DBMS PROJECT

ART MUSEUM AND SHOWROOM MANAGEMENT SYSTEM

Made By :

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ABSTRACT

The Art Museum and Showroom Database Management System simplifies art gallery operations by efficiently managing user and gallery databases. Using SQL, the system makes it easy to retrieve, insert, update, and delete data. It stores detailed information about artists, artworks, and customers, helping gallery administrators make informed decisions and manage inventory better. The project aims to make art galleries more efficient and organized, improving customer satisfaction and overall effectiveness.

OVERVIEW

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INTRODUCTION

Our project focuses on developing an Art Museum and Showroom Database Management System. This system aims to streamline the management of art galleries by efficiently organizing and storing information related to artists, artworks, exhibitions, and customers. By centralizing data management, our system enhances the efficiency of gallery operations, simplifies order management

PROBLEM STATEMENT

We seek to provide gallery administrators with a cohesive platform for managing gallery operations, improving customer satisfaction, and fostering a more organized and efficient art gallery environment.

First Problem

Art galleries often struggle with manual and disjointed data management processes, leading to inefficiencies in organizing exhibitions.

Second Problem

Existing methods of data management in art galleries lack cohesion and often result in errors.

OBJECTIVES

Objective I

To design and implement a robust Art Museum and Showroom Database Management System that centralizes the management of artist, artwork, exhibition, and customer data to streamline gallery operations.

Objective II

To enhance the efficiency and organization of art galleries by providing gallery administrators with a comprehensive platform for managing exhibitions, tracking artwork sales, and maintaining customer records

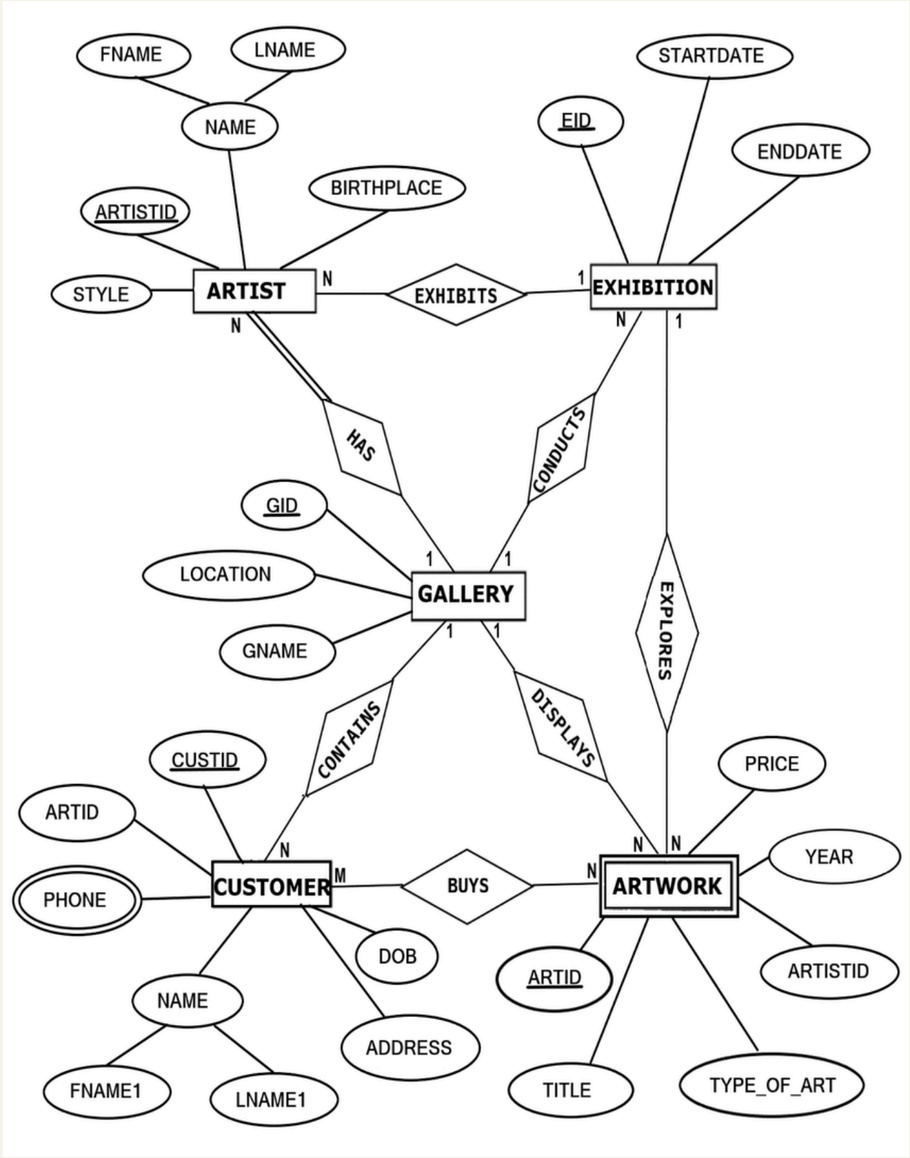
METHODOLOGY

Database Design

We start by designing the database schema using an Entity-Relationship (ER) model. This involves identifying the entities (such as artists, artworks, exhibitions, and customers) and their relationships, attributes, and constraints.

