate** and **endDate** attributes in this table will have the also have the same value as the one in the *locations* table, so I can easily update them.

* WorksLocation table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Current:*   |  | | --- | | **work\_location** | | wl-itemalpha\_ex FK-wk  wl-itemnumber\_ex FK-wk wl-current\_location  wl-date\_in | | wl-date\_out  wl-time\_in  wl-time\_out | | *New:*   |  | | --- | | **WorksLocations** | | wl-lcName FK-lc  wl-wkIDAlpha FK-wk  wl-wkIDNumeric FK-wk  wl-lcmuseumName FK-lc  wk-workLocationStartDateTime | | wk- workLocationEndDateTime | |

For this table, because of the change of PK set in *locations* table, I will need to add the **lcmuseumName** attribute to connect it with the location table.

The other thing I need to do is to combine the 2 attributes **date\_in** and **time\_in**, so that the attribute can show both date and time. After that I can make the result attribute as a part of the PK in this table. The same will be done for **date\_out** and **time\_out**, but we don’t need it as part of the PK. No further change need to be made for this table.

* ExhibitionsLocations table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Current:*   |  | | --- | | **Exhibition\_location** | | el-Ex\_id FK-ex  el-current\_location FK-lc | | el-no\_of\_items | | *New:*   |  | | --- | | **ExhibitionsLocations** | | el-lcName FK-lc  el-exName FK-ex  el-exStartDate FK-ex  el-lcexMuseumName FK-lc, ex | | el-lctelStartDate  el-lctelEndDate  el-exEndDate | |

Because the set of PK in both *Exhibitions* table and *Locations* table are changed, I will need to add the more attributes to make a new PK. All of the data for these new attributes are already available in *locations* and *exhibitions* and therefore, can be updated from those tables. Because **Ex\_id** is not needed in the new database, I will also drop it.

The no\_of\_items attribute is also not needed for this table, so I will also drop it.

The 2 new special attributes like: **lctelStartDate** and **lctelEndDate** are used to store the date of the traveling exhibition. For this dates, I can find them both in the *exhibitions* table or the *temporary location* table, therefore I can update it from there. However, for the temporary locations, the value of this attribute will be null.

* ExhibitionsWorks table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Current:*   |  | | --- | | **Exhibition\_works** | | ew-itemalpha\_ex FK-wk  ew-itemnumber\_ex FK-wk  ew-ex\_id FK-ex | |  | | *New:*   |  | | --- | | **ExhibitionsWorks** | | ew-exName FK-ex  ew-wkIDAlpha FK-wk  ew-wkIDNumeric FK-wk  ew-exStartDate FK-ex  ew-exMuseumName FK-ex | | ew-endDate | |

This table has to be changed due to the change of the PK set from the exhibitions table. So, after I added all the new attributes, I can update the information from the exhibitions table.

* WorksKeeper table

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Current:*   |  | | --- | | **donors** | | do-itemalpha\_don FK-wk  do-itemnumber\_don FK-wk | | do-donor\_name |  |  | | --- | | **loan\_institution** | | lo-itemalpha\_loan FK-wk  lo-itemnumber\_loan FK-wk | | lo-name  lo-address  lo-phonenum  lo-email  lo-start\_date  lo-end\_date | | *New:*   |  | | --- | | **Workskeeper** | | wkk-workKeeperName  wkk-wkIDNumberic FK-wk  wkk-wkIDAlpha FK-wk  wkk-workKeeperStartDate  wkk-status | | wkk-workKeeperAddress  wkk-workKeeperEndDate  wkk-email  wkkphonenumber | |

The *workskeeper* table is the combination of the donors and *loan\_institution* table. Because this 2 tables have the same attributes and can work in the same way, all we need to do is to add another attribute **status** to know whether or not the items are lend or borrowed. All the data can be taken from this 2 old tables after the merge.

When I do these 2 tables, I didn’t think to make them the temporal data storage, so I only make the item identification to be the PK. However, in this project, making it a temporal data storage mean I have to change the PK set like the above, but all the information can be update easily.

* Doors table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Current:*   |  | | --- | | **Doors** | | dr-door\_from FK-lc  dr-door\_to FK-lc | | dr-door\_name | | *New:*   |  | | --- | | **Doors** | | dr-lcMuseumName FK-lc  dr-lcName1 FK-lc  dr-lcname2 FK-lc | |  | |

The doors table doesn’t have many major change.

I will need to drop the **doorname** as it is considered unnecessary.

Then, because the PK set in the locations table is changed, I will need to add the **museum name** as part of the table PK. This will also be a way to distinguished the doors between the museum. All the data can be taken from *locations* table.

* Media table

|  |
| --- |
| **Media** |
| md-wkIdAlpha FK-wk  md-wkIDNumeric FK-wk md-material |
|  |

For this table, it is identical to my current one and have the same primary key as foreign key. Therefore, I can transfer my data to this table easily.

New table:

* WorksState table

|  |
| --- |
| **WorksState** |
| ws-wkIDNumeric FK-wk  ws-wkIDAlpha FK-wk  ws-workStateStartDate |
| ws-state  ws-workStateEndate |

* WorksInsuranceValue table

|  |
| --- |
| **WorksInsuranceValue** |
| wiv-wkIDNumeric FK-wk  wiv-wkIDAlpha FK-wk  wiv-workInsuranceValueStartDate |
| wiv-insuranceValue  wiv- workInsuranceValueEndDate |