LONDON METROPOLITAN UNIVERSITY

Islington college
(इस्लिङ्टन कलेज)

Module Code & Module Title

CC4057NI Introduction to Information Systems

Assessment Weightage & Type

30% Individual Coursework

Year and Semester

2021-22 Spring

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Group: C13

London Met ID:

College ID: NP01CP4S210039

Assignment Due Date: April 30, 2021.

Assignment Submission Date: April 28, 2021.

I confirm that I understand my coursework needs to be submitted online via Google Classroom under the relevant module page before the deadline in order for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a marks of zero will be awarded.

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1.Introduction

A database is a structured set of records or data, usually stored in a computer so that it can be accessed electronically. The collection of data (database) contains information about one particular firm. It preserves any information that could be useful in the decision-making process. The data is recorded and arranged to provide a footing for future application development. (Berrington, 2017)

A good database system is important to any firm. Data should be accurate and it must be protected from damage. It should be kept in an orderly manner so that other applications can utilize the data.

Description of Itsuki Graphic Designing Company.

"Design can be Art. Design can be Aesthetics.
Design is so simple, that's why it is so complicated."
-Paul Rand

Itsuki is a graphic designing company which provides specialized graphic designers for the client's aid. It assists the clients to create visual form of communication with an objective to make a positive impression, to convey messages, to form a spectacular image in the public eye and to establish trust and goodwill. (Velocity Consultancy, 2020)

Operations of the company:

- Employees manage work that does not require special skills. For instance: sorting out the order, forwarding the order to the client chosen department and also arranging appointment time for the client and the HOD.
- After the employee forwards the order to the respective department, the department's HOD talks to the client. The pricing and other details like deadlines are discussed and the order is confirmed.
- The HOD then assigns the details of the project to the graphic designer who specializes in the respective field.

Goals and Objectives:

"There are three responses to a piece of design – Yes, No, and WOW!!
WOW is the one to aim for."
-Milton Glaser

The above quote is the motto of the company. The company's goal is to support the client in reaching their end goal.

As graphic designing is not only for appearances but is also for conveying messages and could be used to create awareness, our graphic designers make sure that any kind of message the client wants to convey through the design is conveyed properly. We know graphic designing can help boost marketing, advertising, establishing trust and goodwill as a well-designed marketing material greatly enhances the trustworthiness of the business so we make sure to fulfill the client's requirements and create designs to the best of our abilities. (Driedger, 2019)

2.Database Model.

Business Rules:

1. The graphic designer must be hyper-sensitive to the client's needs and should be flexible enough to make changes just in case the client does not like the output and the client should reciprocate.
2. Deadline should be discussed beforehand for the convenience of both client and graphic designer.
3. Deposit must be given at the time of order confirmation.
4. Clients must be clear about their involvement in the project and the designer must respect their decision.
5. Designer must deliver what is promised to the client, take responsibility for any mistake and make efforts to repair damage.
6. Once the order is confirmed, the order cannot be cancelled. If in any case the order is cancelled, the deposit will not be returned and the cancelling party has to pay fine according to the contract.

Entity Relationship Diagram:

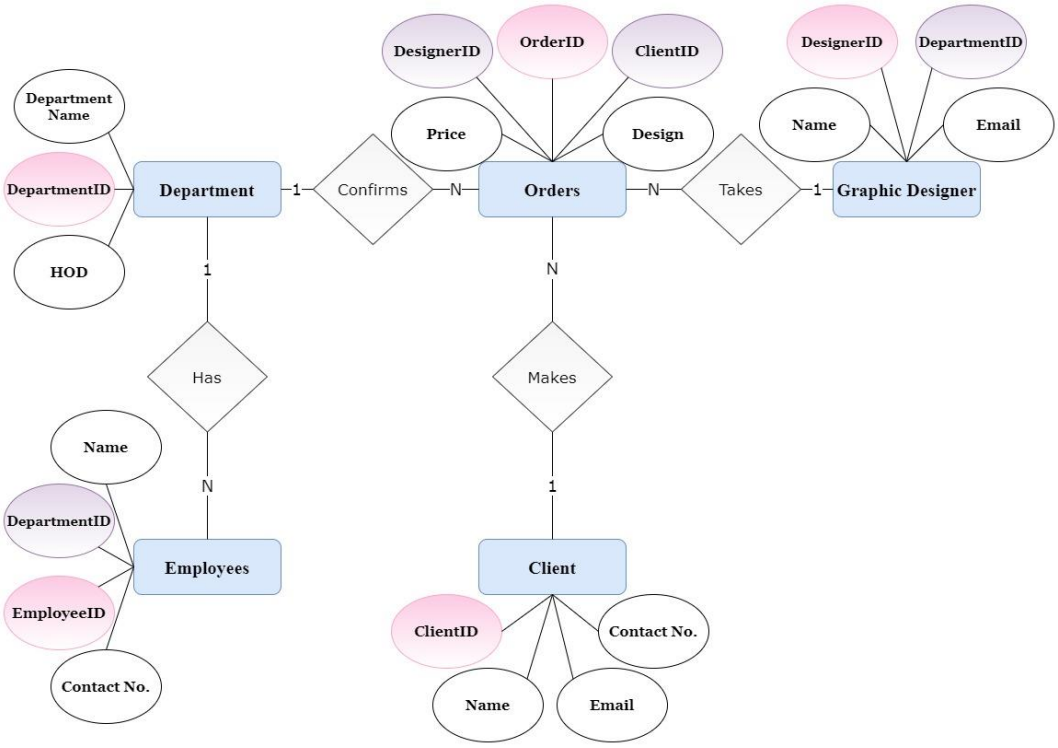

Figure 1: Entity Relational Diagram

Relational Diagram:

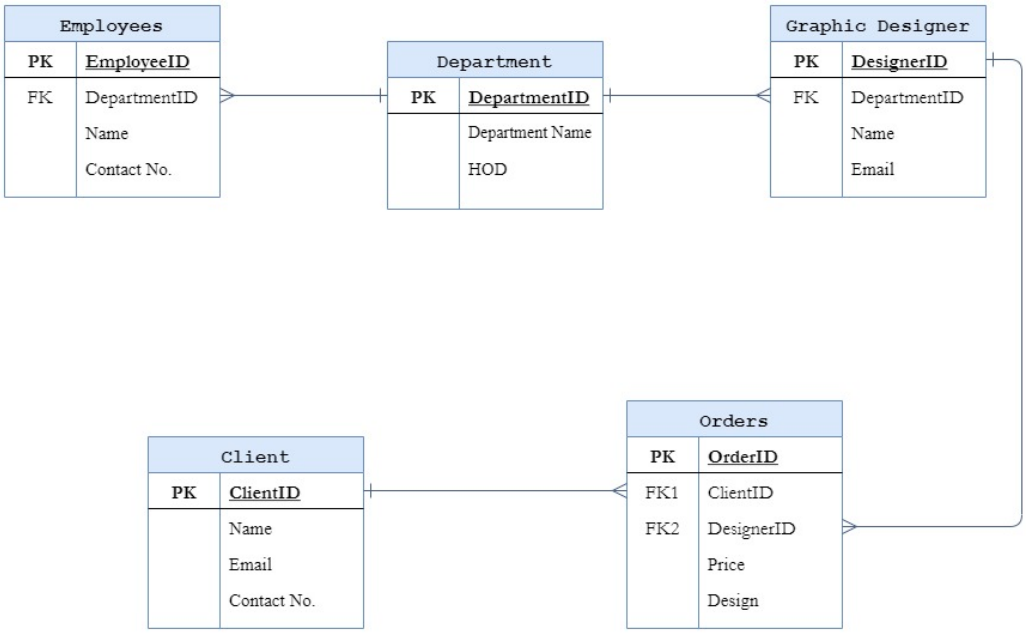

Figure 2: Relational Diagram.

Table 1: Department.

CREATE TABLE department (departmentID INT PRIMARY KEY, department_name VARCHAR(255) NOT NULL, hod varchar(255));

```
MariaDB [(none)]> USE ItsukiGDC;
Database changed
MariaDB [ItsukiGDC]> CREATE TABLE department (departmentID INT PRIMARY KEY,
department_name VARCHAR(255) NOT NULL, hod varchar(255));
Query OK, 0 rows affected (0.031 sec)
```

DESCRIBE department;

The company is subdivided into sections to deal with the issues individually. Department table stores and manages the information of individual departments including the HODs.

```
MariaDB [ItsukiGDC]> DESCRIBE department;
+-----------------+--------------+------+-----+---------+-------+
| Field           | Type         | Null | Key | Default | Extra |
+-----------------+--------------+------+-----+---------+-------+
| departmentID    | int(11)      | NO   | PRI | NULL    |       |
| department_name | varchar(255) | NO   |     | NULL    |       |
| hod             | varchar(255) | YES  |     | NULL    |       |
+-----------------+--------------+------+-----+---------+-------+
3 rows in set (0.065 sec)
```

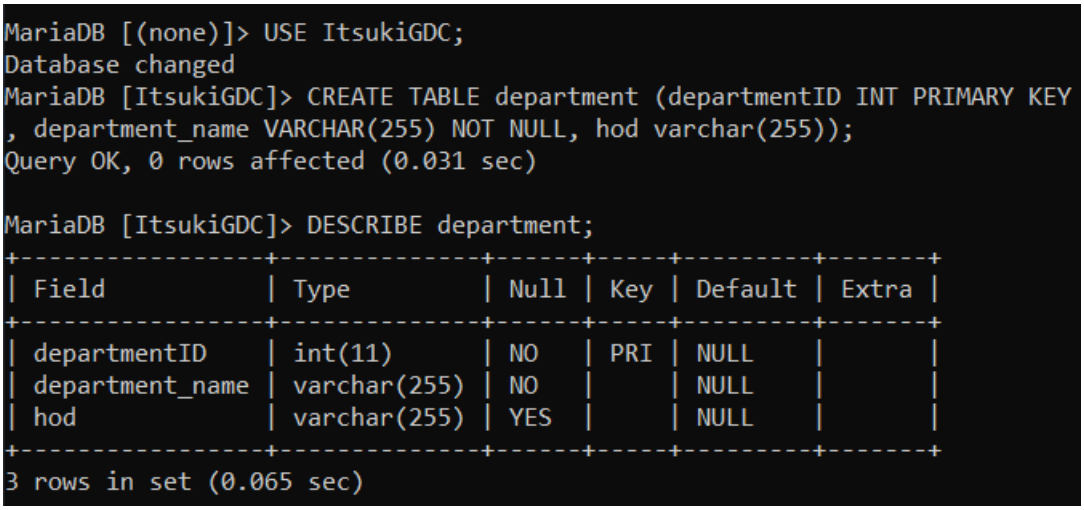

Figure 3: Create And Describe Department.

INSERT INTO department VALUES

(10001, "Corporate Design", "Pritam Singh"),

(10002, "Publication Graphic Design", "Annie Bomjan"),

(10003, "Animation", "Mira Shrestha"),

(10004, "Website Graphic Design", "Sangyum Lama"),

(10005, "Advertising Graphic Design", "Bishesh Acharya"),

(10006, "User Interface Graphic Design", "Saramsha Pokhrel"),

(10007, "Photo Editing", "Riti Tulachan"),

(10008, "Packaging Graphic Design", "Diva Maharjan"),

(10009, "Video and Film Editing", "Asim Joshi"),

(10010, "Art and Illustration", "Iris Shakya");

```
MariaDB [ItsukiGDC]> INSERT INTO department VALUES
    -> (10001, "Corporate Design","Pritam Singh"),
    -> (10002, "Publication Graphic Design","Annie Bomjan"),
    -> (10003, "Animation","Mira Shrestha"),
    -> (10004, "Website Graphic Design","Sangyum Lama"),
    -> (10005, "Advertising Graphic Design","Bishesh Acharya"),
    -> (10006, "User Interface Graphic Design","Saramsha Pokhrel"),
    -> (10007, "Photo Editing","Riti Tulachan"),
    -> (10008, "Packaging Graphic Design","Diva Maharjan"),
    -> (10009, "Video and Film Editing","Asim Joshi"),
    -> (10010, "Art and Illustration","Iris Shakya");
Query OK, 10 rows affected (0.055 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

Figure 4: Insert Into Department Values.

SELECT * FROM department;

```
MariaDB [ItsukiGDC]> SELECT * FROM department;
+--------------+-------------------------------+------------------+
| departmentID | department_name               | hod              |
+--------------+-------------------------------+------------------+
|        10001 | Corporate Design              | Pritam Singh     |
|        10002 | Publication Graphic Design    | Annie Bomjan     |
|        10003 | Animation                     | Mira Shrestha    |
|        10004 | Website Graphic Design        | Sangyum Lama     |
|        10005 | Advertising Graphic Design    | Bishesh Acharya  |
|        10006 | User Interface Graphic Design | Saramsha Pokhrel |
|        10007 | Photo Editing                 | Riti Tulachan    |
|        10008 | Packaging Graphic Design      | Diva Maharjan    |
|        10009 | Video and Film Editing        | Asim Joshi       |
|        10010 | Art and Illustration          | Iris Shakya      |
+--------------+-------------------------------+------------------+
10 rows in set (0.012 sec)
```

*Figure 5: Select * From Department.*

Table 2: Client.

CREATE TABLE client (clientID INT PRIMARY KEY AUTO_INCREMENT, name VARCHAR(255), email VARCHAR(255) NOT NULL, contact_no VARCHAR(10) NOT NULL);

```
MariaDB [ItsukiGDC]> CREATE TABLE client (clientID INT PRIMARY KEY
AUTO_INCREMENT, name VARCHAR(255), email VARCHAR(255) NOT NULL, contact_no
VARCHAR(10) NOT NULL);
Query OK, 0 rows affected (0.064 sec)
```

DESCRIBE client;

Client refers to a person or organization who uses the facilities provided by the company. Client table holds all the required information like their name, email and contact number.

```
MariaDB [ItsukiGDC]> DESCRIBE client;
+------------+--------------+------+-----+---------+----------------+
| Field      | Type         | Null | Key | Default | Extra          |
+------------+--------------+------+-----+---------+----------------+
| clientID   | int(11)      | NO   | PRI | NULL    | auto_increment |
| name       | varchar(255) | YES  |     | NULL    |                |
| email      | varchar(255) | NO   |     | NULL    |                |
| contact_no | varchar(10)  | NO   |     | NULL    |                |
+------------+--------------+------+-----+---------+----------------+
4 rows in set (0.031 sec)
```

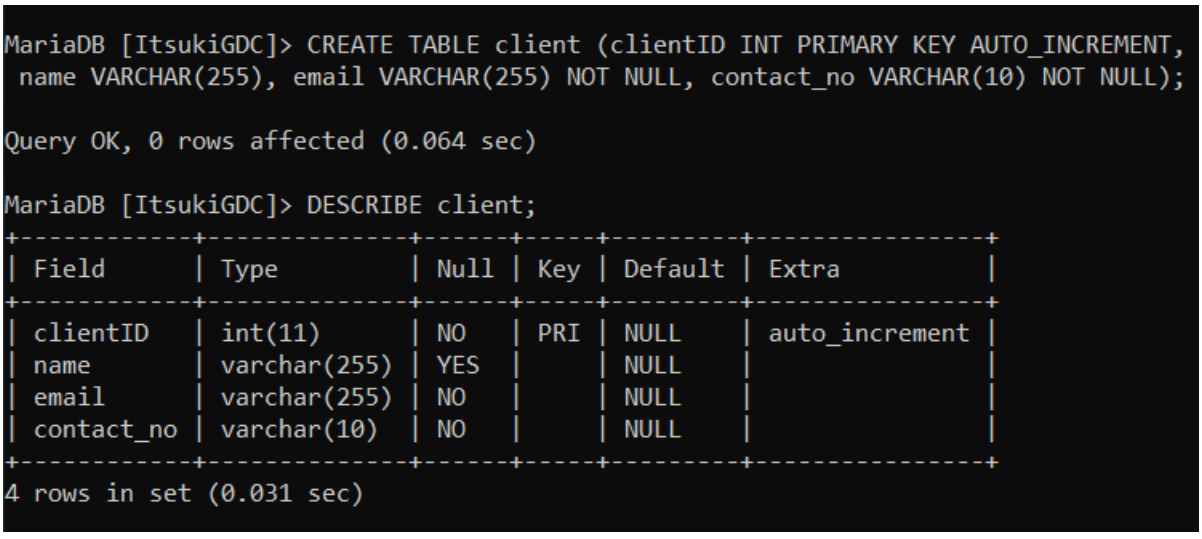

Figure 6: Create And Describe Client.

INSERT INTO client (name, email, contact_no) VALUES

("Prism Color Organization","prismcolor@gmail.com","015500001"),

("Srija Pradhan","srija_pradhan@gmail.com","9851000002"),

("Miran Rai","miranrai23@yahoo.com","9851100003"),

("Yang Limbu","limbuyanggg@gmail.com","9851200004"),

("Samyek Bhattarai","bhattaraisyk@yahoo.com","9851300005"),

("Bihani Shakya","bihanii.shakyaa@gmail.com","9851400006"),

("Lisa Basnet","lizabasnet45@gmail.com","9851500007"),

("Akatsuki","akatsukicompany@gmail.com","015500008"),

("Rohit Joshi","joshiro@yahoo.com","9851600009"),

("Saskiya Gauchan","skggg@gmail.com","9851700010"),

("Muskan KC","mskkk@gmail.com","9851800011"),

("Haikyuu","haikyuu0_0@gmail.com","015500012"),

("Sadikshya Singh","ssdikshya89@yahoo.com","9851900013"),

("Amber Tuladhar","amberakafire@gmail.com","9852000014"),

("Yuri Shrestha","yuriiiiisth@gmail.com","9852100015");

