

DATABASE

MANAGEMENT

SYSTEM PROJECT

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STAKEHOLDERS:

1. Customers
2. Drivers
3. Booking team
4. Customercare team

RELATIONAL SCHEMA

Booking(user_name(customer), driver_user_name, current_location, destination, price, booking_id, mode(of payment))

customer_form(user_name ,current_location, destination)

driver_form(driver_user_name, current_location, license_number, occupancy)

registered(user_name, phone, age, password)

review(booking_id, review)

Queries

Query 1:

```
#all the bookings with a price more than 200  
select * from booking  
where price>200
```

The screenshot shows the MySQL Workbench interface on a Mac OS X desktop. The main window displays a SQL editor with the following query:

```
1  #all the bookings with a price more than 200  
2  select * from booking  
3  where price>200
```

The result grid shows the following data:

user_name	driver_user_name	current_location	destination	price
Kamlesh	Samar	Janakpuri	Rihala	400
Manish	Manohar	KarolBagh	Chenakypuri	231
Nigam	Rahu_dutt	Haryana	Delhi	250
shivash	sidhu	Delhi	Rivari	372

The bottom pane shows the Action Output with two log entries:

Action	Time	Response
02 17:09:30	INSERT INTO `OLA_2`.`driver_form`(`driver_user_name`, `current_location`, `reverse_geocode`, `user_name`) VALUES ('Samar', 'Janakpuri', 'Rihala', 'Kamlesh')	1000 rows affected. 1 row(s) inserted.
02 17:09:30	INSERT INTO `OLA_2`.`booking`(`user_name`, `driver_user_name`, `current_location`, `destination`, `price`) VALUES ('Kamlesh', 'Samar', 'Janakpuri', 'Rihala', 400)	1 row(s) inserted. ID: 74742

Query 2:

#driver with the higest occupancy comes first

```
select driver_user_name,occupancy from driver_form  
order by occupancy desc
```

The screenshot shows the MySQL Workbench interface on a Mac OS X desktop. The title bar reads "MySQL Workbench" and "Sat 30 Apr 5 16:52 PM". The main window displays the query results.

Schemas: local

Tables: BOOKING, customer_form, driver_form, Registered

Object Info: Table: customer_form

Columns:

user_name	varchar(45) PK
current_location	varchar(45)
destination	varchar(45)

Result Grid:

driver_user_name	occupancy
Chirag	6
Manohar	4
Prajesh	4
Rakesh	4
Samar	4
shivam	4
sidhu	4
Rahul	2
NULL	NULL

Action Output:

Time	Action
02/05/2022 17:04:39	INSERT INTO OLA_2.driver_form (driver_user_name, current_location, destination) VALUES ('Chirag', 'Mumbai', 'Delhi')
02/05/2022 17:04:39	INSERT INTO OLA_2.driver_form (driver_user_name, current_location, destination) VALUES ('Manohar', 'Delhi', 'Mumbai')
02/05/2022 17:04:39	INSERT INTO OLA_2.driver_form (driver_user_name, current_location, destination) VALUES ('Prajesh', 'Mumbai', 'Delhi')
02/05/2022 17:04:39	INSERT INTO OLA_2.driver_form (driver_user_name, current_location, destination) VALUES ('Rakesh', 'Delhi', 'Mumbai')
02/05/2022 17:04:39	INSERT INTO OLA_2.driver_form (driver_user_name, current_location, destination) VALUES ('Samar', 'Mumbai', 'Delhi')
02/05/2022 17:04:39	INSERT INTO OLA_2.driver_form (driver_user_name, current_location, destination) VALUES ('shivam', 'Delhi', 'Mumbai')
02/05/2022 17:04:39	INSERT INTO OLA_2.driver_form (driver_user_name, current_location, destination) VALUES ('sidhu', 'Mumbai', 'Delhi')
02/05/2022 17:04:39	INSERT INTO OLA_2.driver_form (driver_user_name, current_location, destination) VALUES ('Rahul', 'Delhi', 'Mumbai')

Response: SQL script saved to '/Users/vasukhanna/Desktop/q2.sql'

Query3:

```
#current location of driver and customer same  
select *  
from driver_form d,customer_form c  
where d.current_location=c.current_location
```

The screenshot shows the MySQL Workbench interface on a Mac OS X desktop. The title bar reads "MySQL Workbench" and "Sat 30 Apr 5 20 52 PM". The main window displays the query results.