Database Creation

Once the database design is finalized, we create the database tables using Structured Query Language (SQL). Each table corresponds to an entity in the ER model, and we define the structure, data types, and constraints for each table.


FNAME
LNAME
NAME
STARTDATE
EID
ENDDATE
BIRTHPLACE
ARTISTID
STYLE
ARTIST
N
EXHIBITS
1
EXHIBITION
N
1
N
HAS
CONDUCTS
GID
LOCATION
GNAME
GALLERY
1
1
1
1
EXPLORES
CONTAINS
DISPLAYS
CUSTID
ARTID
PRICE
N
N
N
M
N
YEAR
PHONE
CUSTOMER
BUYS
ARTWORK
DOB
ARTID
ARTISTID
NAME
ADDRESS
FNAME1
LNAME1
TITLE
TYPE_OF_ART

IMPLEMENTATION

Phase 1

- Design the database schema using an Entity-Relationship (ER) model.
- Identify entities such as artists, artworks and customers.

Phase 2

- Create database tables based on the ER model using SQL.
- Define the structure, data types, and constraints for each table.

Phase 3

- Populate the database tables with sample data using SQL INSERT.
- Include a variety of data to simulate real-world scenarios.

Phase 4

Implement queries for various operations, such as displaying artworks by artist, updating customer information, or deleting records.

