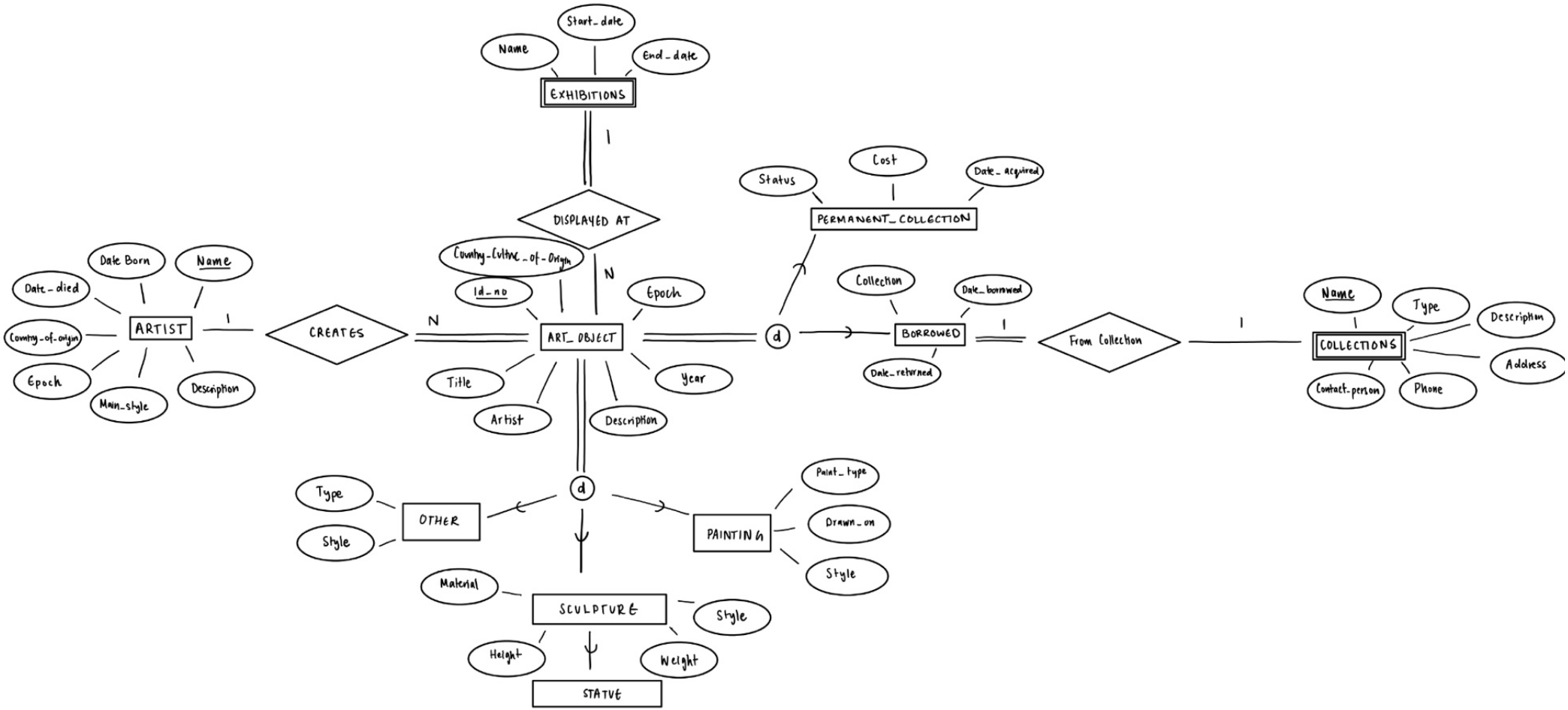
EER Diagram:


Start_date
Name
End_date
EXHIBITIONS
1
DISPLAYED AT
N
Country_Culture_of_Origin
Id_no
Epoch
Status
Cost
Date_acquired
PERMANENT_COLLECTION
Collection
Date_borrowed
BORROWED
Date_returned
1
From Collection
1
Name
Type
Description
Address
COLLECTIONS
Contact_person
Phone
Date Born
Name
Date_died
ARTIST
Country_of_origin
Epoch
Main_style
Description
1
CREATES
N
ART_OBJECT
Title
Artist
Description
year
d
Type
Style
OTHER
d
Paint_type
Drawn_on
Style
PAINTING
Material
SCULPTURE
Style
Height
Weight
STATUE

Description:

For our EER diagram, we decided that all entities should be in some way related to ART_OBJECT. We used a disjoint relation to show the relationship between ART_OBJECT and its 4 types, since each main type cannot be in union with another. When deciding the relation of STATUE to ART_OBJECT, we assumed that all STATUE objects would fall under the SCULPTURE category, since statues are considered sculptures. As for the ARTIST entity, we demonstrated a 1:N cardinality, as one artist may create multiple different ART_OBJECTs. For the EXHIBITIONS entity, we assumed each ART_OBJECT would be displayed at a single exhibition, therefore the implentation of an 1:1 cardinality. We also thought that the exhibition entity would be a weak entity, since it is only part of the database when art objects are displayed at the exhibitions. We disjointly categorized ART_OBJECT into PERMANENT_COLLECTION and BORROWED. Since a permanent collection object belongs to the museum and a borrowed collection object belongs to another source, they cannot be in union, therefore there cannot be overlap between the two entities. As for the collections, we decided that it would be related to the borrowed art object in the way that BORROWED borrows from COLLECTIONS. This would make COLLECTIONS a weak entity, since it cannot exist in the database if the museum does not borrow art objects from it. For each of the attributes in the diagram, we assumed that they can only have one value so that the database generalizes the data for each entity,