DATABASE MANAGEMENT PROJECT

ON ART GALLARY MANAGEMENT SYSTEM

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In partial fulfilment for the requirements off the award of the degree of

“B-Tech (computer science Engineering)”

“School of Computer science and Engineering”

PHAGWARA, PUNJAB

Submitted to: Ms. Bhanu Talwar

DECLARATION

We hereby declare that the project work entitled ("**Art Gallery Management System**") is an authentic record of our own work carried out as requirements of sProject for the award of B.Tech degree in Computer Science and
Engineering from Lovely Professional University, Phagwara, under the guidance of **Bhanu Talwar** ,during November 2022. All the information furnished in this project report is based on our own intensive work and is genuine.

Name of Student: Mayur Rai
Registration Number: 12115953

MayurRai
(Signature of Student)
Date:22/11/2022

CERTIFICATE

This is to certify that the declaration statement made by this student is correct to the best of my knowledge and belief. He had completed this Project under my guidance and supervision. The present work is the result of their original investigation, effort and study. No part of the work has ever been submitted for any other degree at any University. The Project is fit for the submission and partial fulfillment of the conditions for the award of B.Tech degree in Computer Science and Engineering from Lovely Professional University, Phagwara.

Signature and Name of the Mentor

Designation

School of Computer Science and Engineering, Lovely Professional University,
Phagwara, Punjab.

Date:20/11/2022

ACKNOWLEDGEMENT

I would like to extend my sincere thanks/gratitude to our LOVELY PROFESSIONAL UNIVERSITY for providing such
a conducive environment and platform for us with facilities with which we've been able to accomplish this project.

Also, our teacher Ms. Bhanu Talwar Ma'am for passing such knowledge to us in a very good and understanding way. My classmates for helping and supporting me out where I needed it

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INTRODUCTION

Art Gallery Management System is a software application designed to streamline the process of managing an art gallery. The system provides a centralized database for storing information on artists, artworks, exhibitions, and sales. The software includes tools for tracking gallery inventory, creating marketing materials, and managing customer relationships. The system is designed to be userfriendly and can be accessed from any internet-connected device.

Online Art Gallery is an online application, which is used to display and sell art works of artist irrespective of their nationality, gender and other narrow consideration, through auction. Artist can register online for being a member in the art gallery and each artist can upload the digital copy of their art work under the respective categories. They can host their art work either for auction or for fixed price. The artist is liable to pay a fraction of the price of each art work to the web site to find the running fund for site. Art lovers have to go to the art exhibition to collect their favourite arts or painting. But now-a-days they are not getting enough time to go to the galleries and collect the arts and paintings.

Commonly used statements are grouped into the following categories

Data Query Language (DQL)

SELECT-Used to retrieve certain records from one or more tables.

Data Manipulation Language (DML)

INSERT - Used to create a record

UPDATE - Used to change certain records.

DELETE - Used to delete certain records.

Data Definition Language (DDL)

CREATE - Used to create a new table, a view of a table, or other object in database.

ALTER - Used to modify an existing database object, such as a table.

DROP - Used to delete an entire table, a view of a table or other object in the database.

OBJECTIVE OF THE PROJECT

The main objective of creating an Art Gallery database project is

To manage the details of gallery, exhibition, artwork and artist. It manages all the sales and inventory in the gallery. The purpose of the project is to build and application program to reduce the manual work.

To tracks all the details about the sales of the artwork, the customer that bought it, etc. It manages the information about the artwork. Provides an information and description of the artworks left, thereby increasing the efficiency of managing the gallery. The organisation can maintain a computerized record of the artwork present in the gallery.

To helps in the utilization of the resources in an effective manner. It maintains a list of all the customers and the various artwork that they have bought and the money that have invested in each.

To maintains the record of exhibitions and various sales made during it. The objective of developing such computerized system is to reduce the paper work and safe of time in art gallery database management, thereby increasing the efficiency and decreasing the work load.

To develop such computerized system is to reduce the paper work and safe of time in art gallery database management, thereby increasing the efficiency and decreasing the work load.

APPLICABILITY OF THE PROJECT

Existing System:

Customer can also register online and they can browse art works that are arranged in different categories scientifically. Each Customer can create their own gallery to see his favourite art works without much difficult. And each user has the right to purchase an art work using the integrated payment gateway and participate in auction by submitting their bids. Qualified bidder should remit the amount using payment gateway and after each valid payment the art work will be shipped within some days.

Proposed system:

ONLINE ART GALLARY is a web application software and it is very helpful for the art lovers others who want to know the address where this kind of arts will we sold

This application helps the end-users to search their arts and paintings and they can place order for the selected pieces. The end-user can also get the information about the art exhibition and the respective

Art Gallery brings you an opportunity to view online art exhibitions at our Online

Art Gallery we bring you details of all art exhibitions held in the past and the forthcoming show. The Online Art Gallery is updated daily, so the user can view and buy the latest collection of contemporary art online from any where in the world. You can view and buy the latest Indian contemporary art collection available at their exhibition and also at their online gallery.

PROJECT DESCRIPTION

The primary purpose of an art gallery is to nurture visual artists, promote their work and expose them to the public, collectors, media, and cultural institutions.