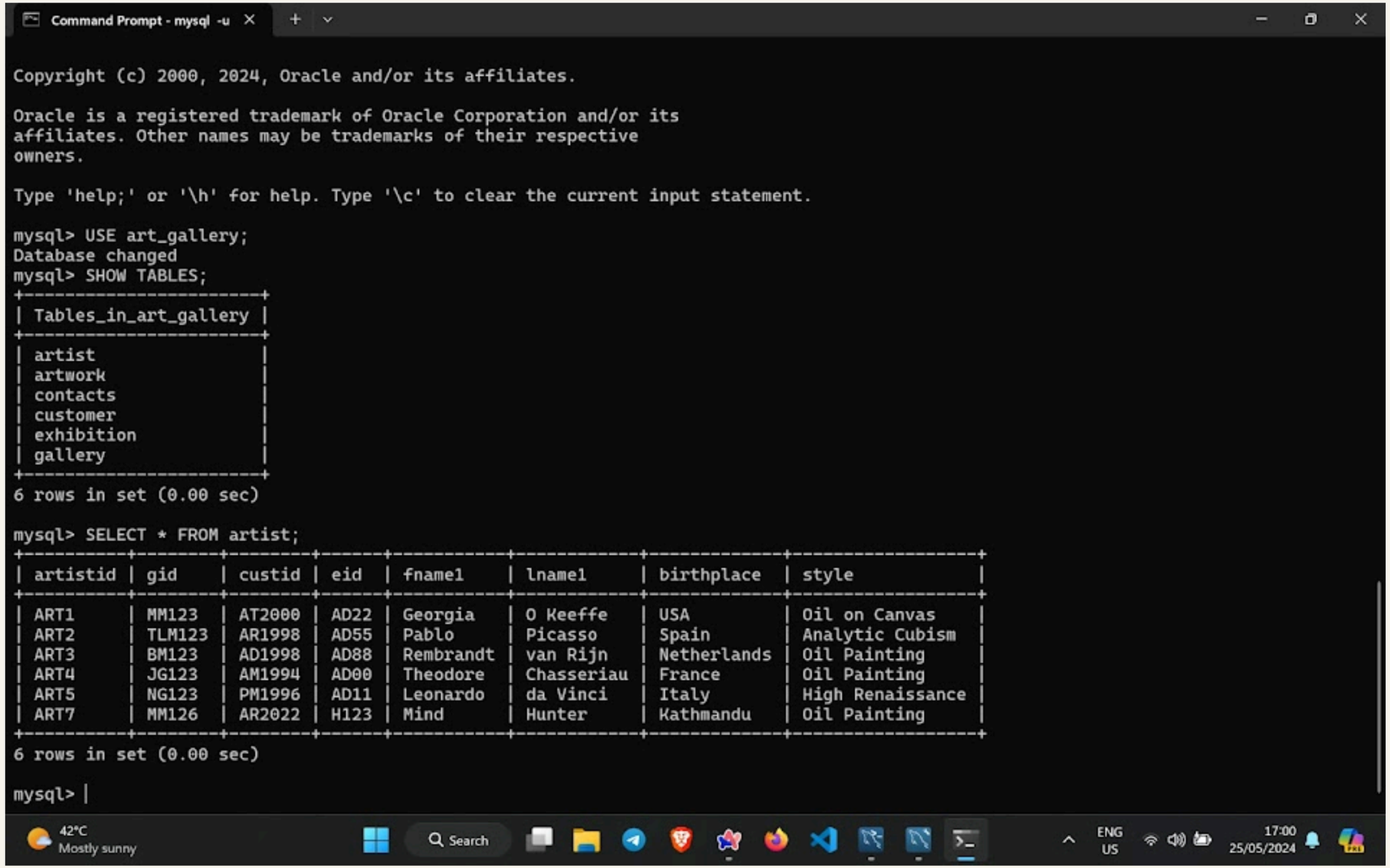
```
mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| art_gallery        |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM artwork;
+-------+-----------------+------+-------------+--------------+------+-------+----------+
| artid | title           | year | type_of_art | price        | eid  | gid   | artistid |
+-------+-----------------+------+-------------+--------------+------+-------+----------+
| AW12  | Mona Lisa       | 1503 | Painting    | 10,00,00,000 | G123 | NG123 | AD11     |
| AW34  | Poppies         | 1873 | Painting    | 1,50,00,000  | H123 | MM123 | AD22     |
| AW56  | Guernica        | 1937 | Painting    | 2,50,00,000  | I123 | TLM123| AD55     |
| AW78  | The Night Watch | 1642 | Painting    | 90,00,000    | J123 | BM123 | AD88     |
| AW90  | Two Sisters     | 2010 | Sculpture   | 2,00,000     | K123 | JG123 | AD00     |
| a111  | ttt             | 2018 | tyse        | 2000000000   | E11  | G11   | ar1      |
+-------+-----------------+------+-------------+--------------+------+-------+----------+
6 rows in set (0.00 sec)

mysql> SELECT * FROM customer;
+--------+--------+-----------+---------+-------+------------+------------+
| custid | gid    | artworkid | fname   | lname | dob        | address    |
+--------+--------+-----------+---------+-------+------------+------------+
| AT2000 | MM123  | AW12      | Akshay  | Thakur| 2000-04-16 | New York   |
| AR1998 | TLM123 | AW34      | Ashutosh| Ranjan| 1998-02-04 | Paris      |
| AD1998 | BM123  | AW56      | Ayush   | Dhar  | 1998-09-28 | London     |
| AM1994 | JG123  | AW78      | Avanish | Mehta | 1994-10-05 | Mumbai     |
| PM1996 | NG123  | AW56      | Prashant| Mehta | 1996-06-18 | Washington |
| AR2022 | MM126  | AW56      | Aashu   | Demo  | 2022-05-10 | Delhi      |
| AR2025 | MM126  | AW78      | Aashut  | Demo0 | 2022-05-10 | Delhi      |
+--------+--------+-----------+---------+-------+------------+------------+
7 rows in set (0.00 sec)
```

