



Blood Bank Management System

Group: G-42

Students:

- **Srajit Jain** **19UCS069**
- **Vaibhav Singhal** **19UCS018**
- **Daksh Sharma** **19UCS065**
- **Pearl Kothari** **19UCS071**

Tables:

- **user**
- **donor**
- **bloodbank**
- **receiver**
- **staff_transaction**

user(**UserID**,username,emailID,Address,phonenumber,password,post,Date);

donor(**UserID**,BloodGrp,AnyDisease,Quantity,Disease,Date,phonenumber);

- FK_1: **UserID** references user(**UserID**);

bloodbank(BloodGrp,Quantity);

receiver(PatientID,PateintName,PateintAge,StaffID,BloodGrp,volume,contact Number,Date);

staff_transaction(StaffID,Date,status);

- FK_1: StaffID references receiver(StaffID);

- **Tables:**

```
c:\wamp64\bin\mysql\mysql5.7.20\bin\mysql.exe
mysql> show tables;
+-----+
| Tables_in_project |
+-----+
| bloodbank          |
| donor              |
| receiver            |
| staff_transaction  |
| user                |
+-----+
5 rows in set (0.00 sec)

mysql>
```

- **All Tables Description:**

- ***user***

```
c:\wamp64\bin\mysql\mysql5.7.20\bin\mysql.exe
mysql> Describe user;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| userID | int(11) | NO | PRI | NULL | auto_increment |
| username | varchar(20) | YES | | NULL | |
| emailID | varchar(30) | YES | | NULL | |
| Address | varchar(100) | YES | | NULL | |
| phonenumber | varchar(10) | YES | | NULL | |
| password | varchar(6) | YES | | NULL | |
| post | varchar(20) | YES | | NULL | |
| date | date | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

mysql>
```

○ *donor*

```
c:\xampp\htdocs\mysql>mysql5.7.26\bin\mysql.exe
mysql> Describe donor;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| UserID | int(11) | YES | MUL | NULL | |
| bloodgrp | varchar(5) | YES | | NULL | |
| AnyDisease | varchar(5) | YES | | NULL | |
| Quantity | varchar(5) | YES | | NULL | |
| Disease | varchar(30) | YES | | NULL | |
| Date | date | YES | | NULL | |
| phonenumber | varchar(10) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql>
```

○ *bloodbank*

```
c:\xampp\htdocs\mysql>mysql5.7.26\bin\mysql.exe
mysql> Describe bloodbank;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| bloodgrp | varchar(5) | YES | | NULL | |
| Quantity | int(11) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

○ receiver

```
c:\wamp64\bin\mysql\mysql5.7.20\bin\mysql.exe
mysql> Describe receiver;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| PatientName | varchar(30) | YES | | NULL | |
| PatientAge | varchar(3) | YES | | NULL | |
| StaffID | varchar(6) | YES | | NULL | |
| bloodgrp | varchar(4) | YES | | NULL | |
| volume | varchar(5) | YES | | NULL | |
| contactNumber | varchar(10) | YES | | NULL | |
| PatientID | int(11) | NO | PRI | 1 | |
| Date | date | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

mysql>
```

○ staff_transaction

```
c:\wamp64\bin\mysql\mysql5.7.20\bin\mysql.exe
mysql> describe staff_transaction;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Date | date | YES | | NULL | |
| status | varchar(5) | YES | | NULL | |
| StaffID | int(11) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```

