

**Assignment 5**  
**B461: Database Concepts**  
**Fall 2021**

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## **Introduction**

In this solution paper, each of the two problems have been broken up into sub-problems, or sub-sections, that will then be used to form the full final ER diagram. These solutions are for Assignment 5 CSCI-B461: Database Concepts Fall 2021.

## Question 1

REPORT\_ASSESSMENT database.

### Question 1.a.

#### Question 1.a.

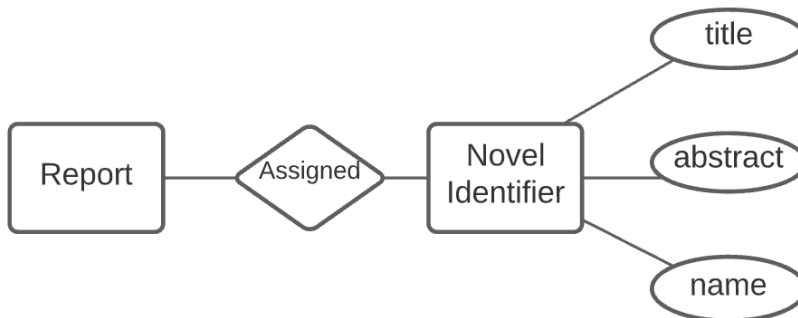
Writers of reports are uniquely distinguished by email id. First and last names are also stored.



### Question 1.b.

#### Question 1.b.

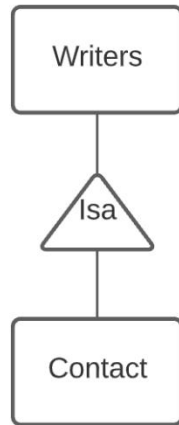
Each report is assigned a novel identifier by the system and is depicted by a title, abstract, and the name of the electronic document containing the report.



### Question 1.c.

#### Question 1.c.

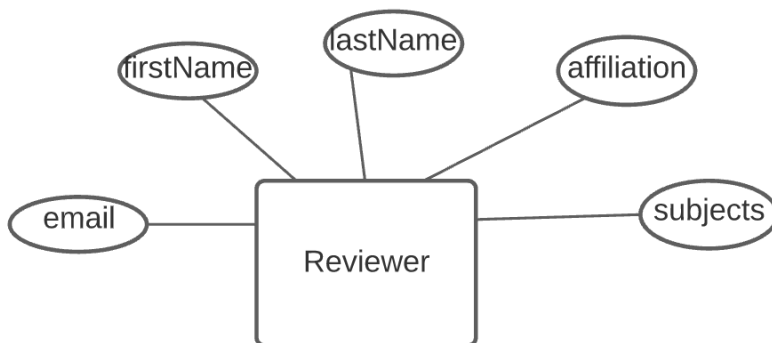
A report might have multiple writers, however one of the writers is assigned as the contact writer.



### Question 1.d.

#### Question 1.d.

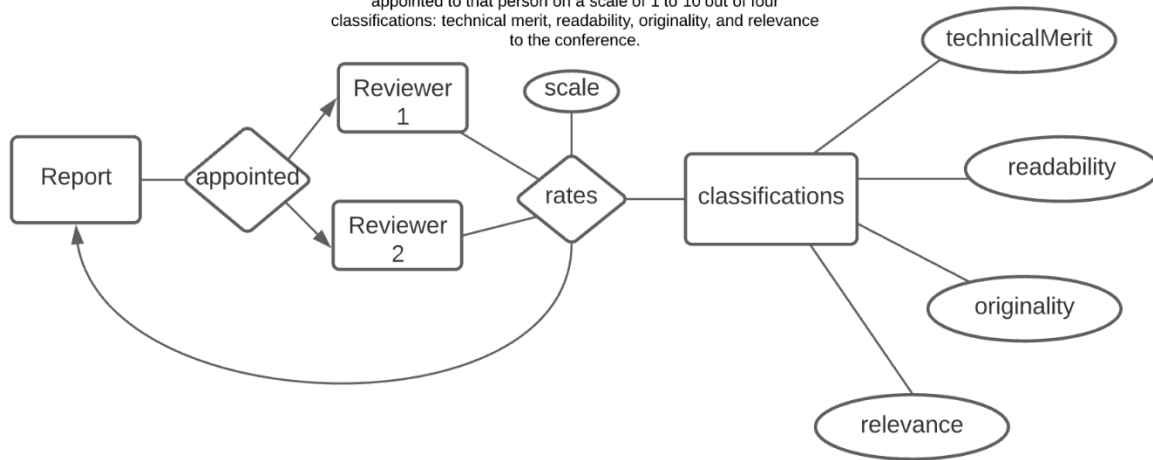
Reviewers of reports are uniquely recognized by email address. Every reviewer's first name, last name, affiliation, and subjects of interest are additionally recorded.



### Question 1.e.

Question 1.e.

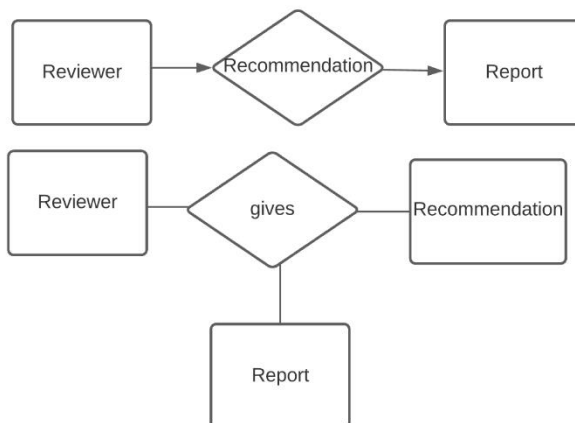
Each report is allotted two reviewers. A reviewer rates each report appointed to that person on a scale of 1 to 10 out of four classifications: technical merit, readability, originality, and relevance to the conference.



**Question 1.f.**

Question 1.f.

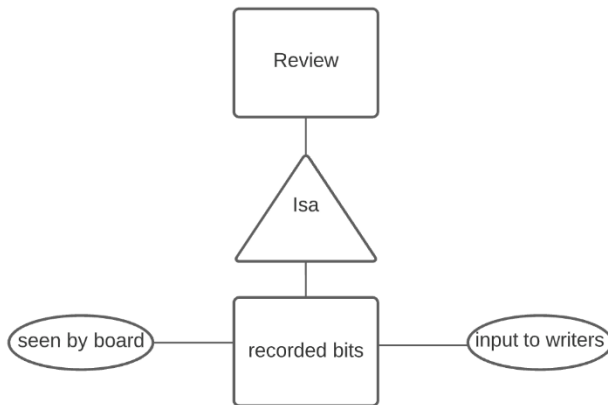
At long last, every reviewer gives an overall recommendation with respect to report.



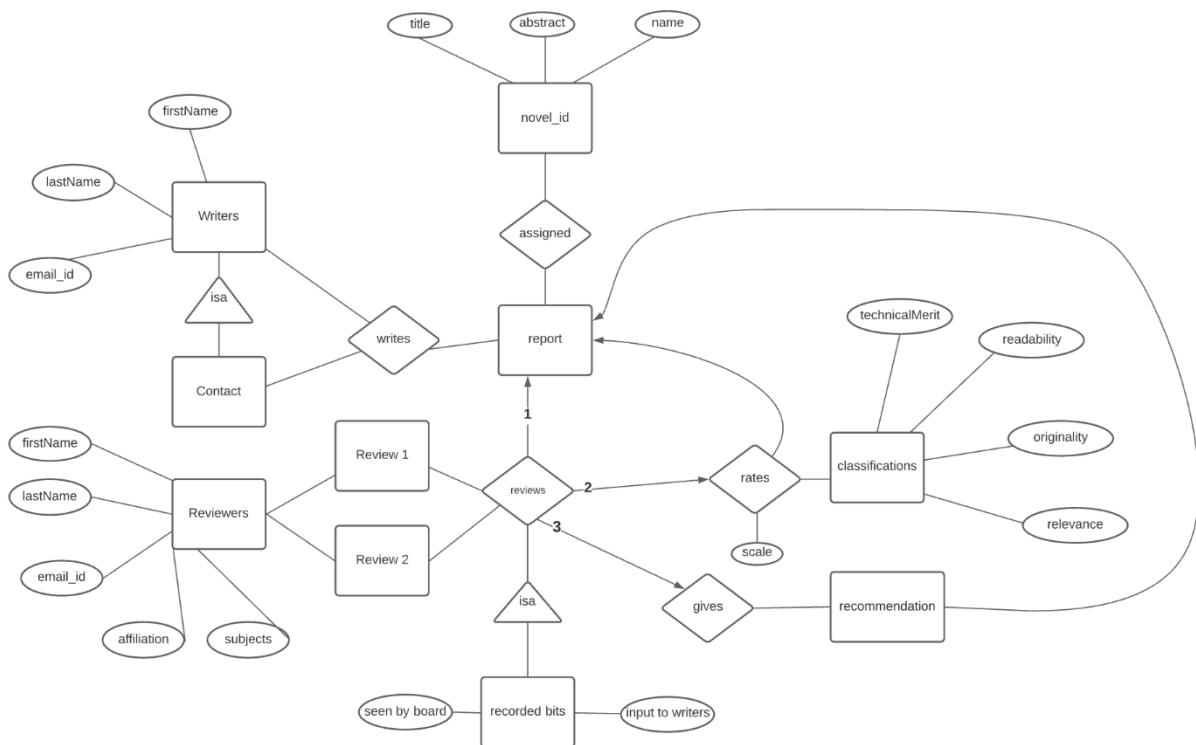
## Question 1.g.

Question 1.g.

Each review contains two sorts of recorded bits of feedback: one to be seen by the review board only and the other as input to the writer(s).



## Question 1 Full Diagram



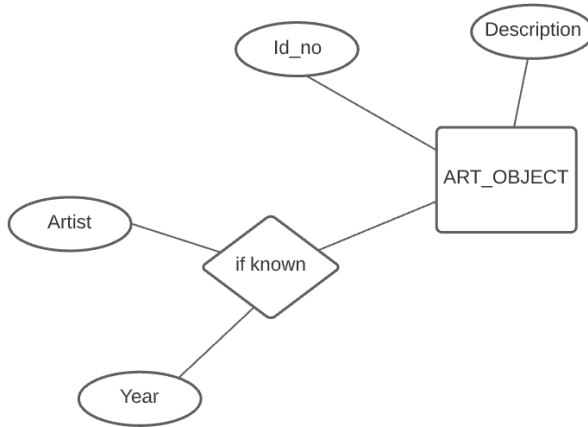
## Question 2

Art museum database.

### Question 2.a.

Question 2.a.

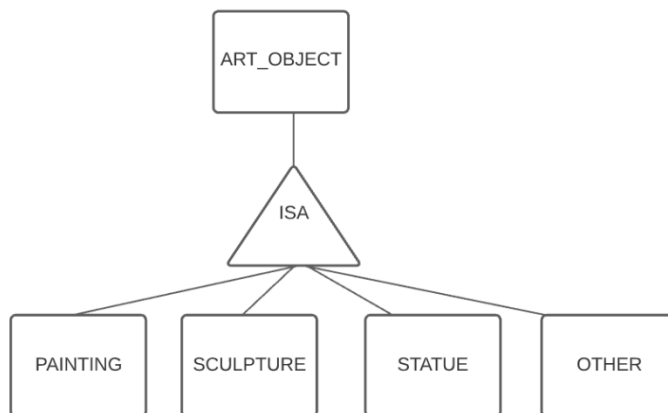
The museum has a collection of ART\_OBJECTS. Each ART\_OBJECT has a unique Id\_no, an Artist (if known), a Year (when it was created, if known), a Title, and a Description. The art objects are categorized in several ways, as discussed below.



### Question 2.b.

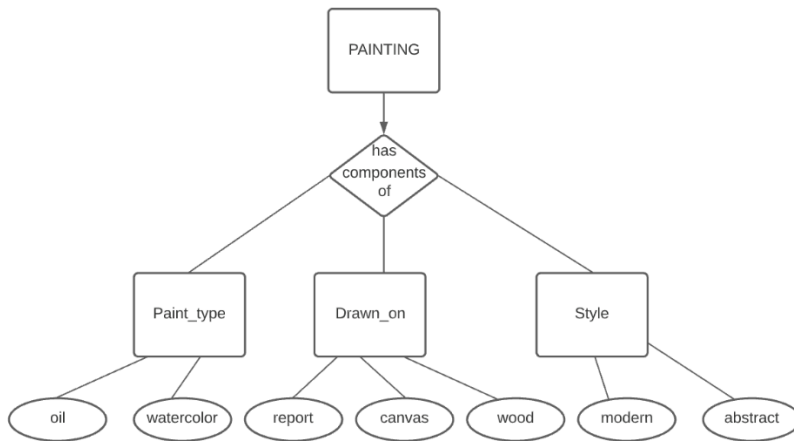
Question 2.b.

ART\_OBJECTS are categorized based on their type. There are three main types: PAINTING, SCULPTURE, and STATUE, plus another type called OTHER to accommodate objects that do not fall into one of the three main types.



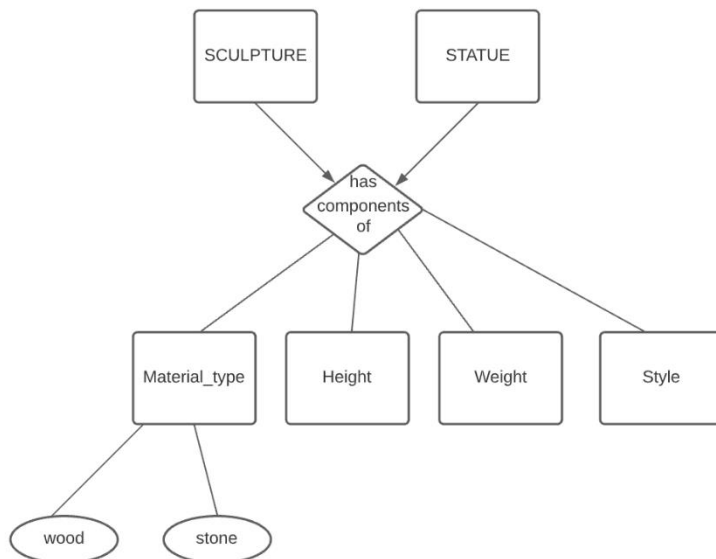
### Question 2.c.

Question 2.c.  
A PAINTING has a Paint\_Type (oil, watercolor, etc.), material on which it is Drawn\_on (report, canvas, wood, etc.), and Style (modern, abstract, etc.).



### Question 2.d.

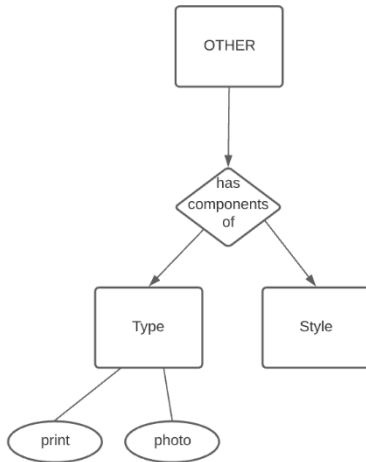
Question 2.d.  
A SCULPTURE or a statue has a Material from which it was created (wood, stone, etc.), Height, Weight, and Style.





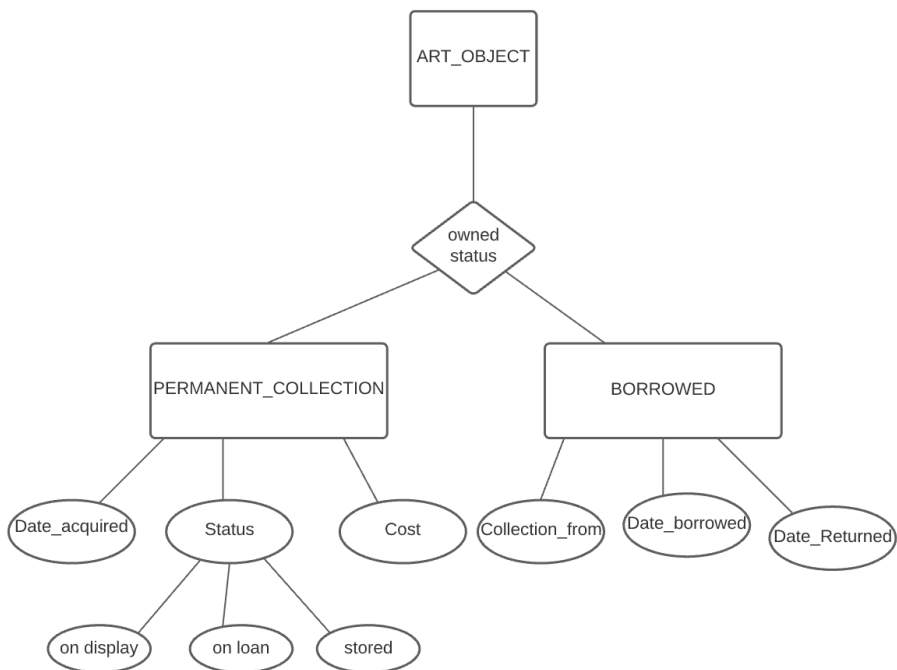
## Question 2.e.

Question 2.e.  
An art object in the OTHER category has a Type (print, photo, etc.) and Style.



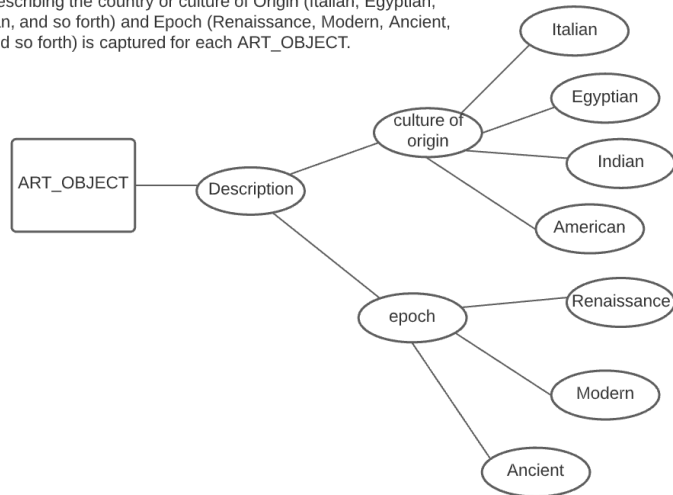
## Question 2.f.

Question 2.f.  
Art\_OBJECTs are categorized as either PERMANENT\_COLLECTION (objects that are owned by the museum) and BORROWED. Information captured about objects in the PERMANENT\_COLLECTION includes Date\_acquired, Status (on display, on loan, or stored), and Cost. Information captured about BORROWED objects includes the Collection from which it was borrowed, Date\_borrowed, and Date\_returned.



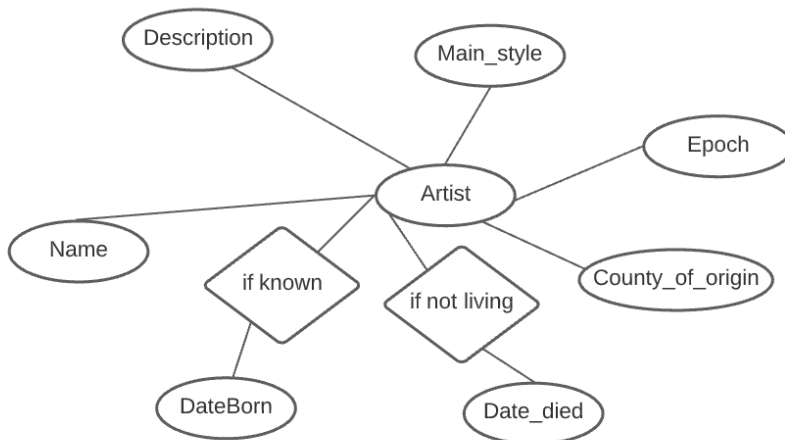
## Question 2.g.

Question 2.g.  
Information describing the country or culture of Origin (Italian, Egyptian, American, Indian, and so forth) and Epoch (Renaissance, Modern, Ancient, and so forth) is captured for each ART\_OBJECT.



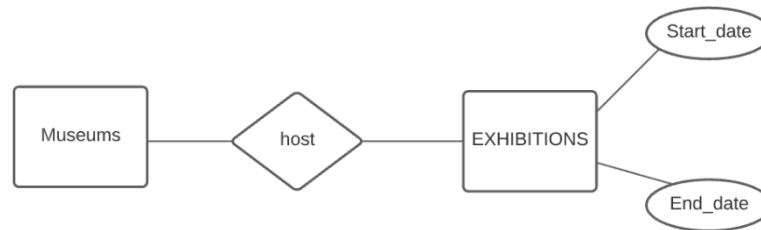
## Question 2.h.

Question 2.h.  
The museum keeps track of ARTIST information, if known: Name, Dateborn (if known), Date\_died (if not living), Country\_of\_origin, epoch, Main\_style, and description. The Name is assumed to be unique.



### Question 2.i.

Question 2.i.  
Different EXHIBITIONS occur, each having a Name, Start\_date, and End\_date



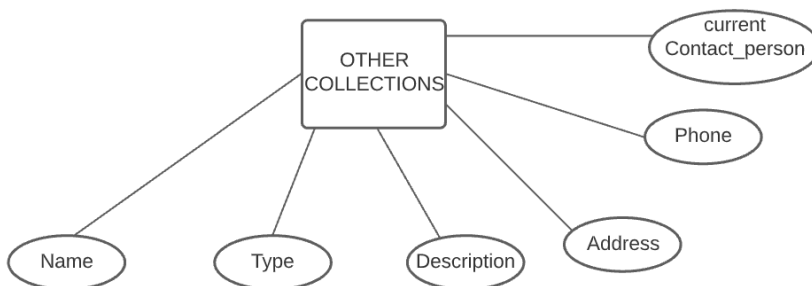
### Question 2.j.

Question 2.j.  
EXHIBITIONS are related to all the art objects that were on display during the exhibition



### Question 2.k.

Question 2.k.  
Information is kept on other COLLECTIONS with which the museum interacts, including Name (unique), Type (museum, personal, etc.), Description, Address, Phone, and current Contact\_person.



## Question 2 Full Diagram