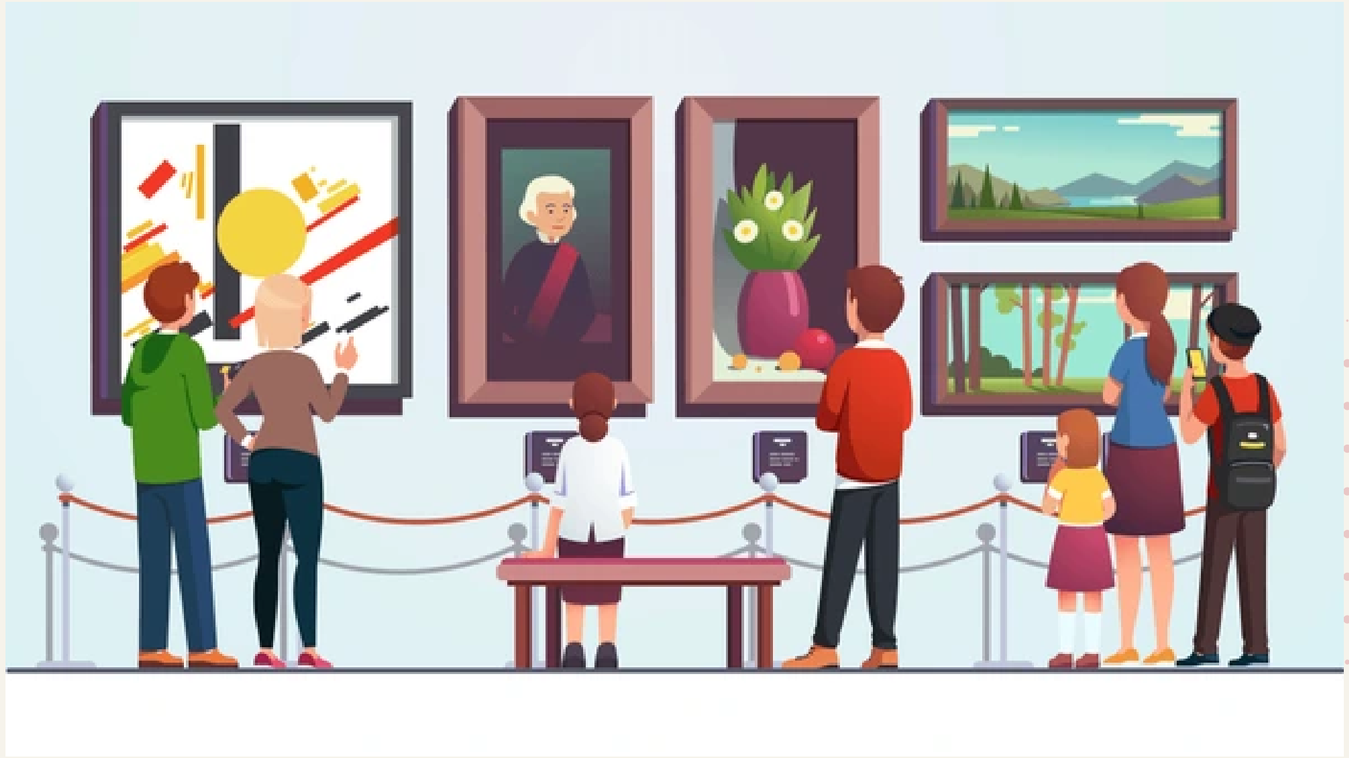
```
mysql> SELECT * FROM exhibition;
+------+--------+------------+------------+
| eid  | gid    | startdate  | enddate    |
+------+--------+------------+------------+
| H123 | BM123  | 2018-12-21 | 2019-01-05 |
| I123 | MM123  | 2019-01-25 | 2019-02-05 |
| G123 | NG123  | 2018-12-01 | 2018-12-15 |
| J123 | TLM123 | 2018-12-15 | 2019-01-15 |
| K123 | JG123  | 2019-03-09 | 2019-03-27 |
+------+--------+------------+------------+
5 rows in set (0.00 sec)

mysql> SELECT * FROM gallery;
+--------+--------------------+------------+
| gid    | gname              | location   |
+--------+--------------------+------------+
| MM126  | MY GALLERY         | Patna      |
| s123   | ASHUTOSH           | patna      |
| NG123  | NATIONAL GALLERY   | Washington |
| BM123  | BRITISH MUSEUM     | London     |
| JG123  | JAHANGIR GALLERY   | Mumbai     |
| TLM123 | THE LOUVRE MUSEUM  | Paris      |
| MM123  | METROPOLITAN MUSEUM | New York  |
+--------+--------------------+------------+
7 rows in set (0.01 sec)
```


Command Prompt - mysql -u
Copyright (c) 2000, 2024, Oracle and/or its affiliates.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> USE art_gallery;
Database changed
mysql> SHOW TABLES;
+-----------------------+
| Tables_in_art_gallery |
+-----------------------+
| artist |
| artwork |
| contacts |
| customer |
| exhibition |
| gallery |
+-----------------------+
6 rows in set (0.00 sec)
mysql> SELECT * FROM artist;
+----------+--------+--------+------+-----------+------------+-------------+------------------+
| artistid | gid | custid | eid | fname1 | lname1 | birthplace | style |
+----------+--------+--------+------+-----------+------------+-------------+------------------+
ART1	MM123	AT2000	AD22	Georgia	O Keeffe	USA	Oil on Canvas
ART2	TLM123	AR1998	AD55	Pablo	Picasso	Spain	Analytic Cubism
ART3	BM123	AD1998	AD88	Rembrandt	van Rijn	Netherlands	Oil Painting
ART4	JG123	AM1994	AD00	Theodore	Chasseriau	France	Oil Painting
ART5	NG123	PM1996	AD11	Leonardo	da Vinci	Italy	High Renaissance
ART7	MM126	AR2022	H123	Mind	Hunter	Kathmandu	Oil Painting
+----------+--------+--------+------+-----------+------------+-------------+------------------+
6 rows in set (0.00 sec)
mysql>
42°C
Mostly sunny
Search
ENG
US
17:00
25/05/2024

RESULT

The Art Museum and Showroom Database Management System has streamlined gallery operations, enhancing data organization and facilitating smoother management of exhibitions, artworks, and customer interactions.



THANK YOU

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SCAN TO VIEW THE ENTIRE PROJECT: