

A
Project Report
on
ART GALLERY Management System

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CERTIFICATE

This is to certify that the project entitled “ART GALLERY MANAGEMENT SYSTEM” is a bonafied report of the work carried out by

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of Department of Information Technology, semester V, under the guidance and supervision for the subject Database Management System. They were involved in Project training during academic year 2019-2020.

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Date:

Acknowledgement

On completion of project we would like to express our sincere thanks to all those who have guide, advised, inspired and supported during our project work.

Every work that one completes successfully stands on the constants encouragement, good will and support of the people around. We, hereby, avail this opportunity to express our heartfelt gratitude to a number of people who extended their valuable time, full support and cooperation in developing this project.

We are hearty thankful to the qualified staff of the centre and especially to our lab faculty Prof. ROSHNI M RAVAL. We believe that his computer expertise and valuable guidance have made it possible to present such nice project report.

Thanking you.

Yours Sincerely,

NEHAL UNAGAR (IT - 125)

YUGANT PATEL (IT - 133)

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1. System Overview

1.1 Current System

Art cannot be manufactured in factories, it can only come from generous artist. Modern Exhibition, including paintings and models for many art, is not possible without the use of color and sketches. In current system for fulfil the requirement of painting, Art Gallery organizes Art Exhibition Club. Artist can Exhibits your art in Exhibition.

Art Gallery is a place where Art is collected from Artist, separated into Color and Styles, stored and prepared for payment to recipients.

In Art Gallery there are different kind of Artist like Model Designer, Painter, Sketcher, Wall Artist. Coordination of these Artist And Customers makes Art Gallery complete. In today's system they have to manipulate everything manually.

1.2 Objectives of the Proposed System

Objective of our system is to customers to purchase art object in Art Gallery management system. System supports following features,

- Every users of this system is must be authenticated and they have separate login id on type of user.
- This application will provide you with a wide range of choices. The registration in this application is free, unlike other sites. It provides various categories too, in buyers' accordance.
- There are 5 different kind of users this portal.
 - o Login
 - o Customer
 - o Artist
 - o Exhibition
 - o PayMent Mode
 - o About us
- Now, we can see that nearly everything is very much possible to perform with a single click so this system will help you to computerize the system so that user and client can access the system online.

These are some key features of the system which is as follow:

- o To reduce the hectic of maintaining the record of inventories.
- o To reduce the cumbersome job of maintaining several documents

- It will eliminate the delays in the generation of reports that which item has sold to whom.
- Searching will become more efficient and fast.
- It will also provide assurance to the customer that they can buy the art they like there would be no pressure.
- Overall it will reduce the cost and time of the customer.

1.3 Advantages of the proposed system (Over Current)

People are typically too busy lately to do quite possibly routine tasks and are only hoping to rush back property after work to relax.

One has to be an art enthusiast to free time to visit an exhibition. Moreover, if there are several exhibitions as well, you will rarely be able to attend both, no matter how much you wish you could.

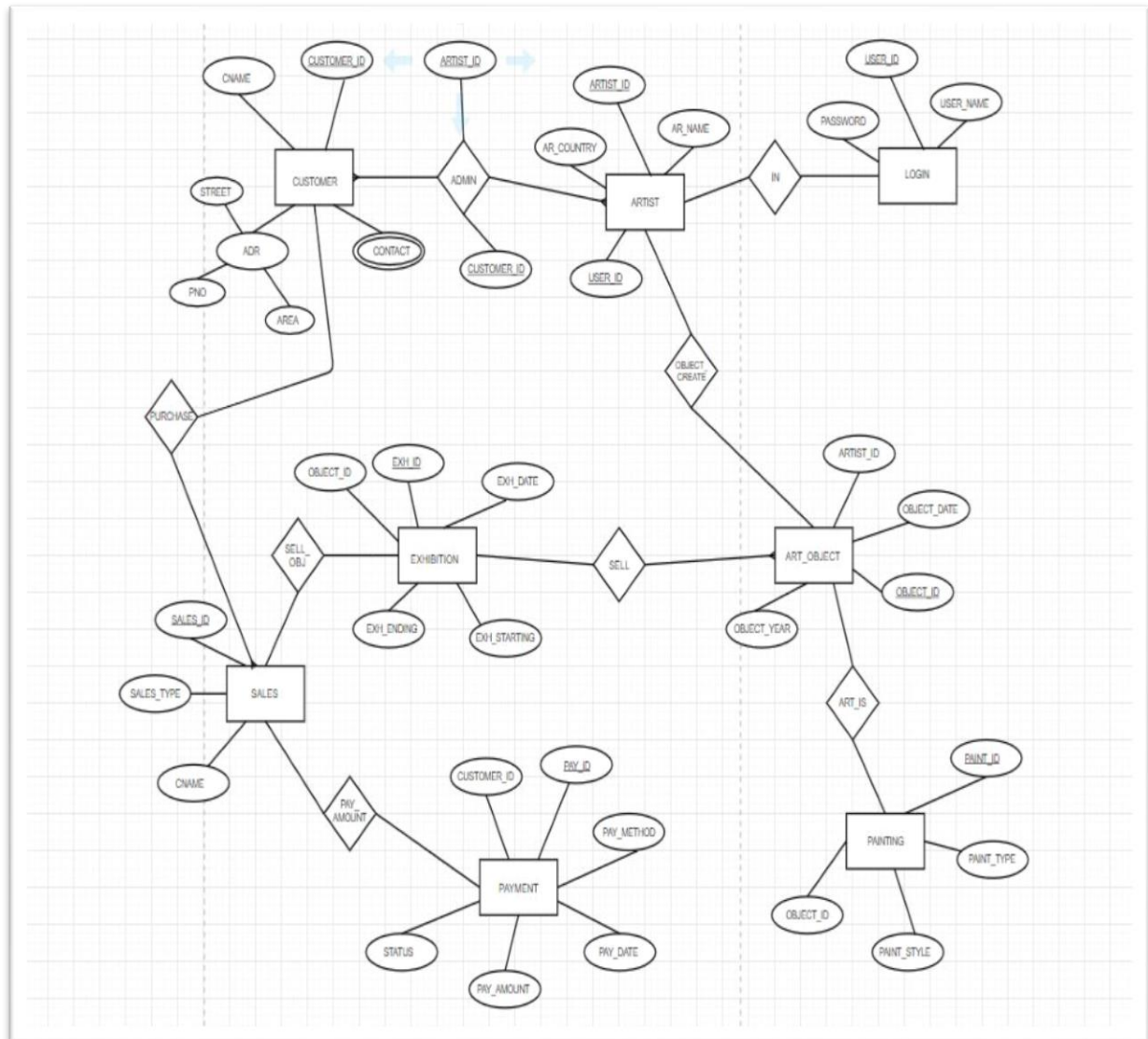
Today, cyberspace is the most popular and the latest platform for fine art browsing, auctioning, providing, and of course buying. For the present day art buyer, it is very exciting to maneuver around online art galleries.

Art lovers get the chance to see a lot more pieces and to appreciate them at their own personal leisure rather than visiting a regular gallery.

There is also the advantages of discretion on a great auction and sale websites as it is much easier to generate a bid and to own an item.

Typically, the rules with regard to selling and purchasing remain the same, but the purchaser ought to be internet-savvy to understand the machine properly. Every online gallery provides useful tips for dealing, even if you will be new to the process.