Our art gallery management system will provide a way for artists to showcase and sell their artwork online, as well as for art galleries to manage their inventory and keep track of artist submissions. Artists will be able to create a profile and upload images of their artwork, which they can then categorize and tag accordingly. Galleries will be able to browse through artist profiles and request submissions for specific exhibitions. Once an artist has been accepted to an exhibition, the gallery will be able to track which pieces have been sold and generate invoices accordingly.

The art gallery management system is a tool for gallery owners and administrators to track and manage their inventory. The system also includes a central database that can be accessed by authorized users from any location. The database contains information on all of the artworks in the gallery, including the artist, title, date of creation, and value. The system also includes a search function that allows users to find specific artworks by keyword or artist.

The art gallery management system is a system that is designed to help manage and keep track of the inventory of an art gallery. This system will allow the user to add and remove artworks from the inventory, as well as keep track of the location of each artwork.

Additionally, the system will generate reports on the sales of artworks and the overall value of the gallery's inventory.

REQUIREMENTS SPECIFICATION

SOFTWARE REQUIREMENTS

✓ Windows xp or above

✓ MySql Server 2005

✓ Internet explorer 5.0.

✓ IIS 5.0 or above

✓ The hardware & software specification and environment specifications to runthe application.

HARDWARE REQUIREMENTS

✓ Computer system: Standard pc/at compatible with Pentium 3 or Pentium 4 CPU or more.

✓ Primary memory: This Information System works within 1 G.B. if user memory (RAM) addressed by MS windows.

✓ Hard disk having 1GB free space.

✓ Input device: Mouse & keyboard compatible with PC/ AT, video adapters and monitors. It is a coloured program so better to use a coloured monitor

✓ Colour monitors for best performance

ER DIAGRAM

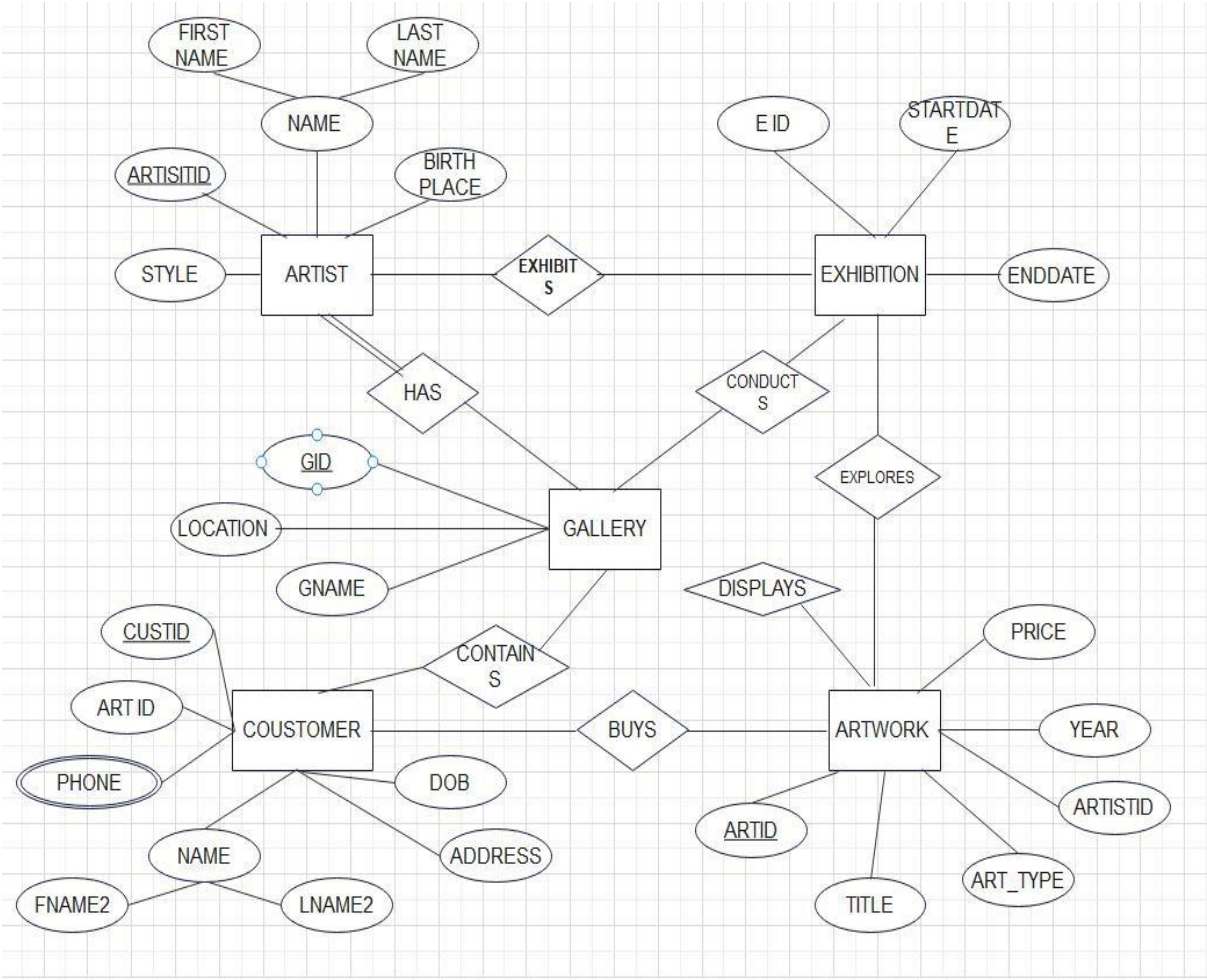
1. A lentity-relationship model (ER Mode) describes inter-related things of interest in a specific domain of knowledge. An ER model is composed of entity types (which classify the things of interest) and specifies relationships that can exist between instances of those entity types.
2. An entity may be defined as a thing capable of an independent existence that can be uniquely identified. An entity is an abstraction from the complexities of a domain.
3. Attributes are drawn as ovals and are connected with a line to exactly one entity or relationship set.
4. An entity relationship model, also called an entity-relationship (ER) diagram, is a graphical representation of entities and their relationships to each other, typically used in computing in regard to the organization of data within databases or information systems.
5. Cardinality constraints are expressed as follows:

a. A double line indicates a participation constraint, totality or subjectivity: all entities in the entity set must participate in at least one relationship in the relationship set.

b. An arrow from entity set to relationship set indicates a key constraint, i.e. injectivity: each entity of the entity set can participate in at most one relationship in the relationship set.

c. A thick line indicates both, i.e. bijectivity: each entity in the entity set is involved in exactly one relationship.

d. An underlined name of an attribute indicates that it is a key: two different entities or relationships with this attribute always have different values for this attribute.



ER DIAGRAM of ART GALLERY DATABASE

NORMALIZE THE RELATIONS

Database normalization, or simply normalization, is the process of organizing the columns(attributes) and tables(relations) of a relational database to reduce data redundancy and improve data integrity. Normalization involves arranging attributes in relations based on dependencies between attributes.

1. First Normal Form

As per First normal form, no two rows of data must contain repeating group of information. Each set of columns must have a unique value, such that multiple columns cannot be used to fetch the same row. Each table should be organized into rows, and each row should have a primary key that will distinguishes it as unique.

Example:

GALLERY

GUI	GNAME	LOCATION

All the tables in the database are normalized to 1NF as all the attributes are atomic.

2. Second Normal Form (2NF)

A table is in 2NF if it is in 1NF and if all non-key attributes are fully functionally dependent on all the key.

Example:

CUSTOMER

CUSTID	ARTID	FNAME1	LNAME1	ADDRESS	PHONE	DOB

FD1

CUSTID	FNAME1	LNAME1	DOB

3. Third Normal Form(3NF):

A table is in 3NF if it is in 2NF and if it has no transitive dependency. X->Y, Y->Z, X>Z

According to CODD's definition a relation schema R is in 3NF. It satisfies 2NF and no non-prime attribute of R is transitively dependent on the primary key. All tables of database satisfies upto 3NF.

CREATION OF TABLES

1. CREATING GALLERY TABLE

```
CREATE TABLE GALLERY
(GID VARCHAR(20) PRIMARY KEY,
GNAME CHAR(20),
LOCATION CHAR(20));
```

2. CREATE EXHIBITION TABLE

```
CREATE TABLE EXHIBITION
(EID VARCHAR(20) PRIMARY KEY,
GID VARCHAR(20),
STARTDATE DATE,
ENDDATE DATE,
FOREIGN KEY(GID) REFERENCES GALLERY(GID) ON DELETE CASCADE);
```

3. CREATE ARTWORK TABLE

```
CREATE TABLE ARTWORK
(ARTID VARCHAR(20) PRIMARY KEY,
TITLE VARCHAR(20),
YEAR INT,
TYPE_OF_ART VARCHAR(20),
PRICE INT,
EID VARCHAR(20),
GID VARCHAR(20),
ARTISTID VARCHAR(20));
```

4. CREATE CUSTOMER TABLE

```
CREATE TABLE CUSTOMER
```

(CUSTID VARCHAR(20) PRIMARY KEY,

GID VARCHAR(20),

ARTID VARCHAR(20),

FNAME1 CHAR(20),

LNAME1 CHAR(20),

DOB DATE,

ADDRESS CHAR(20));

5. CREATE ARTIST TABLE

CREATE TABLE ARTIST

(ARTISTID VARCHAR(20) PRIMARY KEY,

GID VARCHAR(20),

CUSTID VARCHAR(20),

EID VARCHAR(20),

FNAME CHAR(20),

LNAME CHAR(20),

BIRTHPLACE CHAR(20),

STYLE CHAR(20));

6. CREATE CONTACTS TABLE CREATE TABLE CONTACTS

(CUSTID VARCHAR(20),

PHONE VARCHAR(12));

INSERTION OF TABLES

1. INSERTION OF GALLERY TABLE

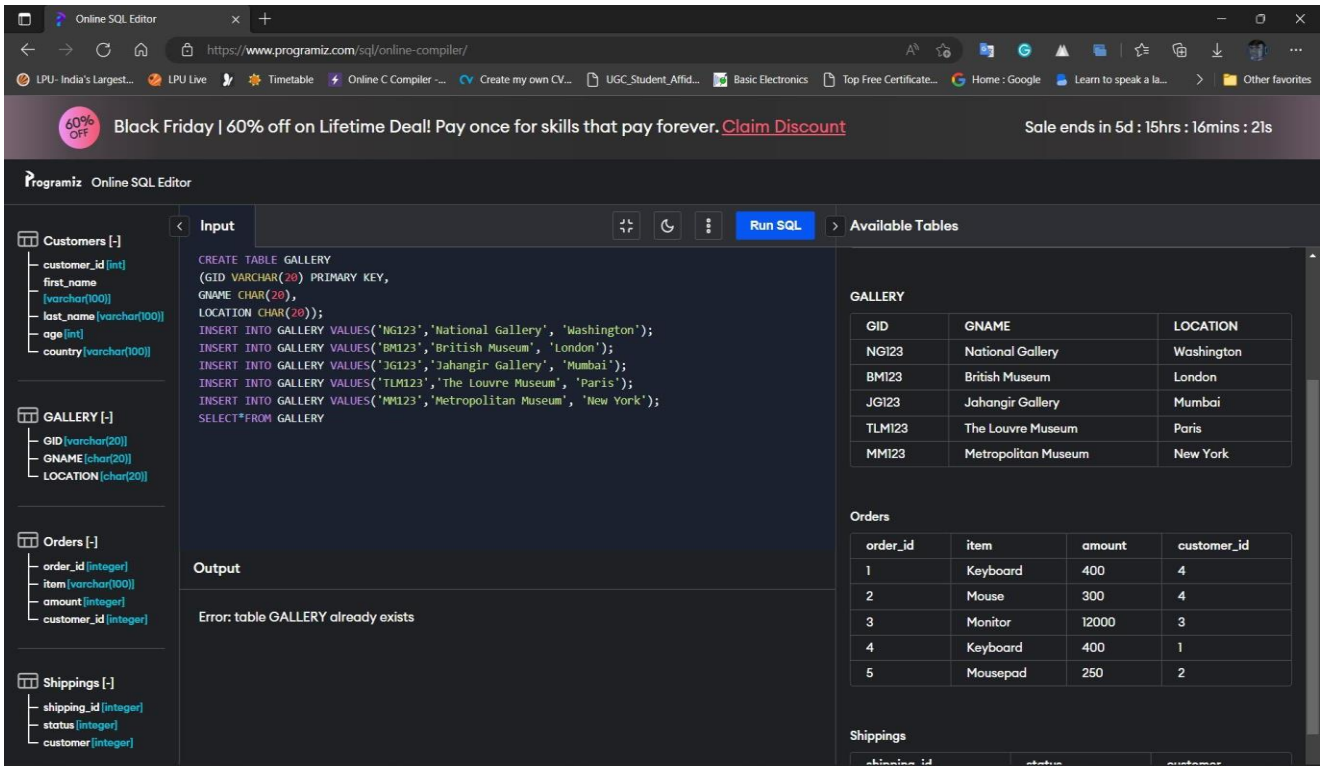
INSERT INTO GALLERY VALUES('NG123','National Gallery', 'Washington');

INSERT INTO GALLERY VALUES('BM123','British Museum', 'London');

INSERT INTO GALLERY VALUES('JG123','Jahangir Gallery', 'Mumbai');

INSERT INTO GALLERY VALUES('TLM123','The Louvre Museum', 'Paris');

INSERT INTO GALLERY VALUES('MM123','Metropolitan Museum', 'New York');



2. INSERTION OF EXHIBITION TABLE

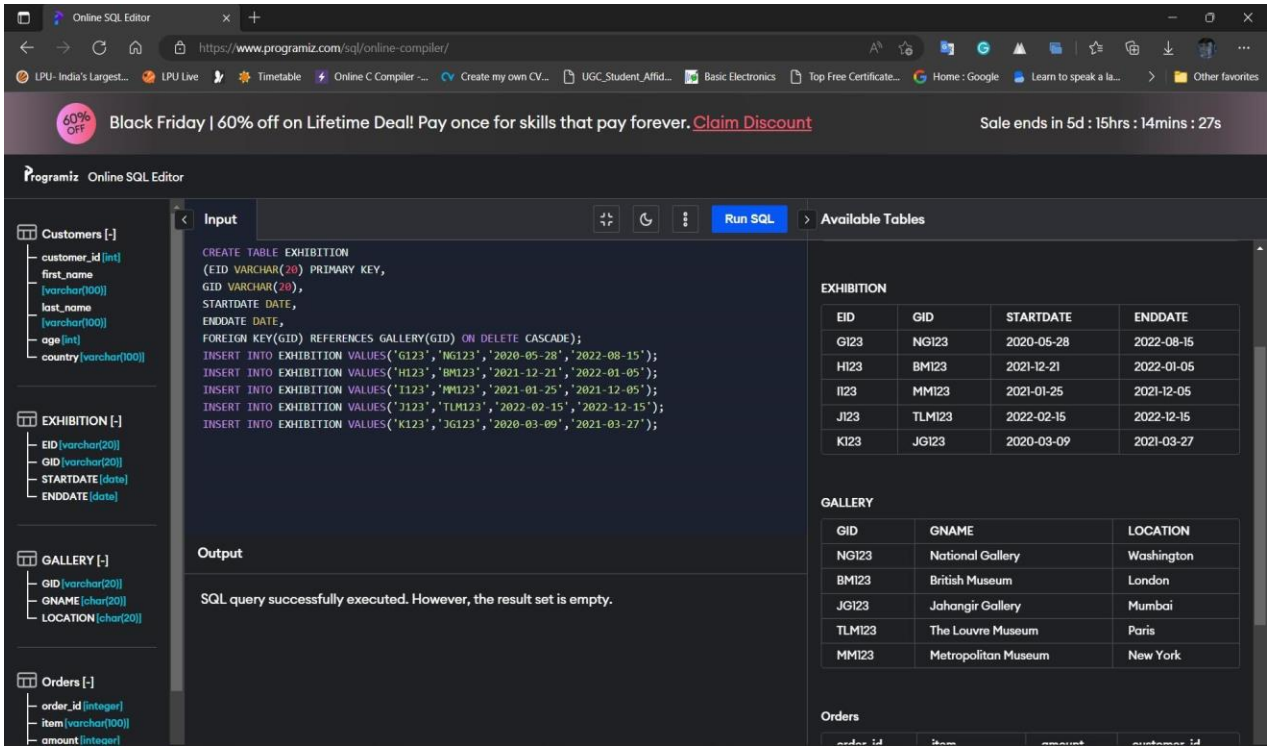
INSERT INTO EXHIBITION VALUES('G123','NG123','2020-05-28','2022-08-15');

INSERT INTO EXHIBITION VALUES('H123','BM123','2021-12-21','2022-01-05');

INSERT INTO EXHIBITION VALUES('I123','MM123','2021-01-25','2021-12-05');

INSERT INTO EXHIBITION VALUES('J123','TLM123','2022-02-15','2022-12-15');

INSERT INTO EXHIBITION VALUES('K123','JG123','2020-03-09','2021-03-27');



3. INSERTION OF ARTWORK TABLE

INSERT INTO ARTWORK VALUES('AW12','Mona

Lisa','1503','Painting','10,00,00,000','G123','NG123','AD11');

INSERT INTO ARTWORK

VALUES('AW34','Poppies','1873','Painting','1,50,00,000','H123','MM1
23','AD22');

INSERT INTO ARTWORK

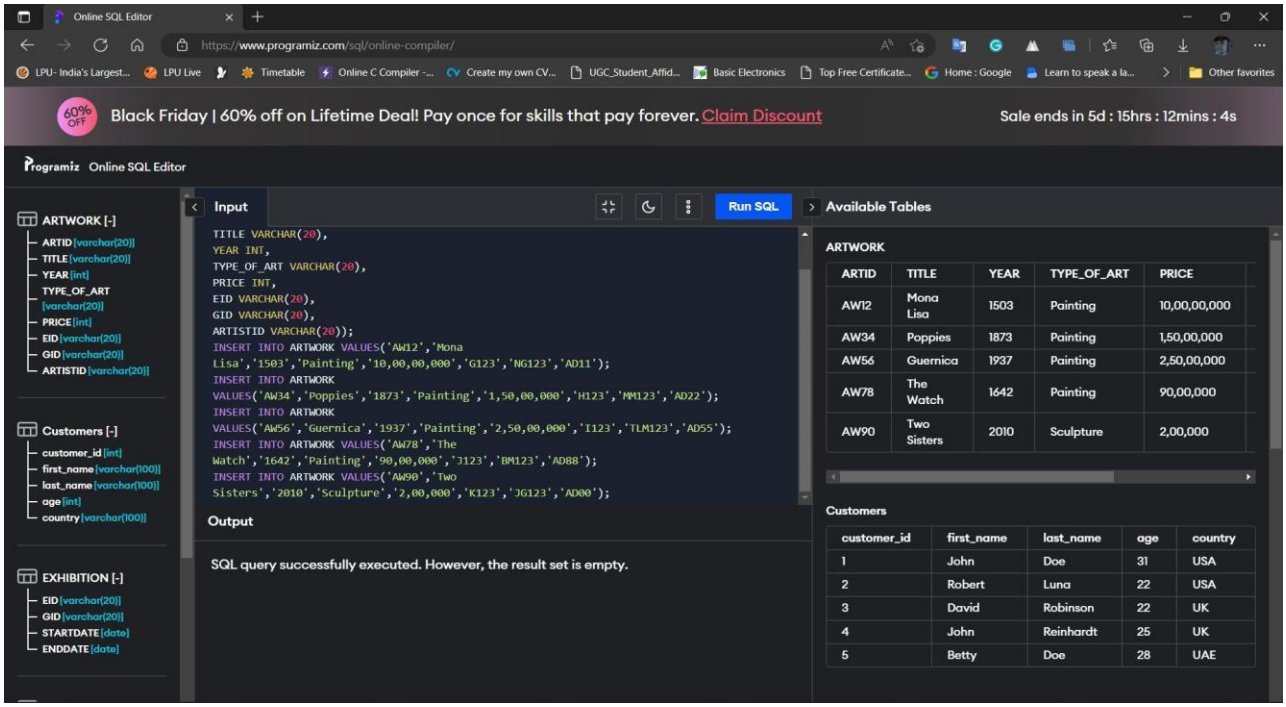
VALUES('AW56','Guernica','1937','Painting','2,50,00,000','I123','TLM1
23','AD55');

INSERT INTO ARTWORK VALUES('AW78','The

Watch','1642','Painting','90,00,000','J123','BM123','AD88');

INSERT INTO ARTWORK VALUES('AW90','Two

Sisters','2010','Sculpture','2,00,000','K123','JG123','AD00');



4. INSERTION OF CUSTOMER TABLE

INSERT INTO CUSTOMER VALUES

('AT2000','MM123','AD22','Akshay','Thakur','2000-04-16','New York');

INSERT INTO CUSTOMER

VALUES('AR1998','TLM123','AD55','Ashutosh','Ranjan','1998-02-04','Paris');

INSERT INTO CUSTOMER

VALUES('AD1998','BM123','AD88','Ayush','Dhar','1998-09-28','London');

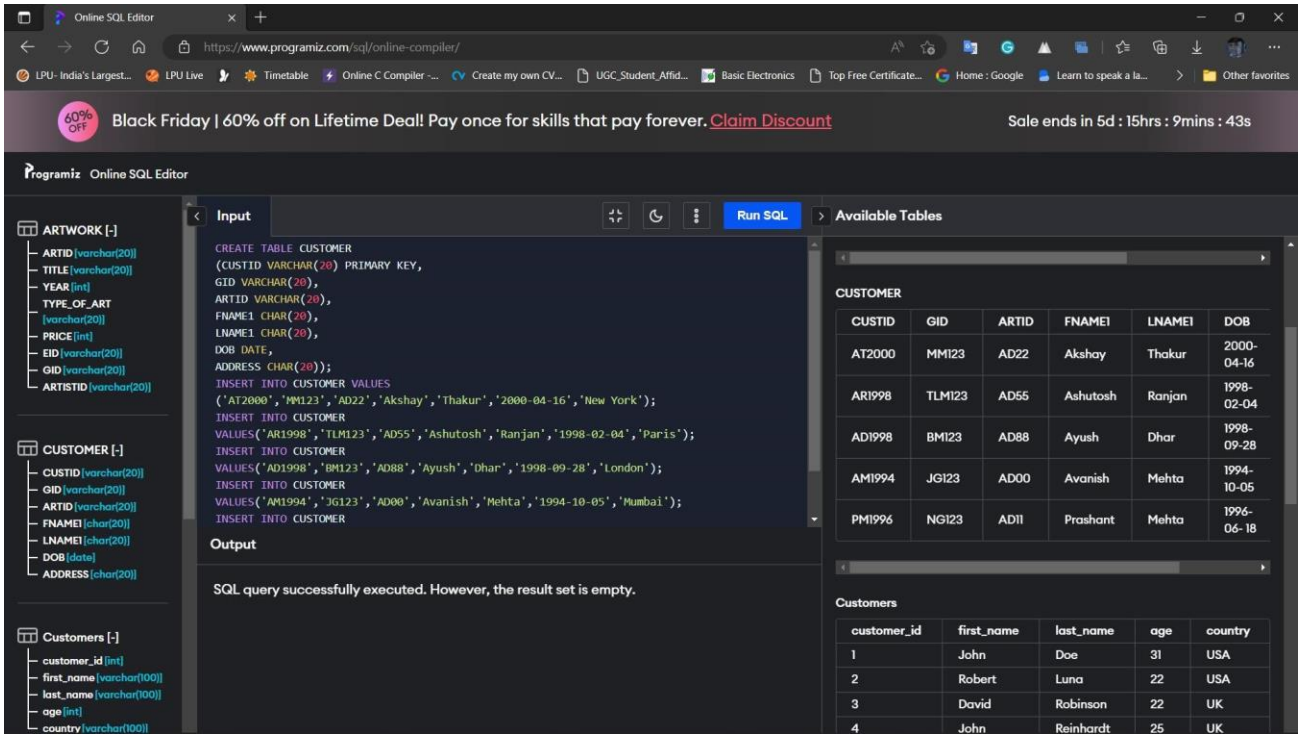
INSERT INTO CUSTOMER

VALUES('AM1994','JG123','AD00','Avanish','Mehta','1994-1005','Mumbai');

INSERT INTO CUSTOMER

VALUES('PM1996','NG123','AD11','Prashant','Mehta','1996-06-

18','Washington');



5. INSERTION OF ARTIST TABLE

INSERT INTO ARTIST
VALUES('ART1','MM123','AT2000','AD22','Georgia','O

Keeffe','USA','Oil on Canvas');

INSERT INTO ARTIST

VALUES('ART2','TLM123','AR1998','AD55','Pablo','Picasso','Spain','An alytic

Cubism');

INSERT INTO ARTIST VALUES

('ART3','BM123','AD1998','AD88','Rembrandt','van Rijn','Netherlands','Oil Painting');

INSERT INTO ARTIST

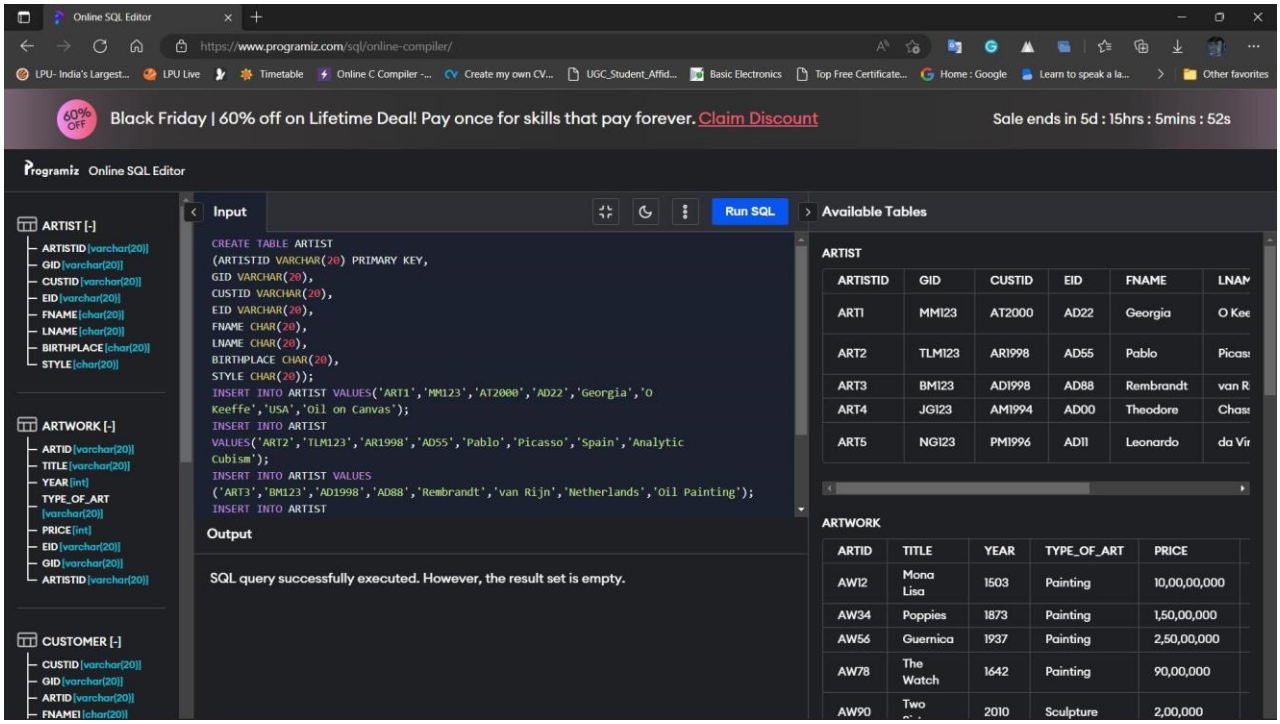
VALUES('ART4','JG123','AM1994','AD00','Theodore','Chasseriau','Fra nce','Oil

Painting');

INSERT INTO ARTIST

VALUES('ART5','NG123','PM1996','AD11','Leonardo','da Vinci','Italy','High

Renaissance');



6. INSERTION OF CONTACTS TABLE

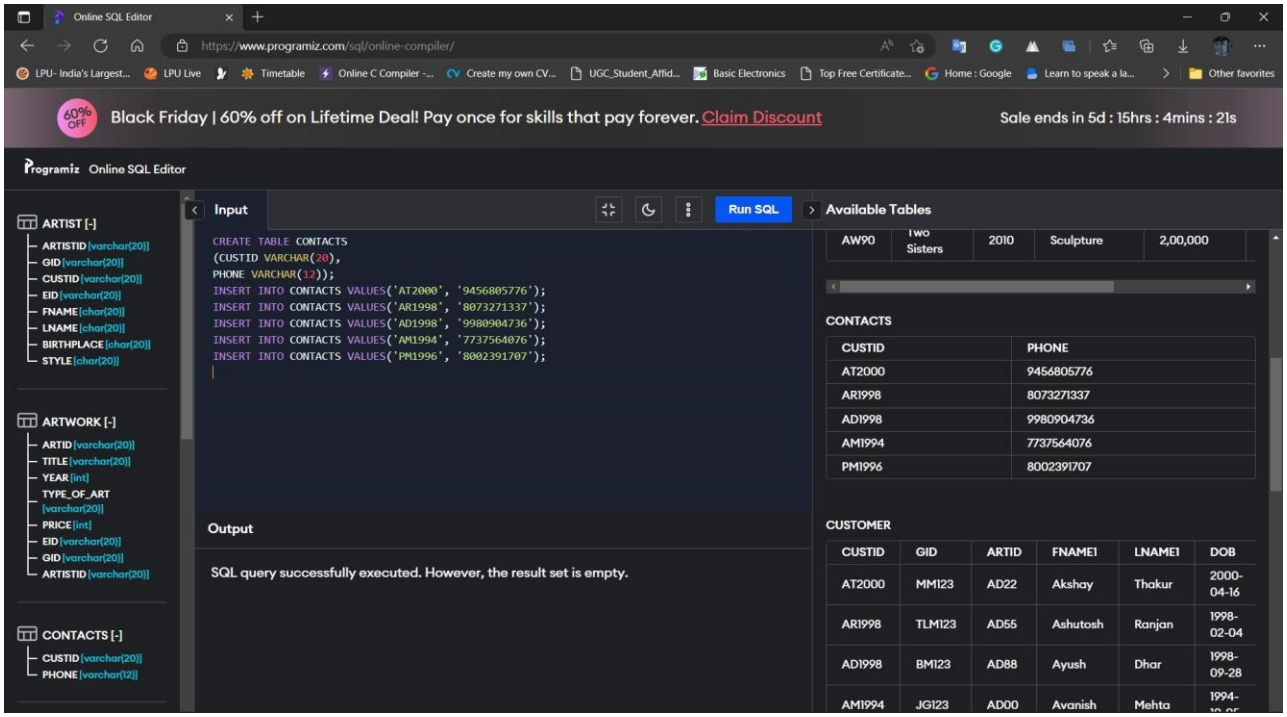
INSERT INTO CONTACTS VALUES('AT2000', '9456805776');

INSERT INTO CONTACTS VALUES('AR1998', '8073271337');

INSERT INTO CONTACTS VALUES('AD1998', '9980904736');

INSERT INTO CONTACTS VALUES('AM1994', '7737564076');

INSERT INTO CONTACTS VALUES('PM1996', '8002391707');


Online SQL Editor
https://www.programiz.com/sql/online-compiler/
Black Friday | 60% off on Lifetime Deal! Pay once for skills that pay forever. Claim Discount
Sale ends in 5d : 15hrs : 4mins : 21s
Programiz Online SQL Editor
ARTIST [-]
ARTISTID [varchar(20)]
GID [varchar(20)]
CUSTID [varchar(20)]
EID [varchar(20)]
FNAME [char(20)]
LNAME [char(20)]
BIRTHPLACE [char(20)]
STYLE [char(20)]
ARTWORK [-]
ARTID [varchar(20)]
TITLE [varchar(20)]
YEAR [int]
TYPE_OF_ART [varchar(20)]
PRICE [int]
EID [varchar(20)]
GID [varchar(20)]
ARTISTID [varchar(20)]
CONTACTS [-]
CUSTID [varchar(20)]
PHONE [varchar(12)]
Input
Run SQL
CREATE TABLE CONTACTS
(CUSTID VARCHAR(20),
PHONE VARCHAR(12));
INSERT INTO CONTACTS VALUES('AT2000', '9456805776');
INSERT INTO CONTACTS VALUES('AR1998', '8073271337');
INSERT INTO CONTACTS VALUES('AD1998', '9980904736');
INSERT INTO CONTACTS VALUES('AM1994', '7737564076');
INSERT INTO CONTACTS VALUES('PM1996', '8002391707');
Output
SQL query successfully executed. However, the result set is empty.
Available Tables
AW90 Two Sisters 2010 Sculpture 2,00,000
CONTACTS
CUSTID PHONE
AT2000 9456805776
AR1998 8073271337
AD1998 9980904736
AM1994 7737564076
PM1996 8002391707
CUSTOMER
CUSTID GID ARTID FNAME1 LNAME1 DOB
AT2000 MM123 AD22 Akshay Thakur 2000-04-16
AR1998 TLM123 AD55 Ashutosh Ranjan 1998-02-04
AD1998 BM123 AD88 Ayush Dhar 1998-09-28
AM1994 JG123 AD00 Avanish Mehta 1994-

ADVANTAGES

There are several benefits of online art galleries. So, have a look at these benefits:

1. An Array of Paintings:

At an online art gallery, you can get variety genres of paintings at one particular place. Yes, at online art galleries you can avail different art forms like traditional art, sketches, modern art to name a few. As you have several options you can select according to your preferences.

2. Affordability:

The paintings are showcased at online art galleries are less expensive and the paintings are been delivered at the doorstep. If you visit any physical art gallery, you may get most of the paintings which will notsuit your pocket or over budget.

3. Buy From the Artists Directly:

In most of the cases, you purchase paintings from the artists itself. So, there is hardly any mediator in between the customer and the painters. If there is an organization in between also, you can avail great customer care services by the particular organization.

4. Explore Creativity by Emerging or Budding Artists:

In most of the online art galleries, they try to promote new talents of budding artists. So, customers can easily get to know regarding their unique concepts and ideas or their unique treatment or style or approach towards art and creativity.

5. Door Step Shipping:

Online art galleries promise doorstep shipping. So, if you order for your preferred paintings also, you can rest assured about the doorstep shipping. It means that you do not need to go anywhere and can get the painting delivered where ever you want.

DISADVANTAGES

▪ This process is so time-consuming.

▪ There is a threat to the record of the customer so it might be the case that one painting can be sold twice.

▪ There is no proper way of getting new paintings to record customers need to search on their own.

▪ It might be the case that manager can take a commission as well as extra charges for transport the paintings to the customer.

So, above this is the whole process of getting art from the Art gallery by our system we can make it a little bit simpler and the fast process of automating it. We can automate this process by creating an application that will allow you to use these things in a fully functional way and the application will include the following entities (an entity is a real-world object).

CONCLUSION

A database was created for a market that can use it for keeping track on art gallery. Galleries are divided into many art galleries. Galleries have different names, locations, etc. gallery will have different exhibitions and each exhibition will have a start and end date. The galleries will have different artist displaying their artwork. The model can also be adapted to meet other purposes and thus be used for other projects. The database structure is quite simple, which makes it easy for also other programmers to understand it. In conclusion, a database is a far more efficient mechanism to store and organize data than spreadsheets it allows for a centralized facility that can easily be modified and quickly shared among multiple users. Having a web based front end removes the requirement of users having to understand and use a database directly, and allows users to connect from anywhere with an internet connection and a basic web browser. It also allows the possibility of queries to obtain information for various surveys. Due to the number of users reading and modifying student data in the department, it is an ideal use for such a system.

REFERENCES

a. https://www.w3schools.com/sql

b. https://www.youtube.com

c. https://www.tutorialspoint.com

d. https://www.udemy.com

THANK YOU

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