Schemas: Midsem_Exam, OLA, OLA_2

Tables: BOOKING, customer_form, driver_form, Registered

Query Editor:

```
1  #current location of driver and customer same
2  select *
3  from driver_form d,customer_form c
4  where d.current_location=c.current_location
```

Result Grid:

driver_user_name	current_locati...	license_numb...	occupancy	user_name	current_locati...	destination
sidhu	Delhi	ABCD123	4	shivash	Delhi	Rivari

Object Info: Table: customer_form

Columns:

Column Name	Type
user_name	varchar(45) PK
current_location	varchar(45)
destination	varchar(45)

Action Output:

Time	Action	Response	Duration / Fetch Time
66	17:20:11	select * from driver_form d,customer_form c where d.current_location=c.current_locatio... 1 row(s) returned	0.035 sec / 0.00039...

Query 4:

driver whose trip is about to finish at a destination which is the current location of the customer

```
select * from booking,customer_form c  
where booking.destination=c.current_location
```

The screenshot shows the MySQL Workbench interface on a Mac OS X desktop. The title bar reads "MySQL Workbench" and the status bar shows the date and time as "Sat 30 Apr 5 34 34 PM". The main window displays a query editor with the following SQL code:

```
1 # driver whose trip is about to finish at a destination which is the current location of the customer  
2 • select * from booking,customer_form c  
3 where booking.destination=c.current_location
```

Below the query editor is a "Result Grid" pane showing the output of the query. The results are as follows:

user_name	driver_user_name	current_locati...	destination	price	user_name	current_locati...	destination
Nigam	Rahu_dutt	Haryana	Delhi	250	shivash	Delhi	Rivari

The "Object Info" pane on the left shows the schema structure for the "customer_form" table, which has columns: user_name (varchar(45) PK), current_location (varchar(45)), and destination (varchar(45)). The "Session" pane shows the query was executed successfully with a duration of 0.0036 sec / 0.00002...

Query 5:

#check for the driver with ola moto(2 wheeler)

select * from driver_form

where occupancy=2

The screenshot shows the MySQL Workbench interface on a Mac OS X desktop. The title bar reads "MySQL Workbench" and the status bar shows "Sat 30 Apr 5:37:23 PM". The main window has several tabs at the top: Administration, Schemas, BOOKING, customer_form, driver_form, Registered, q1, q2, q3, q4, SQL File 34*, and Result Grid. The Schemas tab is selected, showing databases: Midsem_Exam, OLA, and OLA_2. The OLA_2 database is expanded, showing tables: BOOKING, customer_form, driver_form, and Registered. The driver_form table is currently selected. The Query tab contains the following SQL code:

```
1  #check for the driver with ola moto(2 wheeler)
2  • select * from driver_form
3  where occupancy=2
```

The Result Grid shows the output of the query:

driver_user_name	current_locati...	license_numb...	occupancy
Rahul	Rohini	UIOPN432	2

The bottom status bar indicates the query was completed at 17:37:01 with a duration of 0.0012 sec / 0.00002...

Querry 6:

#drivers with 3+ rating
select * from review
where review>=3

The screenshot shows the MySQL Workbench interface on a Mac OS X desktop. The title bar reads "MySQLWorkbench Sat 30 Apr 6 23:36 PM". The left sidebar shows the database schema with tables like BOOKING, customer_form, driver_form, and review. The central pane displays the SQL editor with the following query:

```
1 #drivers with 3+ rating
2 • select * from review
3 where review>=3
```

The Result Grid shows the output of the query:

idbooking	Review
401	5
402	3
404	3
NULL	NULL

The Action Output pane shows the history of actions taken on the table:

Time	Action	Response	Duration / Fetch Time
101 18:19:31	INSERT INTO 'OLA_2'.'review' ('idbooking') VALUES (NULL)	1048: Column 'idbooking' cannot be null	0.00005 sec / 0.000...
102 18:19:31	INSERT INTO 'OLA_2'.'review' ('idbooking') VALUES (NULL)	1048: Column 'idbooking' cannot be null	0.00005 sec / 0.000...
103 18:20:44	Apply changes to review	Error 1366: Incorrect integer value: 'good' for column...	
104 18:21:14	Apply changes to review	Error 1366: Incorrect integer value: 'nice experience' f...	
105 18:21:29	Apply changes to review	Error 1366: Incorrect integer value: 'nice experience' f...	
106 18:21:41	Apply changes to review	Error 1366: Incorrect integer value: 'nice experience' f...	
107 18:22:06	Apply changes to Review	Changes applied	
108 18:22:48	select * from review where review>3 LIMIT 0, 1000	1 row(s) returned	0.00095 sec / 0.000...
109 18:22:58	select * from review	(S) returned	0.00046 sec / 0.000...

A status bar at the bottom indicates "meet.google.com is sharing your screen." and a "Stop sharing" button.

Query 7

amount received by each mode
select mode,sum(price)
from booking
group by(mode)

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
1 # amount received by each mode
2 select mode,sum(price)
3 from booking
4 group by(mode)
```

The Result Grid displays the following data:

mode	sum(price)
UPI	400
Cash	363
Card	250
OLA money	372

The Action Output pane shows the execution log:

Action	Time	Response	Duration / Fetch Time
Apply changes to Review	107 18:22:06	Changes applied	0.00095 sec / 0.000...
select * from review where review>-3 LIMIT 0, 1000	108 18:22:48	1 row(s) returned	0.00046 sec / 0.000...
select * from review where review>-3 LIMIT 0, 1000	109 18:22:58	3 row(s) returned	0.0011 sec / 0.0001...
SELECT * FROM OLA_2.review LIMIT 0, 1000	110 18:24:57	5 row(s) returned	0.00036 sec / 0.000...
Apply changes to BOOKING	111 18:25:37	Changes applied	0.00052 sec / 0.0001...
SELECT * FROM OLA_2.BOOKING LIMIT 0, 1000	112 18:25:42	5 row(s) returned	0.00070 sec / 0.0000...
select mode,sum(price) from booking group by(mode) LIMIT 0, 1000	113 18:28:59	4 row(s) returned	0.00096 sec / 0.000...
select mode,sum(price) from booking group by(mode) LIMIT 0, 1000	114 18:29:55	4 row(s) returned	0.00096 sec / 0.000...
select mode,sum(price)	115 18:29:57	(0) returned	0.00096 sec / 0.000...

Query 8:

amount earned by driver and amount earned by ola
select idbooking,price*0.80 As driver_money, price*0.20
as ola_profit
from booking

The screenshot shows the MySQL Workbench interface on a Mac OS X desktop. The title bar indicates it's running on a local host at Sat 30 Apr 6:35:32 PM. The main window displays the following SQL query:

```
1 # amount earned by driver and amount earned by ola
2 • select idbooking,price*0.80 As driver_money, price*0.20
3 as ola_profit
4 from booking
```

The Result Grid shows the output of the query:

idbooking	driver_money	ola_profit
401	320.00	80.00
402	184.80	46.20
403	200.00	50.00
404	105.60	26.40
405	297.60	74.40

The Action Output pane shows the log of events:

Time	Action	Response	Duration / Fetch Time
109	18:22:58 select * from review where review>=3 LIMIT 0, 1000	3 row(s) returned	0.00046 sec / 0.000...
110	18:24:57 SELECT * FROM OLA_2.review LIMIT 0, 1000	5 row(s) returned	0.0011 sec / 0.00001...
111	18:25:37 Apply changes to BOOKING	Changes applied	
112	18:28:42 SELECT * FROM OLA_2.BOOKING LIMIT 0, 1000	5 row(s) returned	0.00036 sec / 0.000...
113	18:28:58 select mode,sum(price) from booking group by(mode) LIMIT 0, 1000	4 row(s) returned	0.0052 sec / 0.00001...
114	18:29:55 select mode,sum(price) from booking group by(mode) LIMIT 0, 1000	4 row(s) returned	0.00070 sec / 0.0000...
115	18:29:57 select mode,sum(price) from booking group by(mode) LIMIT 0, 1000	4 row(s) returned	0.00096 sec / 0.000...
116	18:34:24 select booking_id,price*0.80 As driver_money, price*0.20 as ola_profit from booking LIMIT 0, 1000	Error Code: 1054. Unknown column 'booking_id' in 'fi...	0.0039 sec
117	18:34:35 select idbooking,...	(s) returned	0.0012 sec / 0.00001...

A message at the bottom of the screen says "meet.google.com is sharing your screen. Stop sharing Hide".

Query 9:

#booking with highest price
select max(price)
from booking

The screenshot shows the MySQL Workbench interface on a Mac OS X desktop. The query editor window displays the following SQL code:

```
1 #booking with highest price
2 • select max(price)
3   from booking
4
```

The result grid shows a single row with the value '400'. Below the result grid, the log pane shows the following activity:

Action	Time	Response	Duration / Fetch Time
SELECT * FROM OLA_2.review LIMIT 0, 1000	120 18:42:12	5 row(s) returned	0.0012 sec / 0.00001...
select max(price) from booking LIMIT 0, 1000	121 18:44:26	1 row(s) returned	0.0026 sec / 0.00001...
select max(price) from booking LIMIT 0, 1000	122 18:44:41	Error Code: 1140. In aggregated query without GROUP...	0.00054 sec
select max(price) from booking LIMIT 0, 1000	123 18:44:55	1 row(s) returned	0.00044 sec / 0.000...
select max(price) from booking LIMIT 0, 1000	124 18:45:09	Error Code: 1140. In aggregated query without GROUP...	0.00044 sec
SELECT * FROM OLA_2.booking LIMIT 0, 1000	125 18:45:29	5 row(s) returned	0.00074 sec / 0.0000...
SELECT * FROM OLA_2.booking LIMIT 0, 1000	126 18:45:29	5 row(s) returned	0.00040 sec / 0.000...
select * from booking where max(price) LIMIT 0, 1000	127 18:45:57	Error Code: 1111. Invalid use of group function	0.00057 sec
select max(price) from booking LIMIT 0, 1000	128 18:46:23	1 row(s) returned	0.0013 sec / 0.00001...

Query 10

#give offers to people using ola money, so fin people that used ola money
select *
from booking
where mode='ola money'

The screenshot shows the MySQL Workbench interface on a Mac OS X desktop. The title bar reads "MySQL Workbench" and "Sat 30 Apr 6:50:57 PM". The main window displays a SQL editor with the following query:

