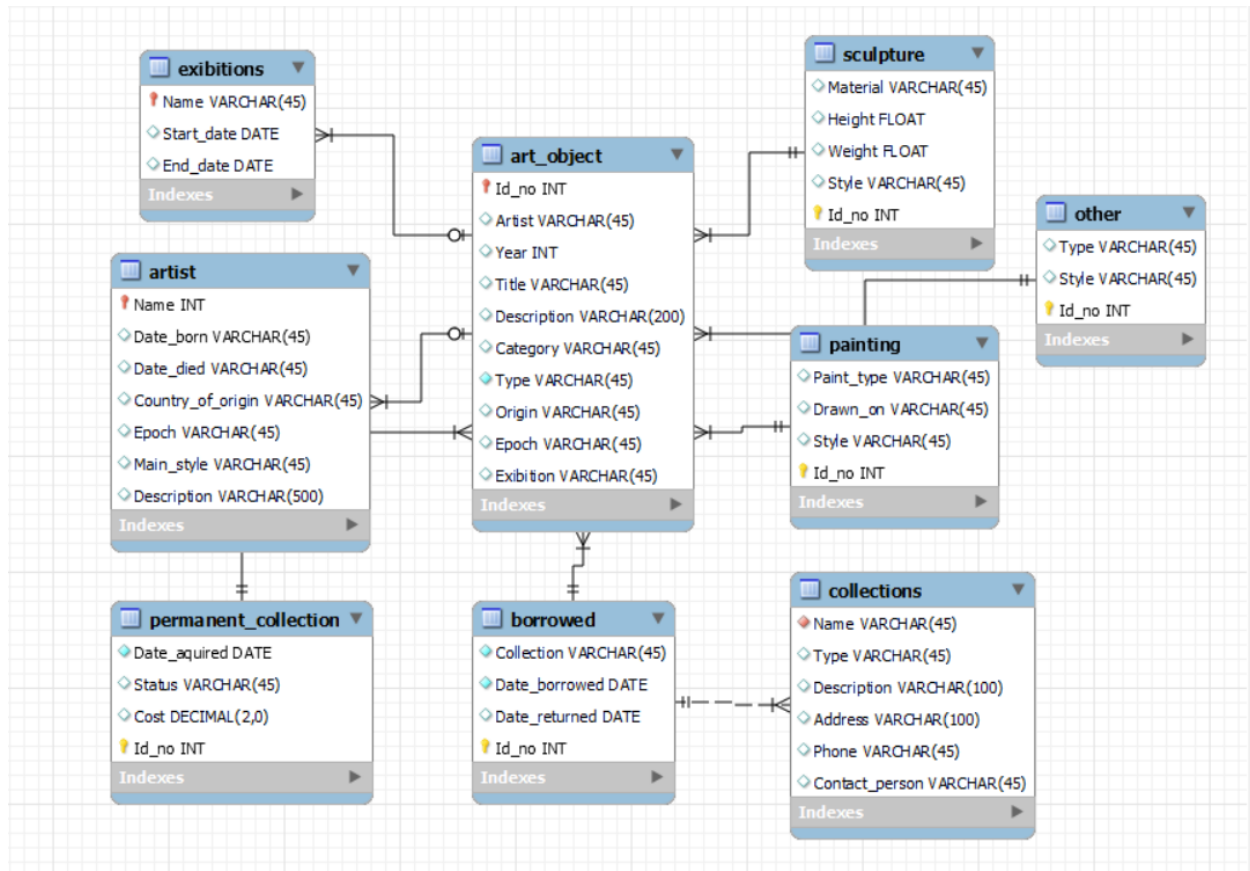Project Description:

The purpose of this database is to keep track of information for an art museum. The requirements are as follows:

- The museum has a collection of ART_OBJECTS. Each one has a unique Id_no, Artist, Year, Title, and Description. Objects also contain information about the country/culture of Origin, and Epoch.
- Art objects are categorized by their type. There are 3 main types: PAINTING, SCULPTURE, and OTHER.
- A PAINTING has a Paint_type, material on which it is drawn, Drawn_on, and Style.
- A SCULPTURE has a Material, Height, Weight, and Style.
- An ART_OBJECT categorized as OTHER has a Type, and Style.
- ART_OBJECTS are categorized as either PERMANENT_COLLECTION or BORROWED. Objects in the PERMANENT_COLLECTION have information about Date_aquired, Status (on display, on loan, or stored), and Cost. Those that are BORROWED include Collection from which it was borrowed, Date_borrowed, and Date_returned.
- The museum also keeps track of ARTIST information, if it is known including, Name, Date_born, Date_died, Country_of_origin, Epoch, Main_style, and Description.
- There are different EXHIBITIONS in the museum, each has a Name, Start_date, and End_date. They are related to all of the art objects that are on display.
- Information is kept about other COLLECTIONS with which the museum interacts; this includes Name, Type (museum, personal, etc.), Description, Address, Phone, and the current contact person.

Inspiration for this project comes from "Fundamentals of Database Systems 7th Edition" by Ramez Elmasri and Shamkant B. Navathe in pages 138-139.

Project 9

ER Diagram:

DBMS: MYSQL

MySQL Workbench

Local instance MySQL80 (art_...

File   Edit   View   Query   Database   Server   Tools   Scripting   Help

art_object

Limit to 1000 rows

1 • SELECT * FROM art_museum.art_objects

SQL Additions

Jump to

Automatic context help is disabled. Use the toolbar t manually get help for the current caret position or t toggle automatic help.

Navigator

SCHEMAS

Filter objects

▼ Tables
  ▶ art_object
  ▶ artist
  ▶ borrowed
  ▶ collections
  ▶ exibitions
  ▶ other
  ▶ painting

Administration   Schemas

Information

No object selected

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Id_no	Artist	Year	Title	Description	Category	Type	Origin	Epoch	Exibition
1	Leonardo da Vinci	1503	Mona Lisa	The Mona Lisa is a half...	Painting	Permanent	Italy	Reinaissance	Reinassance Art
2	Leonardo da Vinci	1495	The Last Supper	Painted in an era when...	Painting	Permanent	Italy	Reinaissance	Reinassance Art
3	Vincent van Gogh	1889	The Starry Night	The compatively abstr...	Painting	Permanent	France	Long nineteent...	Classic Art
4	Edvard Munch	1893	The Scream	The Scream is the pop...	Painting	Permanent	Norway	Long nineteent...	Classic Art
5	Pablo Picasso	1937	Guernica	Guernica is a large 193...	Painting	Borrowed	Spain	Spanish Civil War	Art of War
6	Gustav Klimt	1907	The Kiss	The Kiss is an oil-on-ca...	Painting	Borrowed	Austria	Golden Period	Romantic Art
7	Johannes Vermeer	1665	Girl With a Pearl Earring	Girl with a Pearl Earring...	Painting	Permanent	Netherlands	Golden Age	Classic Art
8	Sandro Botticelli	1485	The Birth of Venus	The Birth of Venus is a ...	Painting	Borrowed	Italy	Reinaissance	Reinassance Art
9	Diego Velazquez	1656	Las Meninas	Las Meninas is a 1656 ...	Painting	Borrowed	Spain	Golden Age	Classic Art
10	Grant Wood	1930	American Gothic	American Gothic is uniq...	Painting	Permanent	United States	Great Depression	American Art
11	Michelangelo	1504	David	David is a masterpiece ...	Sculpture	Borrowed	Italy	Reinaissance	Reinassance Art
12	Katsushika Hokusai	1831	The Great Wave Off K...	The Great Wave off Ka...	Other	Permanent	Japan	Edo Period	Eastern Art
13	Michelangelo	1498	Pieta	This famous work ort d...	Sculpture	Permanent	Italy	Reinaissance	Reinassance Art
14	Alexandros of Antioch	130	Venus de Milo	The Venus de Milo is an...	Sculpture	Permanent	Greek	Hellenistic Period	Greek Mythol...
15	Vincent van Gogh	1888	Cafe Terrace at Night	Cafe Terrace at Night i...	Painting	Permanent	France	Post-Impressio...	Classic Art
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Result Grid

Form Editor

Field Types

Query Stats

Execution Plan

art_object 1

Apply   Revert

Context Help   Snippets

Output

Query Completed

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Query Examples:

1. Select the title and year piece was created and sort from oldest to most recent.

```
1 ● SELECT Title, Year
2   FROM art_museum.art_object
3   ORDER BY Year ASC;
```

Result Grid | Filter Rows: [   ] | Export:

Title	Year
▶ Venus de Milo	130
The Birth of Venus	1485
The Last Supper	1495
Pieta	1498
Mona Lisa	1503
David	1504
Las Meninas	1656
Girl With a Pearl Earring	1665
The Great Wave Off K...	1831
Cafe Terrace at Night	1888
The Starry Night	1889
The Scream	1893
The Kiss	1907
American Gothic	1930
Guernica	1937

2. List art pieces in museum from least to most expensive (1 = 1 million dollars).

```
1 •   SELECT Id_no, Cost
2     FROM art_museum.permanent_collection
3     ORDER BY Cost;
```

Result Grid | Filter Rows: | Edit:

Id_no	Cost
14	0.75
13	1.15
10	1.67
12	1.85
15	2.36
7	13.2
4	27.1
3	55.65
2	57.5
1	100
NULL	NULL

3. Select the art pieces that are made out of Marble.

```
1 •    SELECT Id_no
2      FROM art_museum.sculpture
3      WHERE Material = 'Marble';
```

Result Grid		Filter Rows:	Edit:

Id_no
13
14
NULL

4. Print all of the paintings that were made using Oil paint.

```sql
1   SELECT *
2   FROM art_museum.painting
3   WHERE Paint_type = 'Oil';
```

Result Grid | Filter Rows: | Edit:

Paint_type	Drawn_on	Style	Id_no
Oil	Canvas	Reinaissance	1
Oil	Canvas	Reinaissance	2
Oil	Canvas	Reinaissance	3
Oil	Canvas	Reinaissance	4
Oil	Canvas	Expressionism	5
Oil	Canvas	Expressionism	6
Oil	Canvas	Cubism	7
Oil	Canvas	Cubism	8
NULL	NULL	NULL	NULL

5. Sort exhibitions by their end date. Which will end the longest from now?

```
1 •  SELECT *
2    FROM art_museum.exibitions
3    ORDER BY End_date;
```

Result Grid | Filter Rows: | Edit:

Name	Start_date	End_date
Eastern Art	10/14/19	02/05/21
Romantic Art	08/05/20	02/28/23
Art of War	12/25/21	04/15/22
Reinassance Art	10/15/21	05/15/21
Classic Art	11/26/21	08/22/22
Greek Mythology	11/17/21	10/30/22
NULL	NULL	NULL

6. Find the collection of the borrowed art piece with Id_no 5.

```sql
1 •    SELECT *
2      FROM art_museum.borrowed
3      WHERE Id_no = 5;
```

Collection	Date_borrowed	Date_returned	Id_no
Museo National Centro de Arte Reina Sofia	10/25/20	12/31/20	5
NULL	NULL	NULL	NULL

7. List collection information from those that are classified as Museums.

```sql
1 •    SELECT Contact_person, Phone, Address, Name
2      FROM art_museum.collections
3      WHERE Type = 'Museum';
```

Contact_person	Phone	Address	Name
Adele Newhart	39055294885	Campo della Carità, 1050, 30...	Accademia Gallerly
Robert Brown	43795570	Prinz Eugen-StraBe 27, 1030 ...	Autrian Gallery Belvedere
John Smith	34917741000	C. de Isabel, 52, 28012 Madri...	Museo National Centro de Arte Reina Sofia
Ludovico Peluche	34913302800	C. de Ruiz de Alarcon, 23, 28...	Museo National del Prado
Rebbeca Green	39055294883	Piazzale degli Uffizi, 6, 50122 ...	Uffizi Gallery
NULL	NULL	NULL	NULL

8. Get the artist description of the artist Vincent van Goh.

```
1 •   SELECT Name, Description
2     FROM art_museum.artist
3     WHERE Name = 'Vincent van Gogh';
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap C

Name	Description
Vincent van Gogh	Vincent Willen van Gogh was a Dutch Post-Impressionist paiter who posthumously became one of the most famous and influential figures in Western art history.
NULL	NULL

9. Select the artist information front the artists that made art during the Renaissance era.

```
1 •   SELECT *
2     FROM art_museum.artist
3     Where Main_style = 'Reinassance';
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: IA

Name	Date_born	Date_died	Country_of_origin	Epoch	Main_style	Description
Leonardo da Vinci	04/15/1452	05/02/1519	Italy	Reinassance	Reinassance	Leonardo da Vinci was an Italian polymath of the High Renaissance who was active as a painter, droughtsman, engineer, scientist, theorist, sculptor and architect.
Michelangelo	03/06/1475	02/18/1564	Italy	Reinassance	Reinassance	Michelangelo di Lodovico Buonarroti Simoni, was an Italian sculptor, painter, architect, and poet whose work had a major influence in the development of Western art.
Sandro Botticelli	NULL	05/17/1510	Italy	Reinassance	Reinassance	Alessandro di Mariano di Vanni Filipepi, was an italian painter of the Early Reinassance. Botticelli's posthumous reputation suffered until the late 19th century, when he was rediscovered by the Pre-Raphaelites who stimulated a reappraisal of his work.
NULL	NULL	NULL	NULL	NULL	NULL	NULL

10. List the artist from oldest to youngest.

```
1 ●   SELECT Name, Country_of_origin
2     FROM art_museum.artist
3     ORDER BY Date_born;
```

Name	Country_of_origin
Alexandros of Antioch	France
Diego Velazquez	Spain
Sandro Botticelli	Italy
Grant Wood	United States
Michelangelo	Italy
Vincent van Gogh	Netherlands
Leonardo da Vinci	Italy
Gustav Klimt	Austria
Johannes Vermeer	Netherlands
Pablo Picasso	Spain
Katsushika Hokusai	Japan
Edvar Munch	Norway
NULL	NULL

User Interface based on English Queries:

(1/5)


```
"C:\Users\yessi\source\Data Structures\DB_project8\main.exe"

Welcome to Yessica's Art Museum


Please select an option:

1. View art objects
2. View artist information
3. View collections
4. View current exhibitions
5. View permanent collection
6. View borrowed collection
8. Contact Museum
9. Exit
1

Please select an option:

1. Paintings
2. Sculptures
3. Other
4. All
4

Id_no   Artist                 Year   Title
1       Leonardo da Vinci      1503   Mona Lisa
2       Leonardo da Vinci      1495   The Last Supper
3       Vincent van Gogh       1889   The Starry Night
4       Edvard Munch           1893   The Scream
5       Pablo Picasso          1937   Guernica
6       Gustav Klimt           1665   The Kiss
7       Johannes Vermeer       1495   Girl With a Pearl Earring
8       Sandro Botticelli      1485   The Birth of Venus
9       Diego Velazquez        1656   Las Meninas
10      Grant Wood             1930   American Gothic
11      Michelangelo           1504   David
12      Katsushika Hokusai     1498   The Great Wave Off Kanagawar
13      Michelangelo           1498   Pieta
14      Alexandros of Antioch  130    Venus de Milo
15      Vincent van Gogh       1888   Cafe Terrace at Night

Select Id_no to view more information or 0 to return to menu
0


Please select an option:
```

(2/5)


```
"C:\Users\yessi\source\Data Structures\DB_project8\main.exe"
Please select an option:

1. View art objects
2. View artist information
3. View collections
4. View current exhibitions
5. View permanent collection
6. View borrowed collection
8. Contact Museum
9. Exit
5

Date_aquired   Status       Cost    Id_no
01/31/2001     On display   100     1
01/31/2021     On display   57.5    2
03/30/2004     On display   55.65   3
11/17/2001     Borrowed     27.1    4
05/08/2002     Storage      13.2    7
06/09/2004     On display   1.67    10
07/05/2003     On display   1.85    12
09/06/2005     On display   1.15    13
04/08/2008     On display   0.75    14
10/08/2006     Borrowed     2.36    15


Please select an option:

1. View art objects
2. View artist information
3. View collections
4. View current exhibitions
5. View permanent collection
6. View borrowed collection
8. Contact Museum
9. Exit
1
Please select an option:

1. Paintings
2. Sculptures
3. Other
4. All
2

Material   Height  Style  Id_no
Marble     164     6700   Reinaissance   13
Marble     195     4500   Reinaissance   14
```

"C:\Users\yessi\source\Data Structures\DB_project8\main.exe"

```
Please select an option:

1. View art objects
2. View artist information
3. View collections
4. View current exhibitions
5. View permanent collection
6. View borrowed collection
8. Contact Museum
9. Exit
1

Please select an option:

1. Paintings
2. Sculptures
3. Other
4. All
1

Paint_type     Drawn_on      Style    Id_no
Oil            Canvas        Reinaissance   1
Oil            Canvas        Reinaissance   2
Oil            Canvas        Reinaissance   3
Oil            Canvas        Reinaissance   4
Oil            Canvas        Expressionism  5
Oil            Canvas        Expressionism  6
Oil            Canvas        Cubism         7
Oil            Canvas        Cubism         8
Watercolor     Paper         Surrealsm      9
Watercolor     Paper         Abstract       10
Acrylic        Canvas        Modernism      15

Please select an option:

1. View art objects
2. View artist information
3. View collections
4. View current exhibitions
5. View permanent collection
6. View borrowed collection
8. Contact Museum
9. Exit
4

Name          Start_date     End_date
Art of War     12/25/21       04/15/22
```

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"C:\Users\yessi\source\Data Structures\DB_project8\main.exe"

```
Name          Start_date     End_date
Art of War     12/25/21       04/15/22
Classic Art    11/26/21       08/22/22
Eastern Art    10/14/19       02/05/21
Greek Mythology 11/17/21      10/30/22
Reinassance Art 10/15/21      05/15/21
Romantic Art    08/05/20      02/28/23

Please select an option:

1. View art objects
2. View artist information
3. View collections
4. View current exhibitions
5. View permanent collection
6. View borrowed collection
8. Contact Museum
9. Exit
6

Collection                                    Date_borrowed   Date_returned   Id_no
Museo National Centro de Arte Reina Sofia     10/25/20        12/31/20        5
Autrian Gallery Belvedere                     10/30/20        01/30/21        6
Uffizi Gallery                                02/02/21        03/15/21        8
Museo National del Prado                      03/31/21        05/25/21        9
Accademia Gallerly                            06/16/21        08/29/21        11

Please select an option:

1. View art objects
2. View artist information
3. View collections
4. View current exhibitions
5. View permanent collection
6. View borrowed collection
8. Contact Museum
9. Exit
3

Name                                          Type      Description
Accademia Gallerly                            Museum    Museum of art in Vennice, Italy
Autrian Gallery Belvedere                     Museum    Museum of art in Vienna, Austria
Museo National Centro de Arte Reina Sofia     Museum    Museum of art in Madrid, Spain
Museo National del Prado                      Museum    National museum of art in Madrid, Spain
Uffizi Gallery                                Museum    Museum of art in Florence, Italy
```

10:09 PM
11/26/2021

```
"C:\Users\yessi\source\Data Structures\D8_project8\main.exe"
```

```
1. View art objects
2. View artist information
3. View collections
4. View current exhibitions
5. View permanent collection
6. View borrowed collection
8. Contact Museum
9. Exit
2

Select artist to view information
1. Alexandros of Antioch
2. Diego Velazquez
3. Edvar Munch
4. Grant Wood
5. Gustav Klimt
6. Johannes Vermeer
7. Katsushika Hokusai
8. Leonardo da Vinci
9. Michelangelo
10. Pablo Picasso
11. Sandro Botticelli
12. Vincent van Gogh
12

Name: Vincent van Gogh
Date born: 03/30/1853
Date died: 07/29/1890
Country of origin: Netherlands
Epoch: Post-Impressionalist
Main style: Realsim
Description: Vincent Willen van Gogh was a Dutch Post-Impressionist paiter who posthumously became one of the most famous and influential figures in Western art history.


Please select an option:

1. View art objects
2. View artist information
3. View collections
4. View current exhibitions
5. View permanent collection
6. View borrowed collection
8. Contact Museum
9. Exit
9

Thank you for visiting Yessica's Art Museum!
```