```
MariaDB [ItsukiGDC]> INSERT INTO client(name, email, contact_no) VALUES
    -> ("Prism Color Organization","prismcolor@gmail.com","015500001"),
    -> ("Srija Pradhan","srija_pradhan@gmail.com","9851000002"),
    -> ("Miran Rai","miranrai23@yahoo.com","9851100003"),
    -> ("Yang Limbu","limbuyanggg@gmail.com","9851200004"),
    -> ("Samyek Bhattarai","bhattaraisyk@yahoo.com","9851300005"),
    -> ("Bihani Shakya","bihanii.shakyaa@gmail.com","9851400006"),
    -> ("Lisa Basnet","lizabasnet45@gmail.com","9851500007"),
    -> ("Akatsuki","akatsukicompany@gmail.com","015500008"),
    -> ("Rohit Joshi","joshiro@yahoo.com","9851600009"),
    -> ("Saskiya Gauchan","skggg@gmail.com","9851700010"),
    -> ("Muskan KC","mskkk@gmail.com","9851800011"),
    -> ("Haikyuu","haikyuu0_0@gmail.com","015500012"),
    -> ("Sadikshya Singh","ssdikshya89@yahoo.com","9851900013"),
    -> ("Amber Tuladhar","amberakafire@gmail.com","9852000014"),
    -> ("Yuri Shrestha","yuriiiiiisth@gmail.com","9852100015");
Query OK, 15 rows affected (0.041 sec)
Records: 15  Duplicates: 0  Warnings: 0
```

Figure 7: Insert Into Client Values.

SELECT * FROM client;

```
MariaDB [ItsukiGDC]> SELECT * FROM client;
+----------+--------------------------+---------------------------+------------+
| clientID | name                     | email                     | contact_no |
+----------+--------------------------+---------------------------+------------+
|        1 | Prism Color Organization | prismcolor@gmail.com      | 015500001  |
|        2 | Srija Pradhan            | srija_pradhan@gmail.com   | 9851000002 |
|        3 | Miran Rai                | miranrai23@yahoo.com      | 9851100003 |
|        4 | Yang Limbu               | limbuyanggg@gmail.com     | 9851200004 |
|        5 | Samyek Bhattarai         | bhattaraisyk@yahoo.com    | 9851300005 |
|        6 | Bihani Shakya            | bihanii.shakyaa@gmail.com | 9851400006 |
|        7 | Lisa Basnet              | lizabasnet45@gmail.com    | 9851500007 |
|        8 | Akatsuki                 | akatsukicompany@gmail.com | 015500008  |
|        9 | Rohit Joshi              | joshiro@yahoo.com         | 9851600009 |
|       10 | Saskiya Gauchan          | skggg@gmail.com           | 9851700010 |
|       11 | Muskan KC                | mskkk@gmail.com           | 9851800011 |
|       12 | Haikyuu                  | haikyuu0_0@gmail.com      | 015500012  |
|       13 | Sadikshya Singh          | ssdikshya89@yahoo.com     | 9851900013 |
|       14 | Amber Tuladhar           | amberakafire@gmail.com    | 9852000014 |
|       15 | Yuri Shrestha            | yuriiiiiisth@gmail.com    | 9852100015 |
+----------+--------------------------+---------------------------+------------+
15 rows in set (0.000 sec)
```

*Figure 8: Select * From Client.*

Table 3: Employees.

CREATE TABLE employees (employeeID INT PRIMARY KEY, departmentID INT NOT NULL,name VARCHAR(255), contact_no VARCHAR(10) NOT NULL, FOREIGN KEY (departmentID) REFERENCES department (departmentID));

```
MariaDB [ItsukiGDC]> CREATE TABLE employees (employeeID INT PRIMARY KEY,
departmentID INT NOT NULL,name VARCHAR(255), contact_no VARCHAR(10) NOT
NULL, FOREIGN KEY (departmentID) REFERENCES department (departmentID));
Query OK, 0 rows affected (0.044 sec)
```

DESCRIBE employees;

Employee refers to the people who are not professionals but are hired to do a particular job. This table consists of employee's personal information.

```
MariaDB [ItsukiGDC]> DESCRIBE employees;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| employeeID   | int(11)      | NO   | PRI | NULL    |       |
| departmentID | int(11)      | NO   | MUL | NULL    |       |
| name         | varchar(255) | YES  |     | NULL    |       |
| contact_no   | varchar(10)  | NO   |     | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
4 rows in set (0.035 sec)
```

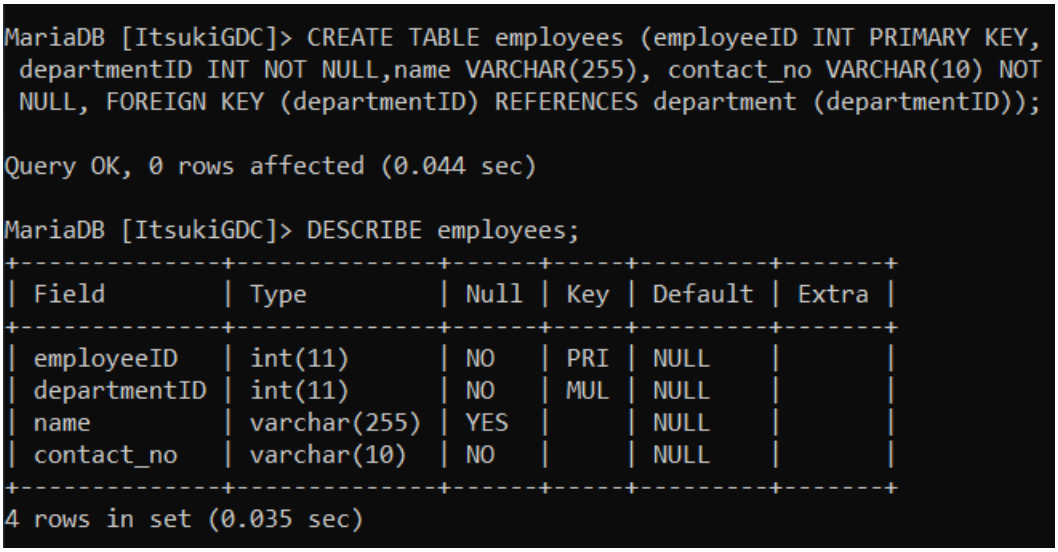

Figure 9: Create And Describe Employees.

INSERT INTO employees VALUES

(701, 10001, "Aastha Sthapit","9841122334"),

(702, 10002, "Fatima Ahmed","9841222345"),

(703, 10003, "Malika Khetan","9841322356"),

(704, 10004, "Siddhartha Thapa","9841422367"),

(705, 10005, "Ayushma Kansakar","9841522378"),

(706, 10006, "Merina Shrestha","9841622389"),

(707, 10007, "Karen Magar","9841722390"),

(708, 10008, "Silve Rai","9841822301"),

(709, 10009, "Prashant Thakur","9841922312"),

(710, 10010, "Saisha Tamang","9842022323"),

(711, 10001, "Yukta Timila","9842122334"),

(712, 10002, "Manav Bhatta","9842222345"),

(713, 10003, "Sona Rai","9842322356"),

(714, 10004, "Cristino Pradhan","9842422367"),

(715, 10005, "Pranaya Nepal","9842522378"),

(716, 10006, "Anastasia Fitzpatrick","9842622389"),

(717, 10007, "Trilok Bista","9842722390"),

(718, 10008, "Garima Shrestha","9842822301"),

(719, 10009, "Aakriti Maharjan","9842922312"),

(720, 10010, "Trishika Agrawal","9843022323");