```
1 #give offers to people using ola money, so fin people that used ola money
2 • select *
3   from booking
4   where mode='ola money'|
```

Below the editor is a "Result Grid" table with the following data:

user_name	driver_user_name	current_locati...	destination	price	Idbooking	Mode
shivasti	sidhu	Delhi	Rivari	372	405	OLA money

The "Action Output" pane at the bottom shows the execution log:

Time	Action	Response	Duration / Fetch Time
122 18:44:41	selected idbooking,max(price) from booking LIMIT 0, 1000	Error Code: 1140. In aggregated query without GROUP...	0.00054 sec
123 18:44:55	select max(price) from booking LIMIT 0, 1000	1 row(s) returned	0.00044 sec / 0.000...
124 18:45:00	select max(price),idbooking from booking LIMIT 0, 1000	Error Code: 1140. In aggregated query without GROUP...	0.00044 sec
125 18:45:29	SELECT * FROM OLA_2.BOOKING LIMIT 0, 1000	5 row(s) returned	0.00074 sec / 0.000...
126 18:45:29	SELECT * FROM OLA_2.BOOKING LIMIT 0, 1000	5 row(s) returned	0.00040 sec / 0.000...
127 18:45:57	select * from booking where max(price) LIMIT 0, 1000	Error Code: 1111. Invalid use of group function	0.00057 sec
128 18:46:23	select max(price) from booking LIMIT 0, 1000	1 row(s) returned	0.0013 sec / 0.00001...
129 18:49:14	select * from booking group by(mode) LIMIT 0, 1000	Error Code: 1055. Expression #1 of SELECT list is not i...	0.0015 sec
130 18:49:58	select * from booking where mode='ola money' LIMIT 0, 1000	1 row(s) returned	0.0022 sec / 0.00004...

Query to create index:

1->create index ind1
on booking(user_name,price)

2->create index ind2
on registered(user_name,destination)

3->create index usernme
on booking(user_name,driver_user_name)

Querries to create views and grants

Customer-> create view cust as

```
select * from customer_form
```

Driver-> create view driver as

```
select * from driver_form
```

Create user:create user driver@localhost

Grant:grant all on driver to 'driver@'localhost'

Booking team-> create view BT as

```
select * from booking
```

Create user: create user teamola@localhost

Grant:grant all on bt to 'teamola'@'localhost'

Trigger->

```
drop trigger car_populate;
```

```
DELIMITER $$
```

```
CREATE TRIGGER car_populate BEFORE INSERT ON driver_form
```

```
FOR EACH ROW
```

```
BEGIN
```

```
    SET NEW.car_type = CASE WHEN NEW.occupancy=6 THEN "SUV"  
                            WHEN NEW.occupancy=4 THEN "CUV"  
                            WHEN NEW.occupancy=2 THEN "LMV"  
                            ELSE "invalid"  
                            END;
```

```
END$$
```

```
DELIMITER ;
```

Embedded Query->

1st:

```
SELECT * FROM Registered WHERE username="'+usernm+' AND password= "'+pass+''"
```

2nd:

```
`INSERT INTO Registered (name, username, phone, age, password) VALUES ("${name}",  
"${username}", "${phone}", "${age}", "${password}")`
```

3rd:

```
'DELETE FROM Customer_Form WHERE username="'+name+'';'
```

4th:

```
'INSERT INTO Customer_Form(username,currentlocation,destination) VALUES ("'+name+'",  
"+current_location+", "+destination+")'
```

5th:

```
'SELECT * FROM Driver_Form WHERE current_location = "'+current_location+''"
```

6th:

```
'INSERT INTO Driver_Form(username,current_location,license_number,Occupency) VALUES  
("'+name+'", "'+current_location+'", "'+license_number+'", "'+occupency+')'
```

7th:

```
'SELECT * FROM bookings WHERE Driver_name = "'+name+''"
```

8th:

```
'DELETE FROM bookings WHERE Driver_name="'+username+'';'
```

9th:

```
'INSERT INTO  
bookings(customer_name,Driver_name,current_location,destination,Price,Mode) VALUES  
("'+name+'", "'+username+'", "'+curr_loc+'", "'+dest+'", "'+Price+'", "'+mode+')'
```