2. E-R Diagram



2.1 Entities

- Admin
- Artist
- Customer
- Art Object
- Customer Contact
- Exhibition
- Login
- Payment
- Sales
- Painting

2.2 Relationship and Mapping constraints

- Customer has Many to Many relationship with Artist Table.
Relation name : Admin
- Artist has Many to Many relationship with Customer Table
Relation name : Admin
- Artist has one to one relationship with Login Table
Relation name : In
- Artist has one to many relationship with Art Object
Relation name : Create_Object
- Exhibition has one to many relationship with Art Object
Relation name : Sell
- Exhibition has one to many relationship with Sales
Relation name : Sell_object
- Customer has one to many relationship with Sales
Relation name : Purchase
- Sales has one to one relationship with Payment
Relation name : Pay_Amount
- Art_Object has one to one relationship with Payment
Relation name : Art_Is

3. Data Dictionary

1. Login Table

Column	Type	Null	Default	Links to
USER_ID (<i>Primary</i>)	varchar(5)	No		
PASSWORD	int(5)	No		

2. Customer

Column	Type	Null	Default	Links to
CUSTOMER_ID (<i>Primary</i>)	varchar(5)	No		
CNAME	varchar(25)	No		
FNO	varchar(5)	No		
STREET	varchar(30)	No		
AREA	varchar(30)	No		
POSTALNO	int(7)	No		

3. Artist

Column	Type	Null	Default	Links to
ARTIST_ID (<i>Primary</i>)	varchar(5)	No		
USER_ID	varchar(5)	No		login -> USER_ID
AR_NAME	varchar(15)	No		
AR_COUNTRY	varchar(15)	No		

4. Art_Object

Column	Type	Null	Default	Links to
ARTIST_ID	varchar(5)	No		artist -> ARTIST_ID
OBJECT_DATE	date	No		
OBJECT_ID (<i>Primary</i>)	varchar(5)	No		

5. Admin

Column	Type	Null	Default	Links to
ARTIST_ID	varchar(5)	No		artist -> ARTIST_ID
CUSTOMER_ID	varchar(5)	No		customer -> CUSTOMER_ID

6. Customer Contact

Column	Type	Null	Default	Links to
CID (<i>Primary</i>)	varchar(5)	No		customer -> CUSTOMER_ID
CONTACT_NO1	int(20)	No		
CONTACT_NO2	int(20)	No		

7. Exhibition

Column	Type	Null	Default	Links to
EXH_ID	varchar(5)	No		
OBJECT_ID	varchar(5)	No		art_object -> OBJECT_ID
EXH_DATE	date	No		

8. Painting

Column	Type	Null	Default	Links to
OBJECT_ID	varchar(5)	No		art_object -> OBJECT_ID
PAINT_TYPE	varchar(15)	No		
PAINT_ID (<i>Primary</i>)	varchar(5)	No		
PAINT_STYLE	varchar(15)	No		

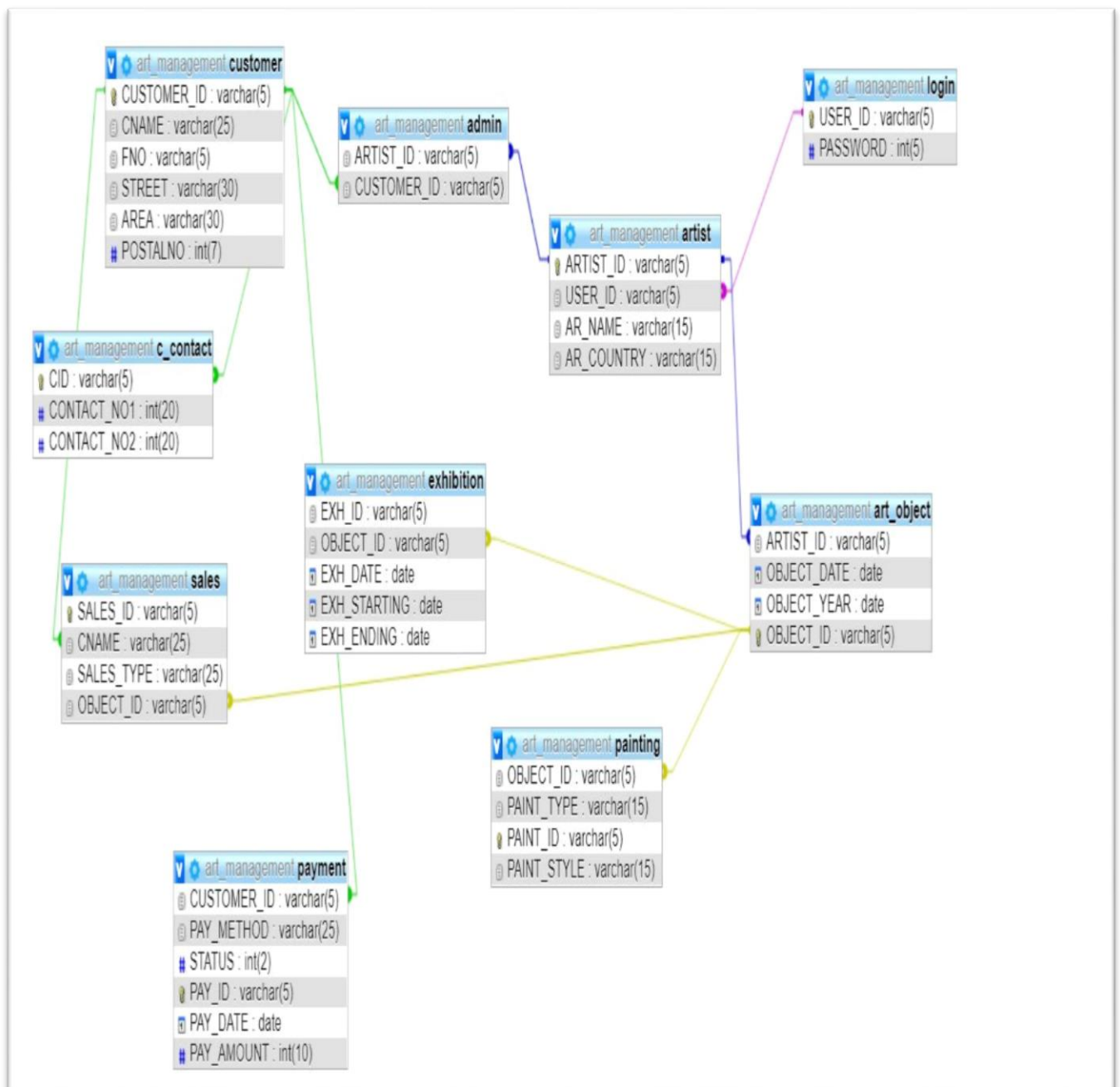
9. Sales

Column	Type	Null	Default	Links to
SALES_ID (<i>Primary</i>)	varchar(5)	No		
CID	varchar(25)	No		customer -> CUSTOMER_ID
SALES_TYPE	varchar(25)	No		
OBJECT_ID	varchar(5)	No		art_object -> OBJECT_ID

10. Payment

Column	Type	Null	Default	Links to
CUSTOMER_ID	varchar(5)	No		customer -> CUSTOMER_ID
PAY_METHOD	varchar(25)	No		
STATUS	int(2)	No		
PAY_ID (<i>Primary</i>)	varchar(5)	No		
PAY_DATE	date	No		
PAY_AMOUNT	int(10)	No		

4. Schema Diagram



5. Database Implementation

5.1 Create Schema

1. Admin Table

```
CREATE TABLE `admin` (
  `ARTIST_ID` varchar(5) NOT NULL,
  `CUSTOMER_ID` varchar(5) NOT NULL
)

ALTER TABLE `admin`

  ADD KEY `CUSTOMER_ID` (`CUSTOMER_ID`),

  ADD KEY `ARTIST_ID` (`ARTIST_ID`);

ALTER TABLE `admin`

  ADD CONSTRAINT `admin_ibfk_1` FOREIGN KEY (`CUSTOMER_ID`)
REFERENCES `customer` (`CUSTOMER_ID`),

  ADD CONSTRAINT `admin_ibfk_2` FOREIGN KEY (`ARTIST_ID`) REFERENCES
`artist` (`ARTIST_ID`);

COMMIT;
```

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	ARTIST_ID	varchar(5)	latin1_swedish_ci		No	None			Change Drop More
2	CUSTOMER_ID	varchar(5)	latin1_swedish_ci		No	None			Change Drop More

2. Artist

```
CREATE TABLE `artist` (
  `ARTIST_ID` varchar(5) NOT NULL,
  `USER_ID` varchar(5) NOT NULL,
  `AR_NAME` varchar(15) NOT NULL,
  `AR_COUNTRY` varchar(15) NOT NULL
)

ALTER TABLE `artist`

  ADD PRIMARY KEY (`ARTIST_ID`),
```

```
ADD KEY `USER_ID` (`USER_ID`);
```

```
ALTER TABLE `artist`
```

```
ADD CONSTRAINT `artist_ibfk_1` FOREIGN KEY (`USER_ID`) REFERENCES `login`
(`USER_ID`);
```

```
COMMIT;
```

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	ARTIST_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	2	USER_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	3	AR_NAME	varchar(15)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	4	AR_COUNTRY	varchar(15)	latin1_swedish_ci	No	None			Change Drop More

3. Art_Object

```
CREATE TABLE `art_object` (
  `ARTIST_ID` varchar(5) NOT NULL,
  `OBJECT_DATE` date NOT NULL,
  `OBJECT_ID` varchar(5) NOT NULL
)
```

```
ALTER TABLE `art_object`
```

```
ADD PRIMARY KEY (`OBJECT_ID`),
```

```
ADD KEY `ARTIST_ID` (`ARTIST_ID`);
```

```
ALTER TABLE `art_object`
```

```
ADD CONSTRAINT `art_object_ibfk_1` FOREIGN KEY (`ARTIST_ID`) REFERENCES
`artist` (`ARTIST_ID`);
```

```
COMMIT;
```

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	ARTIST_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	2	OBJECT_DATE	date		No	None			Change Drop More
<input type="checkbox"/>	3	OBJECT_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More

4. Customer

```
CREATE TABLE `customer` (
  `CUSTOMER_ID` varchar(5) NOT NULL,
  `CNAME` varchar(25) NOT NULL,
```

```

`FNO` varchar(5) NOT NULL,
`STREET` varchar(30) NOT NULL,
`AREA` varchar(30) NOT NULL,
`POSTALNO` int(7) NOT NULL
)

ALTER TABLE `customer`

ADD PRIMARY KEY (`CUSTOMER_ID`);

COMMIT;

```

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	CUSTOMER_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	2	CNAME	varchar(25)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	3	FNO	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	4	STREET	varchar(30)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	5	AREA	varchar(30)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	6	POSTALNO	int(7)		No	None			Change Drop More

5. Customer Contact

```

CREATE TABLE `c_contact` (
`CID` varchar(5) NOT NULL,
`CONTACT_NO1` int(20) NOT NULL,
`CONTACT_NO2` int(20) NOT NULL
)

ALTER TABLE `c_contact`

ADD PRIMARY KEY (`CID`);

ALTER TABLE `c_contact`

ADD CONSTRAINT `FOREIGN KEY` FOREIGN KEY (`CID`) REFERENCES
`customer` (`CUSTOMER_ID`);

COMMIT;

```

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	CID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	2	CONTACT_NO1	int(20)		No	None			Change Drop More
<input type="checkbox"/>	3	CONTACT_NO2	int(20)		No	None			Change Drop More

6. Exhibition

```
CREATE TABLE `exhibition` (
  `EXH_ID` varchar(5) NOT NULL,
  `OBJECT_ID` varchar(5) NOT NULL,
  `EXH_DATE` date NOT NULL
)

ALTER TABLE `exhibition`

  ADD KEY `OBJECT_ID` (`OBJECT_ID`);

ALTER TABLE `exhibition`

  ADD CONSTRAINT `exhibition_ibfk_1` FOREIGN KEY (`OBJECT_ID`) REFERENCES
`art_object` (`OBJECT_ID`);

COMMIT;
```

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	EXH_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	2	OBJECT_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	3	EXH_DATE	date		No	None			Change Drop More

7. Login

```
CREATE TABLE `login` (
  `USER_ID` varchar(5) NOT NULL,
  `PASSWORD` int(5) NOT NULL
)

ALTER TABLE `login`

  ADD PRIMARY KEY (`USER_ID`);

COMMIT;
```

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	USER_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	2	PASSWORD	int(5)		No	None			Change Drop More

8. Painting

```
CREATE TABLE `painting` (
```



```

`OBJECT_ID` varchar(5) NOT NULL,
`PAINT_TYPE` varchar(15) NOT NULL,
`PAINT_ID` varchar(5) NOT NULL,
`PAINT_STYLE` varchar(15) NOT NULL
)

ALTER TABLE `painting`

ADD PRIMARY KEY (`PAINT_ID`),

ADD KEY `OBJECT_ID` (`OBJECT_ID`);

ALTER TABLE `painting`

ADD CONSTRAINT `painting_ibfk_1` FOREIGN KEY (`OBJECT_ID`) REFERENCES
`art_object` (`OBJECT_ID`);

COMMIT;

```

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/> 1	OBJECT_ID	varchar(5)	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/> 2	PAINT_TYPE	varchar(15)	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/> 3	PAINT_ID	varchar(5)	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/> 4	PAINT_STYLE	varchar(15)	latin1_swedish_ci		No	None			Change Drop More

9. Payment

```

CREATE TABLE `payment` (

`CUSTOMER_ID` varchar(5) NOT NULL,

`PAY_METHOD` varchar(25) NOT NULL,

`STATUS` int(2) NOT NULL,

`PAY_ID` varchar(5) NOT NULL,

`PAY_DATE` date NOT NULL,

`PAY_AMOUNT` int(10) NOT NULL

)

ALTER TABLE `payment`

ADD PRIMARY KEY (`PAY_ID`),

ADD KEY `CUSTOMER_ID` (`CUSTOMER_ID`);

```

```
ALTER TABLE `payment`
```

```
ADD CONSTRAINT `payment_ibfk_1` FOREIGN KEY (`CUSTOMER_ID`)
REFERENCES `customer` (`CUSTOMER_ID`);
```

```
COMMIT;
```

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	CUSTOMER_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	2	PAY_METHOD	varchar(25)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	3	STATUS	int(2)		No	None			Change Drop More
<input type="checkbox"/>	4	PAY_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	5	PAY_DATE	date		No	None			Change Drop More
<input type="checkbox"/>	6	PAY_AMOUNT	int(10)		No	None			Change Drop More

10. Sales

```
CREATE TABLE `sales` (
```

```
`SALES_ID` varchar(5) NOT NULL,
```

```
`CID` varchar(25) NOT NULL,
```

```
`SALES_TYPE` varchar(25) NOT NULL,
```

```
`OBJECT_ID` varchar(5) NOT NULL
```

```
)
```

```
ALTER TABLE `sales`
```

```
ADD PRIMARY KEY (`SALES_ID`),
```

```
ADD KEY `OBJECT_ID` (`OBJECT_ID`),
```

```
ADD KEY `CNAME` (`CID`);
```

```
ALTER TABLE `sales`
```

```
ADD CONSTRAINT `sales_ibfk_1` FOREIGN KEY (`OBJECT_ID`) REFERENCES
`art_object` (`OBJECT_ID`),
```

```
ADD CONSTRAINT `sales_ibfk_2` FOREIGN KEY (`CID`) REFERENCES `customer`
(`CUSTOMER_ID`);
```

```
COMMIT;
```

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	SALES_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	2	CID	varchar(25)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	3	SALES_TYPE	varchar(25)	latin1_swedish_ci	No	None			Change Drop More
<input type="checkbox"/>	4	OBJECT_ID	varchar(5)	latin1_swedish_ci	No	None			Change Drop More

5.2 Insert Data Value

1. Admin Table

```
INSERT INTO `admin` (`ARTIST_ID`, `CUSTOMER_ID`)
VALUES('AR1', 'C101'),
('AR1', 'C108'),
('AR2', 'C101'),
('AR2', 'C107'),
('AR3', 'C102'),
('AR4', 'C114'),
('AR4', 'C107'),
('AR5', 'C107'),
('AR5', 'C105'),
('AR6', 'C113'),
('AR7', 'C114'),
('AR7', 'C109'),
('AR8', 'C112'),
('AR8', 'C111'),
('AR9', 'C105');
```

ARTIST_ID	CUSTOMER_ID
AR1	C101
AR1	C108
AR2	C101
AR2	C107
AR3	C102
AR4	C114
AR4	C107
AR5	C107
AR5	C105
AR6	C113
AR7	C114
AR7	C109
AR8	C112
AR8	C111
AR9	C105

2. Artist

```
INSERT INTO `artist` (`ARTIST_ID`, `USER_ID`, `AR_NAME`, `AR_COUNTRY`)
VALUES('AR1', 'USER1', 'ANKIT SONI', 'INDIA'),

('AR2', 'USER2', 'PRANAV KHENT', 'AFRICA'),

('AR3', 'USER3', 'NIRAV JOSHI', 'ENGLAND'),

('AR4', 'USER4', 'RAM MEHTA', 'INDIA'),

('AR5', 'USER5', 'MAHENDRA PATEL', 'UK'),

('AR6', 'USER6', 'YUG RAJANI', 'INDIA'),
```

('AR7', 'USER7', 'RINKAL PATEL', 'USA'),

('AR8', 'USER8', 'RAVI BORAD', 'AFRICA'),

('AR9', 'USER9', 'SAHIL MUNJANI', 'USA');

ARTIST_ID	USER_ID	AR_NAME	AR_COUNTRY
AR1	USER1	ANKIT SONI	INDIA
AR2	USER2	PRANAV KHENI	AFRICA
AR3	USER3	NIRAV JOSHI	ENGLAND
AR4	USER4	RAM MEHTA	INDIA
AR5	USER5	MAHENDRA PATEL	UK
AR6	USER6	YUG RAJANI	INDIA
AR7	USER7	RINKAL PATEL	USA
AR8	USER8	RAVI BORAD	AFRICA
AR9	USER9	SAHIL MUNJANI	USA

3. Art_Object

INSERT INTO `art_object` (`ARTIST_ID`, `OBJECT_DATE`, `OBJECT_ID`)

VALUES('AR1', '2019-08-07', 'OBJ1'),

('AR3', '2017-09-21', 'OBJ10'),

('AR7', '2019-02-25', 'OBJ11'),

('AR4', '2019-05-05', 'OBJ12'),

('AR8', '2019-12-12', 'OBJ13'),

('AR6', '2019-10-16', 'OBJ14'),

('AR3', '2016-11-10', 'OBJ15'),

('AR4', '2019-07-09', 'OBJ2'),

('AR7', '2019-09-19', 'OBJ3'),

('AR6', '2019-08-25', 'OBJ4'),

('AR9', '2019-05-07', 'OBJ5'),

('AR5', '2019-10-23', 'OBJ6'),

('AR8', '2019-01-26', 'OBJ7'),

('AR2', '2018-02-24', 'OBJ8'),

('AR4', '2016-08-06', 'OBJ9');

ARTIST_ID	OBJECT_DATE	OBJECT_ID
AR1	2019-08-07	OBJ1
AR3	2017-09-21	OBJ10
AR7	2019-02-25	OBJ11
AR4	2019-05-05	OBJ12
AR8	2019-12-12	OBJ13
AR6	2019-10-16	OBJ14
AR3	2016-11-10	OBJ15
AR4	2019-07-09	OBJ2
AR7	2019-09-19	OBJ3
AR6	2019-08-25	OBJ4
AR9	2019-05-07	OBJ5
AR5	2019-10-23	OBJ6
AR8	2019-01-26	OBJ7
AR2	2018-02-24	OBJ8
AR4	2016-08-06	OBJ9

4. Customer

```
INSERT INTO `customer` (`CUSTOMER_ID`, `CNAME`, `FNO`, `STREET`, `AREA`, `POSTALNO`)
```

```
VALUES('C101', 'MILAN PATEL', '25', 'SANTOSHI NAGAR', 'SURAT', 395004),
('C102', 'JAY CHAVDA', '78', 'SRUSHTI SOCIETY', 'BARODA', 358962),
('C103', 'RAM MEHTA', '36', 'KRISHNA RECIDENCY', 'AHMEDABAD', 369874),
('C104', 'DEVANG VARMA', '52', 'SHYAM RECIDENCY', 'SURAT', 321548),
('C105', 'RIYA MEHTA', '12', 'MANGALDHAM SOCIETY', 'BOMBAY', 258963),
('C106', 'MOHIT RAMANI', '65', 'KUNJ BUNGLOWS', 'AMRELI', 254136),
('C107', 'RAHUL SARKHELIYA', '36', 'GAYATRI SOCIETY', 'SURAT', 395004),
('C108', 'SAHIL ROKAD', '25', 'TIRTHAM RECIDENCY', 'RAJKOT', 258741),
('C109', 'ABHISHEK VARIYA ', '21', 'NARAYAN NAGAR', 'SURAT', 395004),
('C110', 'DIVYESH BORAD', '64', 'VARACHHA', 'SURAT', 395487),
('C111', 'JAY MIYANI', '25', 'GURUDEV SOCIETY', 'SURAT', 325417),
('C112', 'RAJ MUNJANI', '32', 'SUMAN DARSHAN', 'RAJKOT', 321486),
('C113', 'NEHAL UNAGAR', '21', 'VACHNAMRUT RECIDENCY', 'BOMBAY', 325684),
('C114', 'KUNJ PATEL', '26', 'SHYAM BUNGLOWS', 'RAJKOT', 325874),
('C115', 'UTPAL RATHOD', '36', 'KUNJ GALI', 'RAJKOT', 321489);
```

CUSTOMER_ID	CNAME	FNO	STREET	AREA	POSTALNO
C101	MILAN PATEL	25	SANTOSHI NAGAR	SURAT	395004
C102	JAY CHAVDA	78	SRUSHTI SOCIETY	BARODA	358962
C103	RAM MEHTA	36	KRISHNA RECIDENCY	AHEMDABAD	369874
C104	DEVANG VARMA	52	SHYAM RECIDENCY	SURAT	321548
C105	RIYA MEHTA	12	MANGALDHAM SOCIETY	BOMBAY	258963
C106	MOHIT RAMANI	65	KUNJ BUNGLOWS	AMRELI	254136
C107	RAHUL SARKHELIYA	36	GAYATRI SOCIETY	SURAT	395004
C108	SAHIL ROKAD	25	TIRTHAM RECIDENCY	RAJKOT	258741
C109	ABHISHEK VARIYA	21	NARAYAN NAGAR	SURAT	395004
C110	DIVYESH BORAD	64	VARACHHA	SURAT	395487
C111	JAY MIYANI	25	GURUDEV SOCIETY	SURAT	325417
C112	RAJ MUNJANI	32	SUMAN DARSHAN	RAJKOT	321486
C113	NEHAL UNAGAR	21	VACHNAMRUT RECIDENCY	BOMBAY	325684
C114	KUNJ PATEL	26	SHYAM BUNGLOWS	RAJKOT	325874
C115	UTPAL RATHOD	36	KUNJ GALI	RAJKOT	321489

5. Customer Contact

```
INSERT INTO `c_contact` (`CID`, `CONTACT_NO1`, `CONTACT_NO2`)
VALUES('C101', 1236547852, 1895235712),
```


('C102', 1896325412, 1896325471),
 ('C103', 1325478963, 1562478948),
 ('C104', 1523698412, 1563247895),
 ('C105', 1896347521, 2036987452),
 ('C106', 1025478931, 1036587413),
 ('C107', 2034569871, 1987423651),
 ('C108', 1587963254, 1874302154),
 ('C109', 1587493652, 1874953264),
 ('C110', 1896324785, 1032659874),
 ('C111', 1742368410, 1874362010),
 ('C112', 1314789632, 1520147896),
 ('C113', 1032658741, 1036987425),
 ('C114', 1030201485, 1201840265),
 ('C115', 1893621052, 1893207610);

CID	CONTACT_NO1	CONTACT_NO2
C101	1236547852	1895235712
C102	1896325412	1896325471
C103	1325478963	1562478948
C104	1523698412	1563247895
C105	1896347521	2036987452
C106	1025478931	1036587413
C107	2034569871	1987423651
C108	1587963254	1874302154
C109	1587493652	1874953264
C110	1896324785	1032659874
C111	1742368410	1874362010
C112	1314789632	1520147896
C113	1032658741	1036987425
C114	1030201485	1201840265
C115	1893621052	1893207610

6. Exhibition

INSERT INTO `exhibition` (`EXH_ID`, `OBJECT_ID`, `EXH_DATE`)

VALUES('EXH1', 'OBJ1', '2019-08-13'),

('EXH3', 'OBJ10', '2019-09-11'),

('EXH5', 'OBJ11', '2019-10-30'),

('EXH4', 'OBJ12', '2019-09-27'),

('EXH5', 'OBJ13', '2019-10-30'),

('EXH1', 'OBJ14', '2019-08-13'),

('EXH1', 'OBJ15', '2019-08-13'),

('EXH5', 'OBJ2', '2019-10-30'),

```
(EXH2, 'OBJ3', '2019-08-31'),
(EXH4, 'OBJ4', '2019-09-27'),
(EXH3, 'OBJ5', '2019-09-11'),
(EXH3, 'OBJ6', '2019-09-11'),
(EXH2, 'OBJ7', '2019-08-31'),
(EXH2, 'OBJ8', '2019-08-31'),
(EXH3, 'OBJ9', '2019-09-11');
```

EXH_ID	OBJECT_ID	EXH_DATE
EXH1	OBJ1	2019-08-13
EXH3	OBJ10	2019-09-11
EXH5	OBJ11	2019-10-30
EXH4	OBJ12	2019-09-27
EXH5	OBJ13	2019-10-30
EXH1	OBJ14	2019-08-13
EXH1	OBJ15	2019-08-13
EXH5	OBJ2	2019-10-30
EXH2	OBJ3	2019-08-31
EXH4	OBJ4	2019-09-27
EXH3	OBJ5	2019-09-11
EXH3	OBJ6	2019-09-11
EXH2	OBJ7	2019-08-31
EXH2	OBJ8	2019-08-31
EXH3	OBJ9	2019-09-11

7. Login

```
INSERT INTO `login` (`USER_ID`, `PASSWORD`) VALUES
('USER1', 12345),
('USER2', 23456),
('USER3', 34567),
('USER4', 45678),
('USER5', 56789),
('USER6', 67890),
('USER7', 78901),
('USER8', 89012),
('USER9', 90123);
```

USER_ID	PASSWORD
USER1	12345
USER2	23456
USER3	34567
USER4	45678
USER5	56789
USER6	67890
USER7	78901
USER8	89012
USER9	90123

8. Painting

```
INSERT INTO `painting` (`OBJECT_ID`, `PAINT_TYPE`, `PAINT_ID`,
`PAINT_STYLE`) VALUES
```

```
(`OBJ1`, 'B&W', 'P1', 'SKRETCH'),
(`OBJ4`, 'COLORFUL', 'P10', 'NATURE'),
(`OBJ11`, 'COLORFUL', 'P11', 'SEA'),
(`OBJ3`, 'B&W', 'P12', 'STREET'),
(`OBJ13`, 'B&W', 'P13', 'CHILDHOOD'),
(`OBJ7`, 'COLORFUL', 'P14', 'LIFE OF MAN'),
(`OBJ5`, 'COLORFUL', 'P15', 'COLLEGE'),
(`OBJ8`, 'COLORFUL', 'P2', 'NATURE'),
(`OBJ10`, 'B&W', 'P3', 'MURTI'),
(`OBJ15`, 'COLORFUL', 'P4', 'MEN'),
(`OBJ12`, 'COLORFUL', 'P5', 'TREE'),
(`OBJ2`, 'B&W', 'P6', 'KING-QUEEN'),
(`OBJ9`, 'COLORFUL', 'P7', 'KING-QUEEN'),
(`OBJ6`, 'COLORFUL', 'P8', 'ANIMAL'),
(`OBJ14`, 'B&W', 'P9', 'BIRD');
```

OBJECT_ID	PAINT_TYPE	PAINT_ID	PAINT_STYLE
OBJ1	B&W	P1	SKRETCH
OBJ4	COLORFUL	P10	NATURE
OBJ11	COLORFUL	P11	SEA
OBJ3	B&W	P12	STREET
OBJ13	B&W	P13	CHILDHOOD
OBJ7	COLORFUL	P14	LIFE OF MAN
OBJ5	COLORFUL	P15	COLLEGE
OBJ8	COLORFUL	P2	NATURE
OBJ10	B&W	P3	MURTI
OBJ15	COLORFUL	P4	MEN
OBJ12	COLORFUL	P5	TREE
OBJ2	B&W	P6	KING-QUEEN
OBJ9	COLORFUL	P7	KING-QUEEN
OBJ6	COLORFUL	P8	ANIMAL
OBJ14	B&W	P9	BIRD

9. Payment

```
INSERT INTO `payment` (`CUSTOMER_ID`, `PAY_METHOD`, `STATUS`, `PAY_ID`,
`PAY_DATE`, `PAY_AMOUNT`) VALUES
('C102', 'CASH', 1, 'PAY1', '2019-08-07', 1250),
('C103', 'CASH', 1, 'PAY8', '2019-08-22', 1285),
('C104', 'CASH', 0, 'PAY5', '2019-08-21', 1240),
('C107', 'CHEQUE', 0, 'PAY4', '2019-09-13', 2530),
('C108', 'ONLINE', 1, 'PAY7', '2019-10-09', 1630),
('C110', 'ONLINE', 1, 'PAY3', '2019-08-08', 6500),
('C113', 'CHEQUE', 0, 'PAY2', '2019-08-07', 1950),
('C114', 'CASH', 1, 'PAY6', '2019-09-18', 8500);
```

CUSTOMER_ID	PAY_METHOD	STATUS	PAY_ID	PAY_DATE	PAY_AMOUNT
C102	CASH	1	PAY1	2019-08-07	1250
C103	CASH	1	PAY8	2019-08-22	1285
C104	CASH	0	PAY5	2019-08-21	1240
C107	CHEQUE	0	PAY4	2019-09-13	2530
C108	ONLINE	1	PAY7	2019-10-09	1630
C110	ONLINE	1	PAY3	2019-08-08	6500
C113	CHEQUE	0	PAY2	2019-08-07	1950
C114	CASH	1	PAY6	2019-09-18	8500

10. Sales

```
INSERT INTO `sales` (`SALES_ID`, `CID`, `SALES_TYPE`, `OBJECT_ID`) VALUES
('S1', 'C102', 'ON SPOT', 'OBJ1'),
('S2', 'C103', 'HOME', 'OBJ8'),
('S3', 'C104', 'HOME', 'OBJ15'),
('S4', 'C107', 'ON SPOT', 'OBJ2'),
('S5', 'C109', 'HOME', 'OBJ6'),
('S6', 'C110', 'ON SPOT', 'OBJ11'),
('S7', 'C113', 'ON SPOT', 'OBJ4'),
('S8', 'C114', 'ON SPOT', 'OBJ7');
```

SALES_ID	CID	SALES_TYPE	OBJECT_ID
S1	C102	ON SPOT	OBJ1
S2	C103	HOME	OBJ8
S3	C104	HOME	OBJ15
S4	C107	ON SPOT	OBJ2
S5	C109	HOME	OBJ6
S6	C110	ON SPOT	OBJ11
S7	C113	ON SPOT	OBJ4
S8	C114	ON SPOT	OBJ7

5.3 Queries

1. Determine The Minimum And Maximum Cost Of Painting From Payment.

SQL : SELECT MAX(PAY_AMOUNT) AS MAXIMUM_COST,
MIN(PAY_AMOUNT) AS MINIMUM_COST FROM PAYMENT

MAXIMUM_COST	MINIMUM_COST
8500	1240

2. Find The Address Of Customer Which Has Cost Is Greater Than 1700.

SQL : SELECT C.CUSTOMER_ID,C.FNO,C.AREA,C.STREET,C.POSTALNO
FROM CUSTOMER C,PAYMENT P
WHERE C.CUSTOMER_ID=P.CUSTOMER_ID AND P.PAY_AMOUNT>1700

CUSTOMER_ID	FNO	AREA	STREET	POSTALNO	PAY_AMOUNT
C113	21	BOMBAY	VACHNAMRUT RECIDENCY	325684	1950
C110	64	SURAT	VARACHHA	395487	6500
C107	36	SURAT	GAYATRI SOCIETY	395004	2530
C114	26	RAJKOT	SHYAM BUNGLOWS	325874	8500

3. Display Customer Info With Payment Id Which Has Given On Date Before 10 Of Any Month.

SQL : SELECT P.PAY_ID,C.CUSTOMER_ID,C.CNAME,C.FNO,C.STREET,C.AREA
FROM CUSTOMER C,PAYMENT P
WHERE P.CUSTOMER_ID=C.CUSTOMER_ID AND
EXTRACT(DAY FROM P.PAY_DATE)<10

PAY_ID	CUSTOMER_ID	CNAME	FNO	STREET	AREA
PAY1	C102	JAY CHAVDA	78	SRUSHTI SOCIETY	BARODA
PAY2	C113	NEHAL UNAGAR	21	VACHNAMRUT RECIDENCY	BOMBAY
PAY3	C110	DIVYESH BORAD	64	VARACHHA	SURAT
PAY7	C108	SAHIL ROKAD	25	TIRTHAM RECIDENCY	RAJKOT

4. Find The Painting Details Who Is Associated With Artist 'Nirav Joshi'.

SQL : SELECT P.PAINT_TYPE,P.PAINT_ID,P.PAINT_STYLE
 FROM PAINTING P INNER JOIN ART_OBJECT O ON P.OBJECT_ID=O.OBJECT_ID
 INNER JOIN ARTIST A ON O.ARTIST_ID = A.ARTIST_ID
 WHERE A.AR_NAME='NIRAV JOSHI'

PAINT_TYPE	PAINT_ID	PAINT_STYLE
B&W	P3	MURTI
COLORFUL	P4	MEN

5. Find All The Details Sales And Artist Name Who Have Sales On The Spot

SQL : SELECT S.SALES_ID,A.AR_NAME,A.AR_COUNTRY
 FROM SALES S INNER JOIN ART_OBJECT O ON
 S.OBJECT_ID=O.OBJECT_ID INNER JOIN ARTIST A ON
 O.ARTIST_ID=A.ARTIST_ID
 WHERE S.SALES_TYPE='ON SPOT';

SALES_ID	AR_NAME	AR_COUNTRY
S1	ANKIT SONI	INDIA
S4	RAM MEHTA	INDIA
S6	RINKAL PATEL	USA
S7	YUG RAJANI	INDIA
S8	RAVI BORAD	AFRICA

6. Find The Name Of Customer Who Has Done Payment One Time

SQL : SELECT C.CUSTOMER_ID, C.CNAME,C.AREA , COUNT(P.PAY_AMOUNT)
 AS STATUS FROM (PAYMENT P INNER JOIN CUSTOMER C ON
 C.CUSTOMER_ID=P.CUSTOMER_ID)
 GROUP BY CNAME HAVING COUNT(P.STATUS)=1
 ORDER BY C.CUSTOMER_ID ASC

CUSTOMER_ID	CNAME	AREA	STATUS
C102	JAY CHAVDA	BARODA	1
C103	RAM MEHTA	AHEMDABAD	1
C104	DEVANG VARMA	SURAT	1
C107	RAHUL SARKHELIYA	SURAT	1
C108	SAHIL ROKAD	RAJKOT	1
C110	DIVYESH BORAD	SURAT	1
C113	NEHAL UNAGAR	BOMBAY	1
C114	KUNJ PATEL	RAJKOT	1

7. Display Payment Id,Payment Cost And Status Which Have Cost Is Greater Than Average Cost.

SQL: SELECT * FROM PAYMENT P

WHERE(((P.PAY_AMOUNT)>(SELECT AVG(PAY_AMOUNT) FROM PAYMENT)))

ORDER BY P.PAY_AMOUNT DESC

CUSTOMER_ID	PAY_METHOD	STATUS	PAY_ID	PAY_DATE	PAY_AMOUNT ▼ 1
C114	CASH	1	PAY6	2019-09-18	8500
C110	ONLINE	1	PAY3	2019-08-08	6500

8. Display Exhibition Id,Exhibition Date,Object Date,Object Id,Artist Details Which Artist Id Is Highest.

SQL : SELECT E.EXH_ID,E.EXH_DATE,O.OBJECT_DATE,O.OBJECT_ID,

A.AR_NAME,A.AR_COUNTRY,A.USER_ID

FROM EXHIBITION E INNER JOIN ART_OBJECT O ON
E.OBJECT_ID=O.OBJECT_ID

INNER JOIN ARTIST A ON O.ARTIST_ID=A.ARTIST_ID

WHERE A.ARTIST_ID=(SELECT MAX(ARTIST_ID) FROM ARTIST)

EXH_ID	EXH_DATE	OBJECT_DATE	OBJECT_ID	AR_NAME	AR_COUNTRY	USER_ID
EXH3	2019-09-11	2019-05-07	OBJ5	SAHIL MUNJANI	USA	USER9

9. Display Info Of Customer With Customer Name Like Second Letter A

SQL : SELECT * FROM CUSTOMER WHERE CNAME LIKE '_a%'

CUSTOMER_ID	CNAME	FNO	STREET	AREA	POSTALNO
C102	JAY CHAVDA	78	SRUSHTI SOCIETY	BARODA	358962
C103	RAM MEHTA	36	KRISHNA RECIDENCY	AHEMDABAD	369874
C107	RAHUL SARKHELIYA	36	GAYATRI SOCIETY	SURAT	395004
C108	SAHIL ROKAD	25	TIRTHAM RECIDENCY	RAJKOT	258741
C111	JAY MIYANI	25	GURUDEV SOCIETY	SURAT	325417
C112	RAJ MUNJANI	32	SUMAN DARSHAN	RAJKOT	321486

10.Display The Artist Details Who Create The Art Object

SQL : SELECT * FROM ARTIST A RIGHT OUTER JOIN ART_OBJECT O ON
A.ARTIST_ID=O.ARTIST_ID ORDER BY A.AR_NAM

ARTIST_ID	USER_ID	AR_NAME ▲ 1	AR_COUNTRY	ARTIST_ID	OBJECT_DATE	OBJECT_ID
AR1	USER1	ANKIT SONI	INDIA	AR1	2019-08-07	OBJ1
AR5	USER5	MAHENDRA PATEL	UK	AR5	2019-10-23	OBJ6
AR3	USER3	NIRAV JOSHI	ENGLAND	AR3	2017-09-21	OBJ10
AR3	USER3	NIRAV JOSHI	ENGLAND	AR3	2016-11-10	OBJ15
AR2	USER2	PRANAV KHENI	AFRICA	AR2	2018-02-24	OBJ8
AR4	USER4	RAM MEHTA	INDIA	AR4	2019-05-05	OBJ12
AR4	USER4	RAM MEHTA	INDIA	AR4	2019-07-09	OBJ2
AR4	USER4	RAM MEHTA	INDIA	AR4	2016-08-06	OBJ9
AR8	USER8	RAVI BORAD	AFRICA	AR8	2019-12-12	OBJ13
AR8	USER8	RAVI BORAD	AFRICA	AR8	2019-01-26	OBJ7
AR7	USER7	RINKAL PATEL	USA	AR7	2019-09-19	OBJ3
AR7	USER7	RINKAL PATEL	USA	AR7	2019-02-25	OBJ11
AR9	USER9	SAHIL MUNJANI	USA	AR9	2019-05-07	OBJ5
AR6	USER6	YUG RAJANI	INDIA	AR6	2019-10-16	OBJ14
AR6	USER6	YUG RAJANI	INDIA	AR6	2019-08-25	OBJ4

5.4 PL/SQL BLOCKS

5.4.1 PROCEDURES:

1. CREATE A PROCEDURE THAT CHANGE THE ARTIST AR9 IF PAINTING STYLE IS KING-QUEEN.

DELIMITER \$\$

```
CREATE DEFINER=`root`@`localhost` PROCEDURE `CHANGE_ARTIST`(IN `OID`
VARCHAR(5))
```

```
BEGIN
```

```
DECLARE OBJECT VARCHAR(25);
```

```
DECLARE PAINTING VARCHAR(25);
```

```
SET OBJECT=(SELECT OBJECT_ID FROM art_object WHERE OBJECT_ID=OID);
```

```
SET PAINTING=(SELECT PAINT_STYLE FROM painting WHERE OBJECT_ID=OID);
```

```
IF PAINTING='KING-QUEEN' THEN
```

```
UPDATE art_object SET ARTIST_ID='AR9' WHERE OBJECT_ID=OID;
```

```
END IF;
```

```
END$$
```

DELIMITER ;

OUTPUT:

Routine parameters

Name	Type	Function	Value
OID	VARCHAR	▼	OBJ9

BEFORE TABLE :

ARTIST_ID	OBJECT_DATE	OBJECT_ID
AR1	2019-08-07	OBJ1
AR3	2017-09-21	OBJ10
AR7	2019-02-25	OBJ11
AR4	2019-05-05	OBJ12
AR8	2019-12-12	OBJ13
AR6	2019-10-16	OBJ14
AR3	2016-11-10	OBJ15
AR4	2019-07-09	OBJ2
AR7	2019-09-19	OBJ3
AR6	2019-08-25	OBJ4
AR9	2019-05-07	OBJ5
AR5	2019-10-23	OBJ6
AR8	2019-01-26	OBJ7
AR2	2018-02-24	OBJ8
AR4	2016-08-06	OBJ9

AFTER TABLE :

ARTIST_ID	OBJECT_DATE	OBJECT_ID	▲ 1
AR1	2019-08-07	OBJ1	
AR3	2017-09-21	OBJ10	
AR7	2019-02-25	OBJ11	
AR4	2019-05-05	OBJ12	
AR8	2019-12-12	OBJ13	
AR6	2019-10-16	OBJ14	
AR2	2016-11-10	OBJ15	
AR9	2019-07-09	OBJ2	
AR2	2019-09-24	OBJ20	
AR7	2019-09-19	OBJ3	
AR6	2019-08-25	OBJ4	
AR9	2019-05-07	OBJ5	
AR5	2019-10-23	OBJ6	
AR8	2019-01-26	OBJ7	
AR2	2018-02-24	OBJ8	
AR9	2016-08-06	OBJ9	

2.CREATE A PROCEDURE YOU ENTER CUSTOMER ID THEN YOU SHOW TO WHOLE DETAILS OF CUSTOMER**QUERY:**

DELIMITER \$\$

```
CREATE DEFINER=`root`@`localhost` PROCEDURE `CUSTOMER_DETAILS`(IN  
`CID` VARCHAR(5))
```

NO SQL

DETERMINISTIC

```
SELECT * FROM CUSTOMER WHERE CUSTOMER_ID = CID$$
```

DELIMITER ;

OUTPUT:

Routine parameters			
Name	Type	Function	Value
CID	VARCHAR	<input type="text"/>	C108

CUSTOMER_ID	CNAME	FNO	STREET	AREA	POSTALNO
C108	SAHIL ROKAD	25	TIRTHAM RECIDENCY	RAJKOT	258741

3.CREATE A PROCEDURE THAT CHANGE THE PASSWORD OF USER**QUERY:**

DELIMITER \$\$

```
CREATE DEFINER=`root`@`localhost` PROCEDURE `PASSWORD_CHANGE`(IN  
`UID` VARCHAR(5), IN `OLDPSWD` INT(10), IN `NEWPSWD` INT(10))
```

BEGIN

```
IF OLDPSWD=(SELECT PASSWORD FROM login WHERE USER_ID=UID)
```

THEN

```
UPDATE login SET PASSWORD=NEWPSWD WHERE USER_ID=UID;
```

ELSE

```
SELECT 'Wrong Combination';
```

END IF;

END\$\$

DELIMITER ;

OUTPUT:

Routine parameters			
Name	Type	Function	Value
UID	VARCHAR	<input type="text"/>	USER3
OLDPSWD	INT	<input type="text"/>	34567
NEWPSWD	INT	<input type="text"/>	78521

BEFORE :

USER_ID	PASSWORD
USER0	25874
USER1	98745
USER2	23456
USER3	34567

AFTER:

USER_ID	PASSWORD
USER0	25874
USER1	98745
USER2	23456
USER3	78521

5.4.2 FUNCTION

1.CREATE A FUNCTION THAT WORKS YOU ENTER A ARTIST ID THEN IT RETURNS ARTIST NAME .

QUERY:

DELIMITER \$\$

```
CREATE DEFINER=`root`@`localhost` FUNCTION `FIND_ARTIST`(`AID`
VARCHAR(20)) RETURNS varchar(20) CHARSET latin1
```

NO SQL

BEGIN

```
DECLARE ARNAME varchar(20);
```

```
SELECT AR_NAME INTO ARNAME FROM artist
```

```
WHERE ARTIST_ID IN (SELECT ARTIST_ID from artist WHERE ARTIST_ID=AID);
```



```
RETURN ARNAME;
```

```
END$$
```

```
DELIMITER ;
```

OUTPUT:

Routine parameters			
Name	Type	Function	Value
AID	VARCHAR		AR5

FIND_ARTIST
MAHENDRA PATEL

2. CREATE A FUNCTION IF YOU ENTER A PAYMENT ID THEN YOU SEE THE PAYMENT AMOUNT.**QUERY:**

```
DELIMITER $$
```

```
CREATE DEFINER=`root`@`localhost` FUNCTION `FINAL_AMONUT`(`PAYID`  
VARCHAR(5)) RETURNS int(11)
```

```
BEGIN
```

```
DECLARE RT INT(11);
```

```
SELECT PAY_AMOUNT INTO RT FROM payment WHERE PAY_ID=PAYID;
```

```
RETURN RT;
```

```
END$$
```

```
DELIMITER ;
```

OUTPUT:

Routine parameters			
Name	Type	Function	Value
PAYID	VARCHAR		PAY6

FINAL_AMONUT
8500

3. CREATE A FUNCTION THAT IF YOU ENTER PAYMENT ID THEN RETURNS PAYMENT WAS FOUND OR NOT.**QUERY :**

DELIMITER \$\$

```
CREATE DEFINER=`root`@`localhost` FUNCTION `PAYMENT_FOUND`(`PID`  
VARCHAR(5)) RETURNS varchar(5) CHARSET latin1
```

```
BEGIN
```

```
IF EXISTS (SELECT PAY_ID FROM payment WHERE PAY_ID=PID) THEN
```

```
RETURN 'YES' ;
```

```
ELSE
```

```
RETURN 'NO' ;
```

```
END IF;
```

```
END$$
```

```
DELIMITER ;
```

OUTPUT:

Routine parameters			
Name	Type	Function	Value
PID	VARCHAR		PAY6

PAYMENT_FOUND
YES

5.4.3 PROCEDURE & FUNCTION BOTH**1. CREATE A PROCEDURE AND FUNCTION BOTH THEN YOU ENTER A CUSTOMER ID THEN IT IS DISPLAY FINAL AMOUNT AND FINAL AMOUNT IS AMOUNT LESS 50 RUPESS DISCOUNT .****QUERY:**

DELIMITER \$\$

```
CREATE DEFINER=`root`@`localhost` PROCEDURE `DISCOUNT`(IN `CID`  
VARCHAR(5), OUT `PAY_AMT` INT(10)) NO SQL
```

```
BEGIN DECLARE P varchar(10);

SELECT (payment.PAY_AMOUNT-50) INTO P from customer inner join payment on
customer.CUSTOMER_ID=payment.CUSTOMER_ID where
customer.CUSTOMER_ID=CID;

set PAY_AMT=GET_AMOUNT(P);

end$$

DELIMITER ;

DELIMITER $$

CREATE DEFINER=`root`@`localhost` FUNCTION `GET_AMOUNT`(`P` INT(10))
RETURNS int(10)

NO SQL

BEGIN DECLARE PAY_AMT int(10);

set PAY_AMT=P;

return PAY_AMT;

END$$

DELIMITER ;
```

OUTPUT:

Routine parameters			
Name	Type	Function	Value
CID	VARCHAR		C110

PAY_AMT
6450

2. CREATE A PROCEDURE AND FUNCTION YOU CREATE A CUSTOMER CATEGORY IF A CUSTOMER PAYMENT IS CASH THEN IT IS IN FIRST CLASS, PAYMENT IS ONLINE THEN IT IS IN SECOND CLASS AND PAYMENT IS CHEQUE THEN IT IS THIRD CLASS AND OTHER IS OTHER CLASS.

QUERY:

```
DELIMITER $$
```

```
CREATE DEFINER=`root`@`localhost` PROCEDURE `GET_CATEGORY`(IN `CID`
VARCHAR(10), OUT `Category` VARCHAR(50))

BEGIN

DECLARE P VARCHAR(10);

SELECT PAY_METHOD INTO P FROM payment WHERE CUSTOMER_ID=CID;

SET Category = GET_CAT(P);

END$$

DELIMITER ;

DELIMITER $$

CREATE DEFINER=`root`@`localhost` FUNCTION `GET_CAT`(`P` VARCHAR(10))
RETURNS varchar(50) CHARSET latin1 DETERMINISTIC

BEGIN

DECLARE Category varchar(10);

IF P='CASH' THEN    SET Category = 'First Class';

ELSEIF P='ONLINE' THEN    SET Category = 'Second Class';

ELSEIF p='CHEQUE' THEN    SET Category = 'Third Class';

ELSE    SET category = 'enter valid data';

end IF ;

return category;

END$$

DELIMITER ;
```

OUTPUT:

Routine parameters			
Name	Type	Function	Value
CID	VARCHAR	<input type="text"/>	C114

Category
First Clas

5.5 EXCEPTION

1. Whenever any duplicate artist id is entered then generate appropriate exception for that error.

QUERY:

DELIMITER \$\$

```
CREATE DEFINER=`root`@`localhost` PROCEDURE `EXCEPTION1`(IN `AID`  
VARCHAR(5), IN `UID` VARCHAR(5), IN `ANAME` VARCHAR(25), IN `ACOUNTRY`  
VARCHAR(25))
```

```
BEGIN declare exit handler for 1062
```

```
BEGIN select concat('duplicate key (' ,AID,') occured') as message;
```

```
end;
```

```
insert into artist(ARTIST_ID,USER_ID,AR_NAME,AR_COUNTRY) values  
(AID,UID,ANAME,ACOUNTRY);
```

```
END$$
```

DELIMITER ;

OUTPUT:

```
SET @p0='AR10'; SET @p1='USER0'; SET @p2='SANKET LILA'; SET @p3='INDIA'; CALL `EXCEPTION1`(@p0, @p1, @p2, @p3);
```

message

duplicate key (AR10) occured

5.6 TRIGGERS

1. CREATE A TRIGGER TO DISPLAY ART OBJECT DETAILS AFTER RHE ART OBJECT TABLE ADD NEW ENTRY.

QUERY:

```
CREATE TRIGGER `Add_object1` AFTER INSERT ON `art_object`
FOR EACH ROW INSERT INTO change_object
VALUES(NEW.ARTIST_ID , NEW.OBJECT_ID , NOW() , NOW(), 'INSERTED')
INSERT INTO `art_object` (`ARTIST_ID`, `OBJECT_DATE`, `OBJECT_ID`) VALUES
('AR10', '2019-10-09', 'OBJ25');
```

OUTPUT:

Artist_id	object_id	object_date	TIME	Event
AR2	OBJ15	2019-09-29	11:45:45	UPDATED
AR3	OBJ19	2019-09-29	11:10:45	INSERTED
AR9	OBJ2	2019-10-15	12:48:26	UPDATED
AR2	OBJ20	2019-09-29	11:30:16	INSERTED
AR10	OBJ25	2019-10-17	18:28:20	INSERTED
AR9	OBJ9	2019-10-17	17:34:36	UPDATED

2. CREATE A TRIGGER TO DISPLAY ART OBJECT DETAILS AFTER RHE ART OBJECT TABLE CHANGE OR UPDATE ENTRY.

QUERY:

```
CREATE TRIGGER `Update_object1` AFTER UPDATE ON `art_object`
FOR EACH ROW INSERT INTO change_object
VALUES(NEW.ARTIST_ID , NEW.OBJECT_ID , NOW() , NOW(), 'UPDATED')
```

OUTPUT:

Artist_id	object_id	object_date	TIME	Event
AR2	OBJ15	2019-09-29	11:45:45	UPDATED
AR3	OBJ19	2019-09-29	11:10:45	INSERTED
AR9	OBJ2	2019-10-15	12:48:26	UPDATED
AR2	OBJ20	2019-09-29	11:30:16	INSERTED
AR10	OBJ25	2019-10-17	18:28:20	INSERTED
AR9	OBJ9	2019-10-17	17:34:36	UPDATED

5.7 CURSORS

1. CREATE A IMPLICIT CURSOR FOR ARTIST NAME AND COUNTRY.

QUERY:

DELIMITER \$\$

```
CREATE DEFINER=`root`@`localhost` PROCEDURE `CURSOR1`()
```

```
BEGIN
```

```
DECLARE ARID varchar(100);
```

```
DECLARE ARNAME varchar(100);
```

```
DECLARE UID varchar(100);
```

```
DECLARE finished integer DEFAULT 0;
```

```
DECLARE c1 CURSOR FOR SELECT ARTIST_ID,AR_NAME,AR_COUNTRY FROM  
artist;
```

```
DECLARE CONTINUE HANDLER FOR NOT FOUND
```

```
set finished = 1;
```

```
open c1;
```

```
get_art : LOOP FETCH c1 INTO ARID,ARNAME,UID;
```

```
IF finished = 1
```

```
THEN
```

```
LEAVE get_art;
```

```
END IF;
```

```
SELECT concat(ARNAME,"-",UID) as ArtistName;
```

```
END LOOP get_art;
```

```
CLOSE c1;
```

```
END$$
```

```
DELIMITER ;
```

OUTPUT:

ArtistName	ANKIT SONI-INDIA
ArtistName	MILAN PUROHIT-INDIA
ArtistName	PRANAV KHENI-AFRICA
ArtistName	NIRAV JOSHI-ENGLAND
ArtistName	RAM MEHTA-INDIA
ArtistName	MAHENDRA PATEL-UK
ArtistName	YUG RAJANI-INDIA
ArtistName	RINKAL PATEL-USA
ArtistName	RAVI BORAD-AFRICA
ArtistName	SAHIL MUNJANI-USA

2. CREATE CURSOR FOR FETCHING ALL THOSE CUSTOMERS WHOSE PAYMENT IS REMAINING.

QUERY:

DELIMITER \$\$

```
CREATE DEFINER=`root`@`localhost` PROCEDURE `CURSOR2`()
```

```
BEGIN
```

```
DECLARE finished integer DEFAULT 0;
```

```
DECLARE CID varchar(10) ;
```

```
DECLARE PID varchar(100) ;
```

```
DECLARE PAMT INT(10) ;
```

```
DECLARE PDT DATE ;
```



```
DECLARE curCust CURSOR FOR SELECT  
CUSTOMER_ID,PAY_ID,PAY_DATE,PAY_AMOUNT FROM payment WHERE  
STATUS=0;  
  
DECLARE CONTINUE HANDLER FOR NOT FOUND SET finished = 1;  
  
CREATE TABLE IF NOT EXISTS  
`ART_MANAGEMENT`.REMAINING_PAYMENT1(CID1 varchar(10),PAYID  
VARCHAR(5),PAYDT DATE,AMOUNT INT(7));  
  
OPEN curCust;  
  
getCust : LOOP  
  
FETCH curCust INTO CID,PID,PDT,PAMT;  
  
IF finished = 1  
  
THEN  
  
LEAVE getCust;  
  
END IF;  
  
INSERT INTO `REMAINING_PAYMENT1` (CID1,PAYID,PAYDT,AMOUNT) VALUES  
(CID,PID,PDT,PAMT);  
  
END LOOP getCust;  
  
CLOSE curCust;  
  
END$$  
  
DELIMITER ;
```

OUTPUT:

CID1	PAYID	PAYDT	AMOUNT
C113	PAY2	2019-08-07	1950
C107	PAY4	2019-09-13	2530
C104	PAY5	2019-08-21	1240

6. Future Enhancements of the System

For future enhancement of this portal we will provide a pre-registration for art gallery management displayed on home page of portal. We will also provide better GUI visualization as per user's demand. If any user find any kind of bug then, we are ensuring that we fix and solve it in proper way. We will make Android application for the same portal for easier management of art gallery. We will try that users have not to suffer from any kind of problem.

7. Bibliography

For the successful working of my project I have referred books as well as websites. most I Searched For requirement possession on the websites. Many of the logics in my project are used from the book which I referred & the concepts there in book which indeed provided a platform To achieve such reliable system database.

Reference books:

- Data Base System Concepts
- Henry F.Korth & A.Silberschatz. 2nd Ed. McGraw-Hill 1991

References Website:

- <https://w3shools.com/>