```
MariaDB [ItsukiGDC]> INSERT INTO employees VALUES
    -> (701, 10001, "Aastha Sthapit","9841122334"),
    -> (702, 10002, "Fatima Ahmed","9841222345"),
    -> (703, 10003, "Malika Khetan","9841322356"),
    -> (704, 10004, "Siddhartha Thapa","9841422367"),
    -> (705, 10005, "Ayushma Kansakar","9841522378"),
    -> (706, 10006, "Merina Shrestha","9841622389"),
    -> (707, 10007, "Karen Magar","9841722390"),
    -> (708, 10008, "Silve Rai","9841822301"),
    -> (709, 10009, "Prashant Thakur","9841922312"),
    -> (710, 10010, "Saisha Tamang","9842022323"),
    -> (711, 10001, "Yukta Timila","9842122334"),
    -> (712, 10002, "Manav Bhatta","9842222345"),
    -> (713, 10003, "Sona Rai","9842322356"),
    -> (714, 10004, "Cristino Pradhan","9842422367"),
    -> (715, 10005, "Pranaya Nepal","9842522378"),
    -> (716, 10006, "Anastasia Fitzpatrick","9842622389"),
    -> (717, 10007, "Trilok Bista","9842722390"),
    -> (718, 10008, "Garima Shrestha","9842822301"),
    -> (719, 10009, "Aakriti Maharjan","9842922312"),
    -> (720, 10010, "Trishika Agrawal","9843022323");
Query OK, 20 rows affected (0.018 sec)
Records: 20  Duplicates: 0  Warnings: 0
```

Figure 10: Insert Into Employees Values.

SELECT * FROM employees;

```
MariaDB [ItsukiGDC]> SELECT * FROM employees;
+------------+--------------+----------------------+------------+
| employeeID | departmentID | name                 | contact_no |
+------------+--------------+----------------------+------------+
|        701 |        10001 | Aastha Sthapit       | 9841122334 |
|        702 |        10002 | Fatima Ahmed         | 9841222345 |
|        703 |        10003 | Malika Khetan        | 9841322356 |
|        704 |        10004 | Siddhartha Thapa     | 9841422367 |
|        705 |        10005 | Ayushma Kansakar     | 9841522378 |
|        706 |        10006 | Merina Shrestha      | 9841622389 |
|        707 |        10007 | Karen Magar          | 9841722390 |
|        708 |        10008 | Silve Rai            | 9841822301 |
|        709 |        10009 | Prashant Thakur      | 9841922312 |
|        710 |        10010 | Saisha Tamang        | 9842022323 |
|        711 |        10001 | Yukta Timila         | 9842122334 |
|        712 |        10002 | Manav Bhatta         | 9842222345 |
|        713 |        10003 | Sona Rai             | 9842322356 |
|        714 |        10004 | Cristino Pradhan     | 9842422367 |
|        715 |        10005 | Pranaya Nepal        | 9842522378 |
|        716 |        10006 | Anastasia Fitzpatrick | 9842622389 |
|        717 |        10007 | Trilok Bista         | 9842722390 |
|        718 |        10008 | Garima Shrestha      | 9842822301 |
|        719 |        10009 | Aakriti Maharjan     | 9842922312 |
|        720 |        10010 | Trishika Agrawal     | 9843022323 |
+------------+--------------+----------------------+------------+
20 rows in set (0.000 sec)
```

*Figure 11: Select * From Employees.*

Table 4 : Graphic Designer.

CREATE TABLE graphic_designer (designerID INT PRIMARY KEY, departmentID INT NOT NULL, name VARCHAR(255), email VARCHAR(255) UNIQUE, FOREIGN KEY (departmentID) REFERENCES department (departmentID));

```
MariaDB [ItsukiGDC]> CREATE TABLE graphic_designer (designerID INT PRIMARY
KEY, departmentID INT NOT NULL,  name VARCHAR(255), email VARCHAR(255)
UNIQUE, FOREIGN KEY (departmentID) REFERENCES department (departmentID));
Query OK, 0 rows affected (0.037 sec)
```

DESCRIBE graphic_designer;

A graphic designer creates visual contents as per the client's order. This table contains elementary information about the graphic designer.

```
MariaDB [ItsukiGDC]> DESCRIBE graphic_designer;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| designerID   | int(11)      | NO   | PRI | NULL    |       |
| departmentID | int(11)      | NO   | MUL | NULL    |       |
| name         | varchar(255) | YES  |     | NULL    |       |
| email        | varchar(255) | YES  | UNI | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
4 rows in set (0.036 sec)
```

```
MariaDB [ItsukiGDC]> CREATE TABLE graphic_designer (designerID INT PRIMARY KEY,
 departmentID INT NOT NULL,  name VARCHAR(255), email VARCHAR(255) UNIQUE, FORE
IGN KEY (departmentID) REFERENCES department (departmentID));
Query OK, 0 rows affected (0.037 sec)

MariaDB [ItsukiGDC]> DESCRIBE graphic_designer;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| designerID   | int(11)      | NO   | PRI | NULL    |       |
| departmentID | int(11)      | NO   | MUL | NULL    |       |
| name         | varchar(255) | YES  |     | NULL    |       |
| email        | varchar(255) | YES  | UNI | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
4 rows in set (0.036 sec)
```

Figure 12: Create And Describe Graphic Designer.

INSERT INTO graphic_designer VALUES

(51001, 10001,"Pradipti Pradhan","pradiptipradhan.itsuki@gmail.com"),

(51002, 10002,"Yuthika Tulachan","yuthikatulachan.itsuki@gmail.com"),

(51003, 10003,"Rubina Shrestha","rubinashrestha.itsuki@gmail.com"),

(51004, 10004,"Ishika Thakur","ishikathakur.itsuki@gmail.com"),

(51005, 10005,"Gaurav Magar","gauravmagar.itsuki@gmail.com"),

(51006, 10006,"Roshish Tuladhar","roshishtuladhar.itsuki@gmail.com"),

(51007, 10007,"Prajeeta Pradhan","prajeetapradhan.itsuki@gmail.com"),

(51008, 10008,"Roshan Shahi","roshanshahi.itsuki@gmail.com"),

(51009, 10009,"Manik Qazi","manikqazi.itsuki@gmail.com"),

(51010, 10010,"Rahul Munshi","rahulmunshi.itsuki@gmail.com"),

(51011, 10003,"Mihir Shrestha","mihirshrestha.itsuki@gmail.com"),

(51012, 10010,"Kirti Dongol","kirtidongol.itsuki@gmail.com"),

(51013, 10007,"Sagun Timilsina","saguntimilsina.itsuki@gmail.com"),

(51014, 10004,"Anurag Tiwari","anuragtiwari.itsuki@gmail.com"),

(51015, 10008,"Lumanti Maharjan","lumantimaharjan.itsuki@gmail.com");

```
MariaDB [ItsukiGDC]> INSERT INTO graphic_designer VALUES
    -> (51001, 10001,"Pradipti Pradhan","pradiptipradhan.itsuki@gmail.com"),
    -> (51002,10002,"Yuthika Tulachan","yuthikatulachan.itsuki@gmail.com"),
    -> (51003,10003,"Rubina Shrestha","rubinashrestha.itsuki@gmail.com"),
    -> (51004,10004,"Ishika Thakur","ishikathakur.itsuki@gmail.com"),
    -> (51005,10005,"Gaurav Magar","gauravmagar.itsuki@gmail.com"),
    -> (51006,10006,"Roshish Tuladhar","roshishtuladhar.itsuki@gmail.com"),
    -> (51007,10007,"Prajeeta Pradhan","prajeetapradhan.itsuki@gmail.com"),
    -> (51008,10008,"Roshan Shahi","roshanshahi.itsuki@gmail.com"),
    -> (51009, 10009,"Manik Qazi","manikqazi.itsuki@gmail.com"),
    -> (51010,10010,"Rahul Munshi","rahulmunshi.itsuki@gmail.com"),
    -> (51011,10003,"Mihir Shrestha","mihirshrestha.itsuki@gmail.com"),
    -> (51012,10010,"Kirti Dongol","kirtidongol.itsuki@gmail.com"),
    -> (51013,10007,"Sagun Timilsina","saguntimilsina.itsuki@gmail.com"),
    -> (51014,10004,"Anurag Tiwari","anuragtiwari.itsuki@gmail.com"),
    -> (51015,10008,"Lumanti Maharjan","lumantimaharjan.itsuki@gmail.com");
Query OK, 15 rows affected (0.018 sec)
Records: 15  Duplicates: 0  Warnings: 0
```

Figure 13: Insert Into Graphic Designer Values.

SELECT * FROM graphic_designer;

```
MariaDB [ItsukiGDC]> SELECT * FROM graphic_designer;
+------------+--------------+------------------+----------------------------------+
| designerID | departmentID | name             | email                            |
+------------+--------------+------------------+----------------------------------+
|      51001 |        10001 | Pradipti Pradhan | pradiptipradhan.itsuki@gmail.com |
|      51002 |        10002 | Yuthika Tulachan | yuthikatulachan.itsuki@gmail.com |
|      51003 |        10003 | Rubina Shrestha  | rubinashrestha.itsuki@gmail.com  |
|      51004 |        10004 | Ishika Thakur    | ishikathakur.itsuki@gmail.com    |
|      51005 |        10005 | Gaurav Magar     | gauravmagar.itsuki@gmail.com     |
|      51006 |        10006 | Roshish Tuladhar | roshishtuladhar.itsuki@gmail.com |
|      51007 |        10007 | Prajeeta Pradhan | prajeetapradhan.itsuki@gmail.com |
|      51008 |        10008 | Roshan Shahi     | roshanshahi.itsuki@gmail.com     |
|      51009 |        10009 | Manik Qazi       | manikqazi.itsuki@gmail.com       |
|      51010 |        10010 | Rahul Munshi     | rahulmunshi.itsuki@gmail.com     |
|      51011 |        10003 | Mihir Shrestha   | mihirshrestha.itsuki@gmail.com   |
|      51012 |        10010 | Kirti Dongol     | kirtidongol.itsuki@gmail.com     |
|      51013 |        10007 | Sagun Timilsina  | saguntimilsina.itsuki@gmail.com  |
|      51014 |        10004 | Anurag Tiwari    | anuragtiwari.itsuki@gmail.com    |
|      51015 |        10008 | Lumanti Maharjan | lumantimaharjan.itsuki@gmail.com |
+------------+--------------+------------------+----------------------------------+
15 rows in set (0.000 sec)
```

*Figure 14: Select * From Graphic Designer.*

Table 5: Orders.

CREATE TABLE orders (orderID INT PRIMARY KEY AUTO_INCREMENT, clientID INT NOT NULL, designerID INT NOT NULL, price FLOAT(10,2),design VARCHAR(255) DEFAULT 'Simple, To the Point', FOREIGN KEY (clientID) REFERENCES client (clientID), FOREIGN KEY (designerID) REFERENCES graphic_designer (designerID));

```
MariaDB [ItsukiGDC]> CREATE TABLE orders (orderID INT PRIMARY KEY AUTO_INCREMENT,
clientID INT NOT NULL, designerID INT NOT NULL, price FLOAT(10,2),design VARCHAR(255)
DEFAULT 'Simple, To the Point', FOREIGN KEY (clientID) REFERENCES client (clientID),
FOREIGN KEY (designerID) REFERENCES graphic_designer (designerID));
Query OK, 0 rows affected (0.042 sec)
```

DESCRIBE orders;

Order is a set of instructions laid down by the client. It consists of organized information so that the order can be tracked easily.

```
MariaDB [ItsukiGDC]> DESCRIBE orders;
+------------+--------------+------+-----+----------------------+----------------+
| Field      | Type         | Null | Key | Default              | Extra          |
+------------+--------------+------+-----+----------------------+----------------+
| orderID    | int(11)      | NO   | PRI | NULL                 | auto_increment |
| clientID   | int(11)      | NO   | MUL | NULL                 |                |
| designerID | int(11)      | NO   | MUL | NULL                 |                |
| price      | float(10,2)  | YES  |     | NULL                 |                |
| design     | varchar(255) | YES  |     | Simple, To the Point |                |
+------------+--------------+------+-----+----------------------+----------------+
5 rows in set (0.036 sec)
```

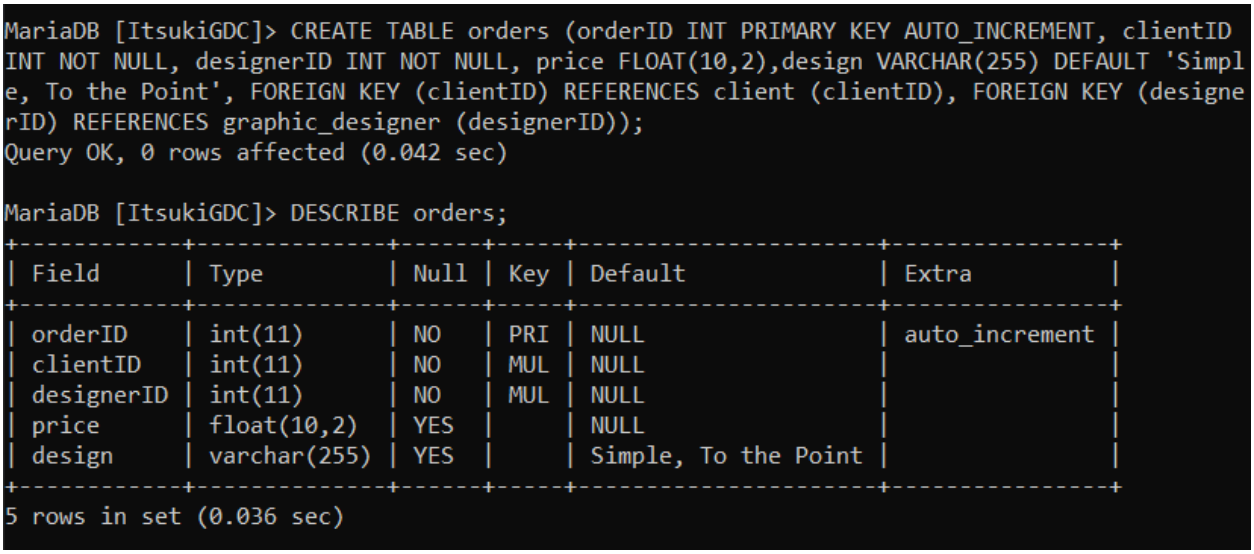

Figure 15: Create And Describe Orders.

INSERT INTO orders (clientID, designerID, price, design) VALUES (6, 51012, 2500.00, "Vibrant");

INSERT INTO orders (clientID, designerID, price) VALUES (12, 51013, 800.00);

INSERT INTO orders (clientID, designerID, price, design) VALUES

(3, 51010, 1500.00, "Black and White"),

(8, 51011, 5000.00, "Precise"),

(9, 51009, 1800.00, "Smooth Transition");

INSERT INTO orders (clientID, designerID, price) VALUES (11, 51001, 3500.00);

INSERT INTO orders (clientID, designerID, price, design) VALUES

(7, 51011, 1950.00, "Tragic"),

(15, 51005, 4000.00, "Dramatic"),

(5, 51012, 1000.00, "Pastel Aesthetic");

INSERT INTO orders (clientID, designerID, price) VALUES (9, 51003, 1500.00);

```
MariaDB [ItsukiGDC]> INSERT INTO orders(clientID, designerID, price,design) VALUES
    -> (6,  51012, 2500.00, "Vibrant");
Query OK, 1 row affected (0.016 sec)

MariaDB [ItsukiGDC]> INSERT INTO orders(clientID, designerID, price) VALUES
    -> (12, 51013,  800.00);
Query OK, 1 row affected (0.002 sec)

MariaDB [ItsukiGDC]> INSERT INTO orders(clientID, designerID, price,design) VALUES
    -> (3,  51010, 1500.00, "Black and White"),
    -> (8,  51011, 5000.00, "Precise"),
    -> (9,  51009, 1800.00, "Smooth Transition");
Query OK, 3 rows affected (0.002 sec)
Records: 3  Duplicates: 0  Warnings: 0

MariaDB [ItsukiGDC]> INSERT INTO orders(clientID, designerID, price) VALUES
    -> (11, 51001, 3500.00);
Query OK, 1 row affected (0.002 sec)

MariaDB [ItsukiGDC]> INSERT INTO orders(clientID, designerID, price,design) VALUES
    -> (7,  51011, 1950.00, "Tragic"),
    -> (15, 51005, 4000.00, "Dramatic"),
    -> (5,  51012, 1000.00, "Pastel Aesthetic");
Query OK, 3 rows affected (0.002 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

Figure 16: Insert Into Orders Values.

SELECT * FROM orders;

```
MariaDB [ItsukiGDC]> SELECT * FROM orders;
+---------+----------+------------+---------+----------------------+
| orderID | clientID | designerID | price   | design               |
+---------+----------+------------+---------+----------------------+
|       1 |        6 |      51012 | 2500.00 | Vibrant              |
|       2 |       12 |      51013 |  800.00 | Simple, To the Point |
|       3 |        3 |      51010 | 1500.00 | Black and White      |
|       4 |        8 |      51011 | 5000.00 | Precise              |
|       5 |        9 |      51009 | 1800.00 | Smooth Transition    |
|       6 |       11 |      51001 | 3500.00 | Simple, To the Point |
|       7 |        7 |      51011 | 1950.00 | Tragic               |
|       8 |       15 |      51005 | 4000.00 | Dramatic             |
|       9 |        5 |      51012 | 1000.00 | Pastel Aesthetic     |
|      10 |        9 |      51003 | 1500.00 | Simple, To the Point |
+---------+----------+------------+---------+----------------------+
10 rows in set (0.001 sec)
```

*Figure 17: Select * From Orders.*

3.Data Dictionary:

A collection of names, attributes and meanings about data elements which are being used or enclosed in a database, information system is called data dictionary. It explains the definitions and objective of data elements within the database. Metadata regarding the data elements are provided in the data dictionary. (Derda, 2020)

Data Dictionary of Itsuki Graphic Designing Company:

- **DEPARTMENT:**

Entity Name	Column Name	Data Type	Length	Primary Key	Foreign key	Nullable	Unique	Notes
Department	Department ID	**INT**		True	False	False	True	
	Department Name	**VARCHAR**	255	False	False	False	False	NOT NULL
	HOD	**VARCHAR**	255	False	False	True	False	

Table 1: Data Dictionary Department.

Department Entity Description: The company is divided into many sections which deals with different things. For instance, animation department is assigned to deal with orders related to animation while the video editing, film making department has deal with video editing and film making orders. Each department consists of one HOD and a group of graphic designers. The HOD assigns a graphic designer to the client after seeing the requirements.

Column Description:

Department ID: There are many subdivisions in a company. Departments can be differentiated with the help of department IDs specified to them which is stored as INTERGER data type. It

makes it easier for the company to evaluate which department is doing the best and the one that has more requirements.

Department Name: Department name is given to the department on the basis of their work field and specialization. It makes a clear distinction between the departments. It is stored as VARCHAR data type.

Head of Department: Each department has a head who manages the employees and acts as an interface between the employees and the company. The data is stored as VARCHAR. The HOD is considered to have the highest authority in the department which gives them a lot of responsibility. Thus, an HOD is a person with most experience in the field, has high leadership skills and an efficient work record.

- **CLIENT:**

Entity Name	Column Name	Data Type	Length	Primary Key	Foreign key	Nullable	Unique	Notes
Client	ClientID	**INT**		True	False	False	True	Auto Increment
	Name	**VARCHAR**	255	False	False	True	False	
	Email	**VARCHAR**	255	False	False	False	False	NOT NULL
	Contact No.	**VARCHAR**	10	False	False	False	False	NOT NULL

Table 2: Data Dictionary Client.

Client Entity Description: Client refers to a person or organization who uses the facilities provided by the graphic designing company. The client has to be specific about the kind of designing he/she wants. Once the department is chosen, the client has to formally discuss the

project with the Head of Department and the graphic designer who will be assigned to them once the prices, designs, etc. are discussed. The allocated graphic designer and the client will go over the designs and details once again and they may remain in contact until the project is over. In case there's a breach in the contract then the party who has violated has to compensate accordingly.

Column Description:

Client ID: Client ID is an identity given to the clients which consists of unique numbers generated by the company. It is stored as INTEGER data type which can be used to identify the client. Client ID helps maintain order, search data easily, reduces redundancy and confusion.

Name: Name is a set of words by which the organization can address the client. The persons or the organization name is also recorded in the database. Searching for data using name can be a hassle as two or more person can share the same name. Thus, ClientID is considered more prominent. It is stored as VARCHAR data type.

Email: Email is one of the required information that the client has to provide in order to maintain contact with them through electronic means. It is formally used to watch over the progress of the client's design and to share ideas. It is stored as VARCHAR data type.

Contact No.: Like email, contact number is another way to communicate with the client. It is stored as VARCHAR data type; clients phone number is shared with the organization for clearing the queries in case of an emergency. Clients may give their personal number or their work-related number.

- **EMPLOYEES:**

Entity Name	Column Name	Data Type	Length	Primary Key	Foreign key	Nullable	Unique	Notes
Employees	Employee ID	**INT**		True	False	False	True	

	Department ID	**INT**		False	True	False	False	NOT NULL/ Reference to Department ID column of Department table
	Name	**VARCHAR**	255	False	False	True	False	
	Contact No.	**VARCHAR**	10	False	False	False	False	NOT NULL

Table 3: Data Dictionary Employees.

Employees Entity Description: Employees works include helping, clearing the doubts if any, sorting out department files and assigning time to the client in accordance to the HOD's schedule in the first stage of the workflow. They are not specialists but are regular trained employees who provide guidance to the clients.

Column Description:

Employee ID: An employee ID verifies whether a person works in the company under any department or not. It can be used to search personal data of the employees and is stored as INTEGER data type.

Department ID: It is an identification given to the employees by the company to specify their departments. If the employee of a certain department is to be called, the department ID is to be used. It is stored as INTEGER data type.

Name: In this attribute the name of the employee is stored in VARCHAR data type. Name refers to how the person is to be addressed according to the legal documents. Here, the company stores data according to the citizenship the employee holds.

Contact No.: This consists of the phone number of the employees which can be helpful in case of emergencies or to notify the employees. It is stored as VARCHAR data type.

- **GRAPHIC DESIGNER:**

Entity Name	Column Name	Data Type	Length	Primary Key	Foreign key	Nullable	Unique	Notes
Graphic Designer	Designer ID	**INT**		True	False	False	True	
	Department ID	**INT**		False	True	False	False	NOT NULL/ Reference to Department ID column of Department table
	Name	**VARCHAR**	255	False	False	True	False	
	Email	**VARCHAR**	255	False	False	True	True	UNIQUE

Table 4: Data Dictionary Graphic Designer.

Graphic Designer Entity Description: A graphic designer creates visual content to communicate messages. They create visual concepts for the client and their work includes providing the required end product. The designer must be very sensitive to what the client desires and must not promise things they cannot fulfill.

Column Description:

Designer ID: Departments have many graphic designers. Designer ID makes it easier for the HOD to track down the graphic designers and their body of work. The HOD can also promote or increase the designer's payment with the help of this data. This data is stored as INTEGER.

Department ID: Each department has a number of graphic designers. The department ID stored as INTEGER data type makes it easier for the graphic designers to be differentiated on the basis of their departments.

Name: Name is the attribute stored by the company which is used as an identification of the graphic designer when a contract is made and is stored as VARCHAR data type.

Email: It is an essential information which is stored as VARCHAR data type, that a graphic designer must share with the company to stay in touch. The email is given to the graphic designer by the company. Most of the information and notices are sent through email which makes it a prominent platform for communication.

- **ORDERS:**

Entity Name	Column Name	Data Type	Length	Primary Key	Foreign key	Nullable	Unique	Notes
Orders	Order ID	**INT**		True	False	False	True	Auto Increment
	Client ID	**INT**		False	True	False	False	NOT NULL/ Reference to Client ID column of Client table
	Designer ID	**INT**		False	True	False	False	NOT NULL/ Reference to Designer ID column of Designer table
	Price	**FLOAT**	10,2	False	False	True	False	

	Design	**VARCHAR**	255	False	False	True	False	DEFAULT= simple, to the point

Table 5: Data Dictionary Orders.

Orders Entity Description: Orders are a set of instructions given by the client, according to the needs and concepts that they want in the project. This stage requires a proper understanding between the client and the designer. The designer must understand the client's end objective and should have a clear idea about the end product that could fulfill the client's overall goals.

Column Description:

Order ID: Order ID is an identification to the orders made by the clients to the company. This gives a confirmation that the order has been placed which can be systematically reviewed by the graphic designer and is stored as INTEGER data type.

Client ID: The client may have multiple orders which can be traced with the help of client ID. It can make the order clear and persuasive for the designer. It is stored as INTEGER data type.

Designer ID: It gives an identification to the graphic designer who has been assigned to the project by the department. With the help of designer ID, the client can update himself about the credential of the designer. It is stored as INTEGER data type.

Price: It is the total sum of money that the client has to pay for using the services. The amount is fixed and can be deposited in two installments, it is stored as FLOAT data type.

Design: Design is a raw description of the client's order. It highlights the important points so that the graphic designer can evaluate his idea and conclude accordingly. It is stored as VARCHAR data type.

4.Queries.

Query No.	Query 1
Query	SELECT department_name,hod FROM department WHERE department_name LIKE "A%";
Keyword Used	SELECT, WHERE, LIKE.

Table 6: Query 1.

```
MariaDB [ItsukiGDC]> SELECT department_name,hod FROM department WHERE department_name LIKE "A%";
+---------------------------+-----------------+
| department_name           | hod             |
+---------------------------+-----------------+
| Animation                 | Mira Shrestha   |
| Advertising Graphic Design | Bishesh Acharya |
| Art and Illustration      | Iris Shakya     |
+---------------------------+-----------------+
3 rows in set (0.000 sec)
```

Figure 18: Query 1.

Query No.	Query 2
Query	SELECT clientID, designerID FROM orders ORDER BY price DESC LIMIT 3;
Keyword Used	SELECT, ORDER BY, DESC, LIMIT.

Table 7: Query 2.

```
MariaDB [ItsukiGDC]> SELECT clientID,designerID FROM orders ORDER BY price DESC LIMIT 3;
+----------+------------+
| clientID | designerID |
+----------+------------+
|        8 |      51011 |
|       15 |      51005 |
|       11 |      51001 |
+----------+------------+
3 rows in set (0.041 sec)
```

Figure 19: Query 2.

Query No.	Query 3
Query	SELECT clientID, email FROM client WHERE clientID IN (9,11,12,15);
Keyword Used	SELECT, WHERE, IN.

Table 8: Query 3.

```
MariaDB [ItsukiGDC]> SELECT clientID,email FROM client WHERE clientID IN (9,11,12,15);
+----------+----------------------+
| clientID | email                |
+----------+----------------------+
|        9 | joshiro@yahoo.com    |
|       11 | mskkk@gmail.com      |
|       12 | haikyuu0_0@gmail.com |
|       15 | yuriiiiisth@gmail.com |
+----------+----------------------+
4 rows in set (0.043 sec)
```

Figure 20: Query 3.

Query No.	Query 4
Query	SELECT DISTINCT (designerID) FROM orders;
Keyword Used	SELECT, DISTINCT.

Table 9: Query 4.

```
MariaDB [ItsukiGDC]> SELECT DISTINCT(designerID) FROM orders;
+------------+
| designerID |
+------------+
|      51001 |
|      51003 |
|      51005 |
|      51009 |
|      51010 |
|      51011 |
|      51012 |
|      51013 |
+------------+
8 rows in set (0.038 sec)
```

Figure 21: Query 4.

Query No.	Query 5
Query	SELECT departmentID, COUNT (*) AS total_employees FROM employees GROUP BY departmentID;
Keyword Used	SELECT, COUNT, GROUP BY.

Table 10: Query 5.

```
MariaDB [ItsukiGDC]> SELECT departmentID, COUNT(*) AS total_employees FROM employees GROUP BY
departmentID;
+--------------+-----------------+
| departmentID | total_employees |
+--------------+-----------------+
|        10001 |               2 |
|        10002 |               2 |
|        10003 |               2 |
|        10004 |               2 |
|        10005 |               2 |
|        10006 |               2 |
|        10007 |               2 |
|        10008 |               2 |
|        10009 |               2 |
|        10010 |               2 |
+--------------+-----------------+
10 rows in set (0.041 sec)
```

Figure 22: Query 5.

Query No.	Query 6
Query	SELECT * FROM orders WHERE price <=2500;
Keyword Used	SELECT, WHERE.

Table 11: Query 6.

```
MariaDB [ItsukiGDC]> SELECT * FROM orders WHERE price <=2500;
+---------+----------+------------+---------+----------------------+
| orderID | clientID | designerID | price   | design               |
+---------+----------+------------+---------+----------------------+
|       1 |        6 |      51012 | 2500.00 | Vibrant              |
|       2 |       12 |      51013 |  800.00 | Simple, To the Point |
|       3 |        3 |      51010 | 1500.00 | Black and White      |
|       5 |        9 |      51009 | 1800.00 | Smooth Transition    |
|       7 |        7 |      51011 | 1950.00 | Tragic               |
|       9 |        5 |      51012 | 1000.00 | Pastel Aesthetic     |
|      10 |        9 |      51003 | 1500.00 | Simple, To the Point |
+---------+----------+------------+---------+----------------------+
7 rows in set (0.039 sec)
```

Figure 23: Query 6.

Query No.	Query 7
Query	SELECT * FROM graphic_designer WHERE name BETWEEN "Gaurav" and "Manik" ORDER BY name;
Keyword Used	SELECT, WHERE, BETWEEN, ORDER BY.

Table 12: Query 7.

```
MariaDB [ItsukiGDC]> SELECT * FROM graphic_designer WHERE name BETWEEN "Gaurav" and "Manik"
ORDER BY name;
+------------+--------------+-----------------+---------------------------------+
| designerID | departmentID | name            | email                           |
+------------+--------------+-----------------+---------------------------------+
|      51005 |        10005 | Gaurav Magar    | gauravmagar.itsuki@gmail.com    |
|      51004 |        10004 | Ishika Thakur   | ishikathakur.itsuki@gmail.com   |
|      51012 |        10010 | Kirti Dongol    | kirtidongol.itsuki@gmail.com    |
|      51015 |        10008 | Lumanti Maharjan | lumantimaharjan.itsuki@gmail.com |
+------------+--------------+-----------------+---------------------------------+
4 rows in set (0.023 sec)
```

Figure 24: Query 7.

Query No.	Query 8
Query	SELECT designerID, COUNT (*) AS no_of_order FROM orders GROUP BY designerID HAVING designerID=51011;
Keyword Used	SELECT, COUNT, AS, GROUP BY, HAVING.

Table 13: Query 8.

```
MariaDB [ItsukiGDC]> SELECT designerID, COUNT(*) AS no_of_order FROM orders GROUP BY
designerID HAVING designerID=51011;
+------------+-------------+
| designerID | no_of_order |
+------------+-------------+
|      51011 |           2 |
+------------+-------------+
1 row in set (0.039 sec)
```

Figure 25: Query 8.

Query No.	Query 9
Query	SELECT employeeID, name, department_name FROM department JOIN employees ON department.departmentID = employees.departmentID;
Keyword Used	SELECT, JOIN, ON.

Table 14: Query 9.

```
MariaDB [ItsukiGDC]> SELECT employeeID, name, department_name FROM department JOIN
 employees ON department.departmentID = employees.departmentID;
+------------+----------------------+------------------------------+
| employeeID | name                 | department_name              |
+------------+----------------------+------------------------------+
|        701 | Aastha Sthapit       | Corporate Design             |
|        711 | Yukta Timila         | Corporate Design             |
|        702 | Fatima Ahmed         | Publication Graphic Design   |
|        712 | Manav Bhatta         | Publication Graphic Design   |
|        703 | Malika Khetan        | Animation                    |
|        713 | Sona Rai             | Animation                    |
|        704 | Siddhartha Thapa     | Website Graphic Design       |
|        714 | Cristino Pradhan     | Website Graphic Design       |
|        705 | Ayushma Kansakar     | Advertising Graphic Design   |
|        715 | Pranaya Nepal        | Advertising Graphic Design   |
|        706 | Merina Shrestha      | User Interface Graphic Design |
|        716 | Anastasia Fitzpatrick | User Interface Graphic Design |
|        707 | Karen Magar          | Photo Editing                |
|        717 | Trilok Bista         | Photo Editing                |
|        708 | Silve Rai            | Packaging Graphic Design     |
|        718 | Garima Shrestha      | Packaging Graphic Design     |
|        709 | Prashant Thakur      | Video and Film Editing       |
|        719 | Aakriti Maharjan     | Video and Film Editing       |
|        710 | Saisha Tamang        | Art and Illustration         |
|        720 | Trishika Agrawal     | Art and Illustration         |
+------------+----------------------+------------------------------+
20 rows in set (0.038 sec)
```

Figure 26: Query 9.

Query No.	Query 10
Query	SELECT orders. designerID, departmentID, name, email, clientID, orderID, price, design FROM graphic_designer RIGHT JOIN orders ON graphic_designer.designerID = orders.designerID;
Keyword Used	SELECT, RIGHT JOIN, ON.

Table 15: Query 10.

```
MariaDB [ItsukiGDC]> SELECT orders.designerID, departmentID, name, email,clientID, orderID, price, design FROM graphic_designer RIGHT JOIN
orders ON graphic_designer.designerID = orders.designerID;
+------------+--------------+-----------------+---------------------------------+----------+---------+---------+----------------------+
| designerID | departmentID | name            | email                           | clientID | orderID | price   | design               |
+------------+--------------+-----------------+---------------------------------+----------+---------+---------+----------------------+
|      51012 |        10010 | Kirti Dongol    | kirtidongol.itsuki@gmail.com    |        6 |       1 | 2500.00 | Vibrant              |
|      51013 |        10007 | Sagun Timilsina | saguntimilsina.itsuki@gmail.com |       12 |       2 |  800.00 | Simple, To the Point |
|      51010 |        10010 | Rahul Munshi    | rahulmunshi.itsuki@gmail.com    |        3 |       3 | 1500.00 | Black and White      |
|      51011 |        10003 | Mihir Shrestha  | mihirshrestha.itsuki@gmail.com  |        8 |       4 | 5000.00 | Precise              |
|      51009 |        10009 | Manik Qazi      | manikqazi.itsuki@gmail.com      |        9 |       5 | 1800.00 | Smooth Transition    |
|      51001 |        10001 | Pradipti Pradhan| pradiptipradhan.itsuki@gmail.com|       11 |       6 | 3500.00 | Simple, To the Point |
|      51011 |        10003 | Mihir Shrestha  | mihirshrestha.itsuki@gmail.com  |        7 |       7 | 1950.00 | Tragic               |
|      51005 |        10005 | Gaurav Magar    | gauravmagar.itsuki@gmail.com    |       15 |       8 | 4000.00 | Dramatic             |
|      51012 |        10010 | Kirti Dongol    | kirtidongol.itsuki@gmail.com    |        5 |       9 | 1000.00 | Pastel Aesthetic     |
|      51003 |        10003 | Rubina Shrestha | rubinashrestha.itsuki@gmail.com |        9 |      10 | 1500.00 | Simple, To the Point |
+------------+--------------+-----------------+---------------------------------+----------+---------+---------+----------------------+
10 rows in set (0.000 sec)
```

Figure 27: Query 10.

Query No.	Query 11
Query	SELECT orderID, client.clientID, designerID, price, design, name, email, contact_no FROM orders LEFT JOIN client ON orders.clientID = client.clientID;
Keyword Used	SELECT, LEFT JOIN, ON.

Table 16: Query 11.

```
MariaDB [ItsukiGDC]> SELECT orderID, client.clientID, designerID, price,design, name, email, contact_no FROM orders LEFT JOIN client
ON orders.clientID = client.clientID;
+---------+----------+------------+---------+----------------------+-----------------+---------------------------+------------+
| orderID | clientID | designerID | price   | design               | name            | email                     | contact_no |
+---------+----------+------------+---------+----------------------+-----------------+---------------------------+------------+
|       1 |        6 |      51012 | 2500.00 | Vibrant              | Bihani Shakya   | bihanii.shakyaa@gmail.com | 9851400006 |
|       2 |       12 |      51013 |  800.00 | Simple, To the Point | Haikyuu         | haikyuu0_0@gmail.com      | 015500012  |
|       3 |        3 |      51010 | 1500.00 | Black and White      | Miran Rai       | miranrai23@yahoo.com      | 9851100003 |
|       4 |        8 |      51011 | 5000.00 | Precise              | Akatsuki        | akatsukicompany@gmail.com | 015500008  |
|       5 |        9 |      51009 | 1800.00 | Smooth Transition    | Rohit Joshi     | joshiro@yahoo.com         | 9851600009 |
|       6 |       11 |      51001 | 3500.00 | Simple, To the Point | Muskan KC       | mskkk@gmail.com           | 9851800011 |
|       7 |        7 |      51011 | 1950.00 | Tragic               | Lisa Basnet     | lizabasnet45@gmail.com    | 9851500007 |
|       8 |       15 |      51005 | 4000.00 | Dramatic             | Yuri Shrestha   | yuriiiiisth@gmail.com     | 9852100015 |
|       9 |        5 |      51012 | 1000.00 | Pastel Aesthetic     | Samyek Bhattarai| bhattaraisyk@yahoo.com    | 9851300005 |
|      10 |        9 |      51003 | 1500.00 | Simple, To the Point | Rohit Joshi     | joshiro@yahoo.com         | 9851600009 |
+---------+----------+------------+---------+----------------------+-----------------+---------------------------+------------+
10 rows in set (0.000 sec)
```

Figure 28: Query 11.

4.Conclusion

MySQL provides a vast number of keywords which makes it easier for the end user to use DBMS. Using keywords like primary key and unique key ensure the company that no data has been repeated twice, if in any case someone tries to do so, MySQL shows an error. Implementing auto increment and default saves time as auto increment generates unique number automatically when a new record is stored and, in a column where the default value is given while making the table if no other value is specified, the default value is automatically set in the database. It is easier for the company to find the data they need as MySQL provides different keywords for the search feature. To guarantee that no mandatory data is left out, not null keyword is used. DBMS offers both physical and logical data liberty to the end user. Database has the capability to help run a company and with the help of this project, we figured out how it can do so.

Bibliography

Berrington, J., 2017. *sciencedirect.* [Online]
Available at: https://www.sciencedirect.com/science/article/abs/pii/S1472029916302181
[Accessed 2 April 2021].

Derda, M., 2020. *Trifacta.* [Online]
Available at: https://www.trifacta.com/blog/data-dictionary/#:~:text=A%20data%20dictionary%20is%20a,research%20project%2C%20or%20information%20system.
[Accessed 26 April 2021].

Driedger, D., 2019. *cowlickstudios.* [Online]
Available at: https://cowlickstudios.com/who-needs-a-graphic-designer/
[Accessed 26 April 2021].

Velocity Consultancy, 2020. *Velocity Consultancy.* [Online]
Available at: https://www.velocityconsultancy.com/benefit-of-graphic-design-for-business/
[Accessed 26 April 2021].