- **Adding 4 donor and 1 staff in user table:**

```
insert into user (username,emailID,Address,phonenumber,password,post) VALUES
('pearlkothari','pearlkothari2@gmail.com','anand mohalla oldcity kishangarh','9521074578','1234','Donor'),
('DakshSharma','dakshsharma@gmail.com','332,comet society new delhi','9192192199','123','Donor'),
('vaibhavsinghal','iamvs@gmail.com','apex apartment mumbai','9000000000','090909','Donor'),
('srajit jain','hello@gmail.com','govindam apartment mumbai','6521078990','090909','Donor'),
('lexi','lexi@gmail.com','lightyear apartment mumbai','9090909110','090909','Staff');
```

```
c:\wamp64\bin\mysql\mysql5.7.26\bin\mysql.exe
mysql>
mysql> insert into user (username,emailID,Address,phonenumber,password,post) VALUES
-> ('pearlkothari','pearlkothari2@gmail.com','anand mohalla oldcity kishangarh','9521074578','1234','Donor'),
-> ('DakshSharma','dakshsharma@gmail.com','Flat 332, comet apartment new delhi','9192192199','123','Donor'),
-> ('vaibhavsinghal','iamvs@gmail.com','apex apartment mumbai','9000000000','090909','Donor'),
-> ('srajit jain','hello@gmail.com','govindam apartment mumbai','6521078990','090909','Donor'),
-> ('lexi','lexi@gmail.com','lightyear apartment mumbai','9090909110','090909','Staff');
Query OK, 5 rows affected (0.00 sec)
Records: 5 Duplicates: 0 Warnings: 0

mysql> select*from user;
+-----+-----+-----+-----+-----+-----+-----+
| UserID | username | emailID | Address | phonenumber | password | post | Date |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | pearlkothari | pearlkothari2@gmail.com | anand mohalla oldcity kishangarh | 9521074578 | 1234 | Donor | NULL |
| 2 | DakshSharma | dakshsharma@gmail.com | Flat 332, comet apartment new delhi | 9192192199 | 123 | Donor | NULL |
| 3 | vaibhavsinghal | iamvs@gmail.com | apex apartment mumbai | 9000000000 | 090909 | Donor | NULL |
| 4 | srajit jain | hello@gmail.com | govindam apartment mumbai | 6521078990 | 090909 | Donor | NULL |
| 5 | lexi | lexi@gmail.com | lightyear apartment mumbai | 9090909110 | 090909 | Staff | NULL |
+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> describe user;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| UserID | int(11) | NO | PRI | NULL | auto_increment |
| username | varchar(20) | YES | | NULL | |
| emailID | varchar(30) | YES | | NULL | |
| Address | varchar(100) | YES | | NULL | |
| phonenumber | varchar(10) | YES | | NULL | |
| password | varchar(6) | YES | | NULL | |
| post | varchar(20) | YES | | NULL | |
| Date | date | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.01 sec)

mysql>
```

- **Inserting all blood group in bloodbank with initial quantity = 0:**

insert into bloodbank (BloodGrp,Quantity) Values

('A+',0),('B+',0),('O+',0),('AB+',0),('AB-',0),('O-',0),('B-',0),('A-',0);

```
mysql> insert into bloodbank (BloodGrp,Quantity) Values ('A+',0),('B+',0),('O+',0),('AB+',0),('AB-',0),('O-',0),('B-',0),('A-',0);
Query OK, 8 rows affected (0.00 sec)
Records: 8 Duplicates: 0 Warnings: 0

mysql> select*from bloodbank;
+-----+
| BloodGrp | Quantity |
+-----+
| A+       | 0        |
| B+       | 0        |
| O+       | 0        |
| AB+      | 0        |
| AB-      | 0        |
| O-       | 0        |
| B-       | 0        |
| A-       | 0        |
+-----+
8 rows in set (0.00 sec)

mysql>
```

- **Get user with phonenumber = XXXXXXXXXX**

select*from user where phonenumber=XXXXXXXXXX;

For Example : Search user where phone number=9521074578;

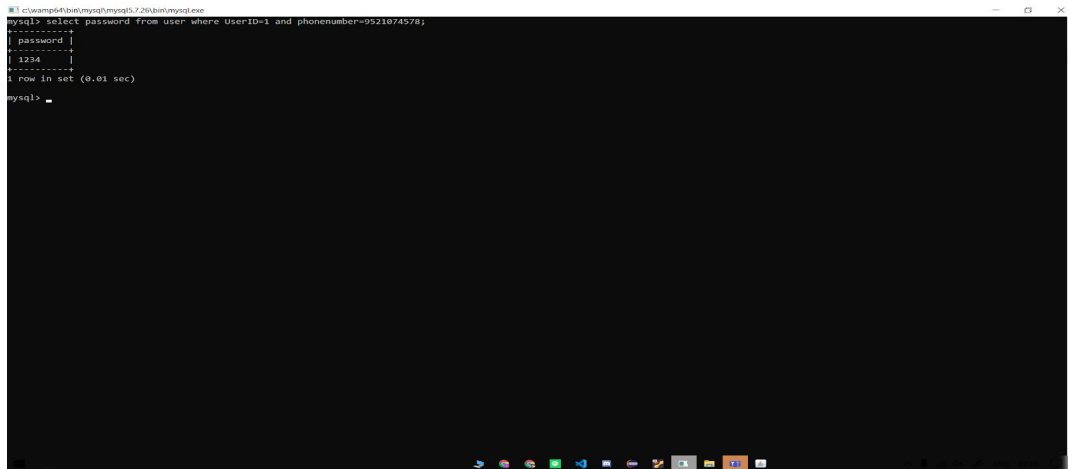
```
mysql> select*from user where phonenumber=9521074578;
+-----+
| UserID | username | emailID | Address | phonenumber | password | post | Date |
+-----+
| 1      | pearlkothari | pearlkothari2@gmail.com | anand mohalla oldcity kishangarh | 9521074578 | 1234 | Donor | NULL |
+-----+
1 row in set (0.00 sec)

mysql>
```

- **Forgot Password in login page:**

Finding the user password where userID=XXXXXX and phonenumber=XXXXXXX:

For Example: Search User Password where phone number=9521074578 and UserID=1;

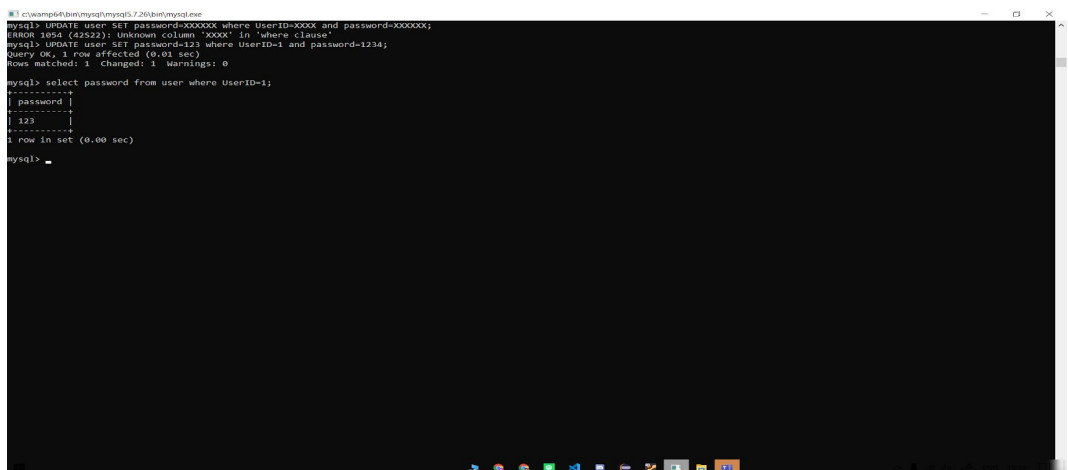


```
c:\xampp\bin\mysql>mysql -u root -p
mysql> select password from user where UserID=1 and phonenumber=9521074578;
+-----+
| password |
+-----+
| 1234     |
+-----+
1 row in set (0.01 sec)

mysql>
```

- **Reset Password of Donor:**

UPDATE user SET password=XXXXXX where UserID=XXXX and password=XXXXXX;



```
c:\xampp\bin\mysql>mysql -u root -p
mysql> UPDATE user SET password=XXXXXX where UserID=XXXX and password=XXXXXX;
ERROR 1054 (42S22): Unknown column 'XXXX' in 'where clause'
mysql> UPDATE user SET password=123 where UserID=1 and password=1234;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

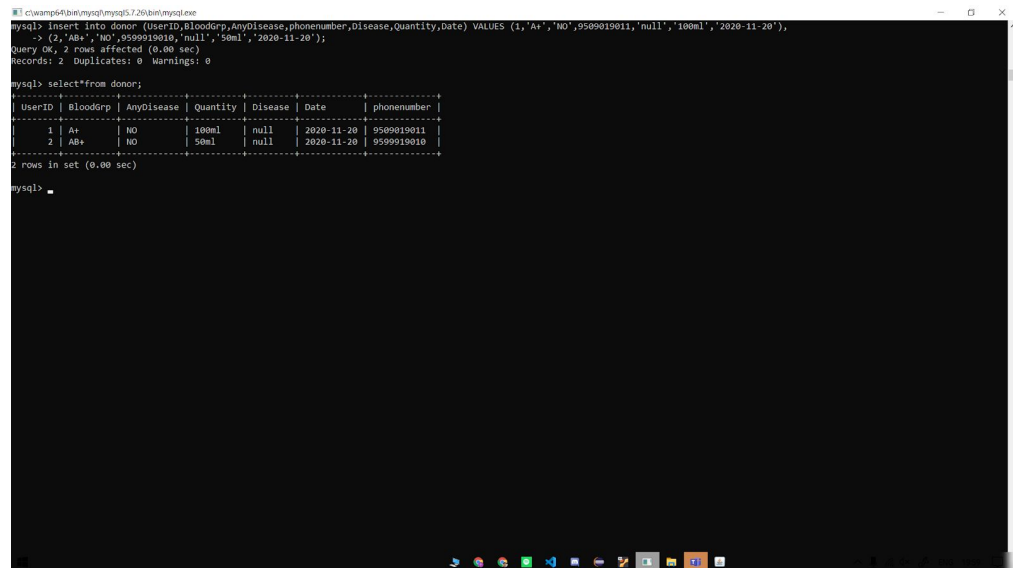
mysql> select password from user where UserID=1;
+-----+
| password |
+-----+
| 123      |
+-----+
1 row in set (0.00 sec)

mysql>
```


- **ADD donor in donor table:**

insert into donor

(UserID,BloodGrp,AnyDisease,phonenumber,Disease,Quantity,Date) VALUES (1,'A+','NO',9509019011,'null','100ml','2020-11-20'),
(2,'AB+','NO',9599919010,'null','50ml','2020-11-20');



```

mysql> insert into donor (UserID,BloodGrp,AnyDisease,phonenumber,Disease,Quantity,Date) VALUES (1,'A+','NO',9509019011,'null','100ml','2020-11-20'),
-> (2,'AB+','NO',9599919010,'null','50ml','2020-11-20');
Query OK, 2 rows affected (0.00 sec)
Records: 2 Duplicates: 0 Warnings: 0

mysql> select*from donor;
+----+-----+-----+-----+-----+-----+-----+
| UserID | BloodGrp | AnyDisease | Quantity | Disease | Date       | phonenumber |
+----+-----+-----+-----+-----+-----+-----+
| 1      | A+       | NO         | 100ml    | null    | 2020-11-20 | 9509019011  |
| 2      | AB+      | NO         | 50ml     | null    | 2020-11-20 | 9599919010  |
+----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>

```

- **Updating Blood Bank Quantity Of BloodGroup:**

For Example: Add 100ml blood in BloodGroup A+

UPDATE bloodbank SET Quantity= NEW_QNT
where BloodGrp=XX;

/*

NEW_QNT = PREV_QNT + SELECTED_QUNT

PREV_QNT is the quantity of blood in the blood bank at the moment before donating/receiving any blood.

SELECTED_QUNT is the quantity of blood donated/received by the user.

*/

For Example:
ADD 100ML “ AB+” Blood

```
c:\wamp64\bin\mysql\mysql5.7.26\bin\mysql.exe
mysql> select quantity from bloodbank where BloodGrp='AB+';
+-----+
| quantity |
+-----+
| 0 |
+-----+
1 row in set (0.00 sec)

mysql> UPDATE bloodbank SET QUANTITY=0+100 where BloodGrp='AB+';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select quantity from bloodbank where BloodGrp='AB+';
+-----+
| quantity |
+-----+
| 100 |
+-----+
1 row in set (0.00 sec)

mysql>
```

- **Insert into receiver:**

```
c:\wamp64\bin\mysql\mysql5.7.26\bin\mysql.exe
mysql> insert into receiver (PatientID,PatientName,PatientAge,StaffID,BloodGrp,volume,contactNumber,Date) VALUES (2,'Ankit Sethi',19,5,'AB+',50,9887654543,'2020-11-20');UPDATE bloodbank SET
Quantity=50 where BloodGrp='AB+';
Query OK, 1 row affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)
Rows matched: 1 Changed: 0 Warnings: 0

mysql> select*from receiver;
+-----+-----+-----+-----+-----+-----+-----+
| PatientName | PatientAge | StaffID | BloodGrp | volume | contactNumber | PatientID | Date |
+-----+-----+-----+-----+-----+-----+-----+
| Ayush       | 19         | 5       | A+       | 50     | 9010101011    | 1         | 2020-11-20 |
| Ankit Sethi | 19         | 5       | AB+      | 50     | 9887654543    | 2         | 2020-11-20 |
+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

- **Staff_Activity:**

Insert into staff_transaction (Date,StaffID,status) VALUES
(‘2020-11-20’,5,’true’),(‘2020-11-20’,5,’true’);

```
c:\wamp64\bin\mysql\mysql5.7.26\bin\mysql.exe
mysql> insert into staff_transaction (Date,StaffID,status) VALUES ('2020-11-20',5,'true');
Query OK, 1 row affected (0.00 sec)

mysql> insert into staff_transaction (Date,StaffID,status) VALUES ('2020-11-20',5,'true');
Query OK, 1 row affected (0.00 sec)

mysql> select*from staff_transaction;
+-----+-----+-----+
| Date       | status | StaffID |
+-----+-----+-----+
| 2020-11-20 | true   | 5       |
| 2020-11-20 | true   | 5       |
+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

- **(ADMIN) To get staff blood providing history with specific ID(BY using JOINS)**

```
c:\xampp64\bin\mysql\mysql5.7.26\bin\mysql.exe
```

```
mysql> select * from receiver;
```

PatientName	PatientAge	StaffID	BloodGrp	volume	contactNumber	PatientID	Date
Ayush	19	5	A+	50	980101011	1	2020-11-20
Ankit Sethi	19	5	AB+	50	9887654543	2	2020-11-20
Anurag Sethi	22	5	O+	50	9887094543	3	2020-10-20
nitin kumar sethi	29	5	O-	50	9887004543	4	2020-09-20
Anurag Sethi	22	5	O+	50	9887094543	3	2020-10-21

```
5 rows in set (0.00 sec)
```

```
mysql> select * from staff_transaction;
```

Date	status	StaffID
2020-11-20	true	5
2020-11-20	true	5
2020-10-20	true	5
2020-09-20	true	5
2020-10-21	true	5
2020-11-21	false	5

```
6 rows in set (0.00 sec)
```

```
mysql> select DISTINCT receiver.PatientName,receiver.PatientAge,receiver.StaffID,receiver.BloodGrp,receiver.volume,receiver.contactNumber,receiver.PatientID,receiver.Date Receiver_Date,staff_transaction.Date AS Staff_Date,staff_transaction.status from receiver LEFT JOIN staff_transaction ON receiver.StaffID=staff_transaction.StaffID AND receiver.Date=staff_transaction.Date where receiver.StaffID=5;
```

PatientName	PatientAge	StaffID	BloodGrp	volume	contactNumber	PatientID	Receiver_Date	Staff_Date	status
Ayush	19	5	A+	50	980101011	1	2020-11-20	2020-11-20	true
Ankit Sethi	19	5	AB+	50	9887654543	2	2020-11-20	2020-11-20	true
Anurag Sethi	22	5	O+	50	9887094543	3	2020-10-20	2020-10-20	true
nitin kumar sethi	29	5	O-	50	9887004543	4	2020-09-20	2020-09-20	true
Anurag Sethi	22	5	O+	50	9887094543	3	2020-10-21	2020-10-21	true

```
5 rows in set (0.00 sec)
```

```
mysql>
```

- **Delete Any User with their ID :**

```
delete from user where userID=enter_the_userID;
```

```
c:\wamp64\bin\mysql\mysql5.7.26\bin\mysql.exe
mysql> Delete from user where userID=3;
Query OK, 1 row affected (0.01 sec)

mysql> select*from user;
+----+-----+-----+-----+-----+-----+-----+
| UserID | username | emailID | Address | phonenumber | password | post | Date |
+----+-----+-----+-----+-----+-----+-----+
| 1 | pearlKothari | pearlKothari2@gmail.com | anand mohalla oldcity kishangarh | 9887731651 | 123 | Donor | NULL |
| 2 | DakshSharma | dakshsharma@gmail.com | Flat 332, comet apartment new delhi | 9192192199 | 123 | Donor | NULL |
| 4 | srjait jain | hello@gmail.com | govindam apartment mumbai | 6521078990 | 090909 | Donor | NULL |
| 5 | lexi | lexi@gmail.com | lightyear apartment mumbai | 9090909110 | 090909 | Staff | NULL |
+----+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```