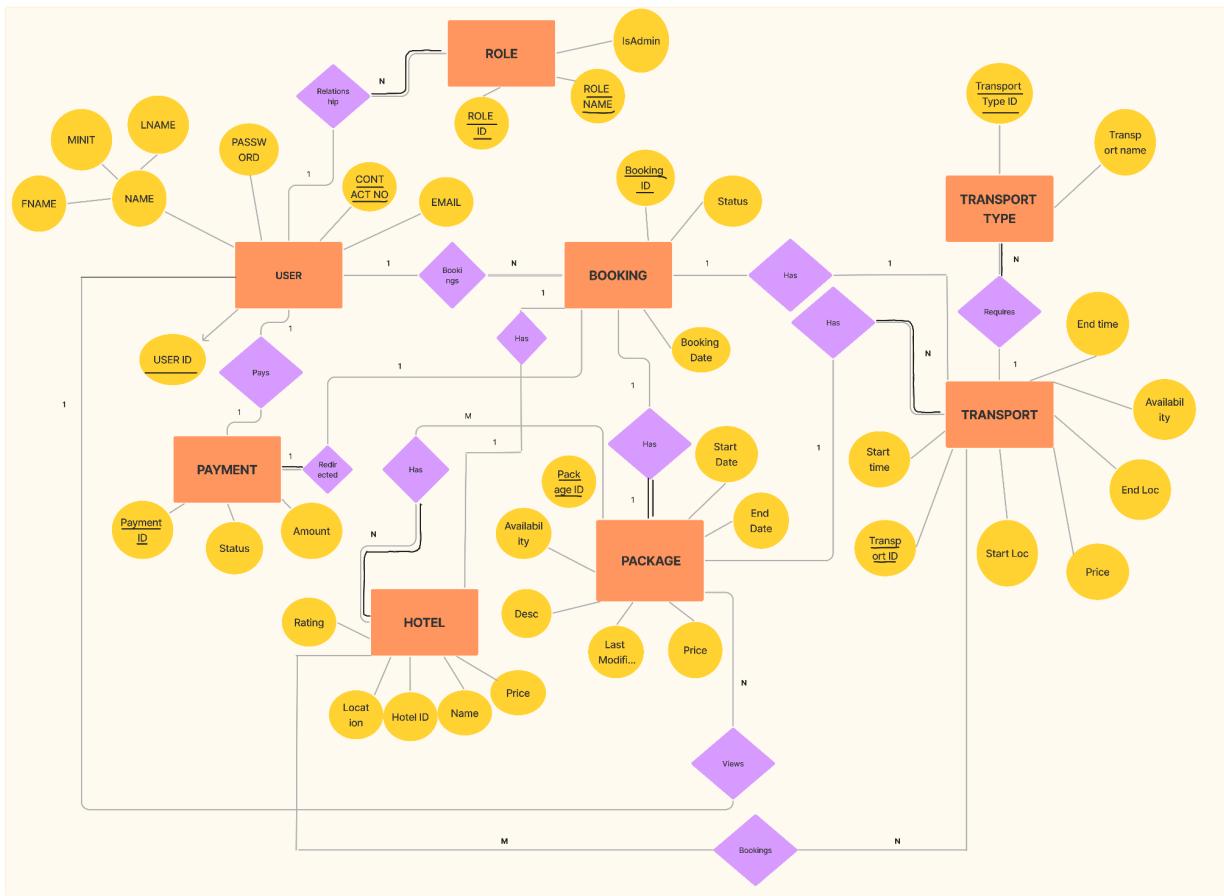


DBMS REPORT

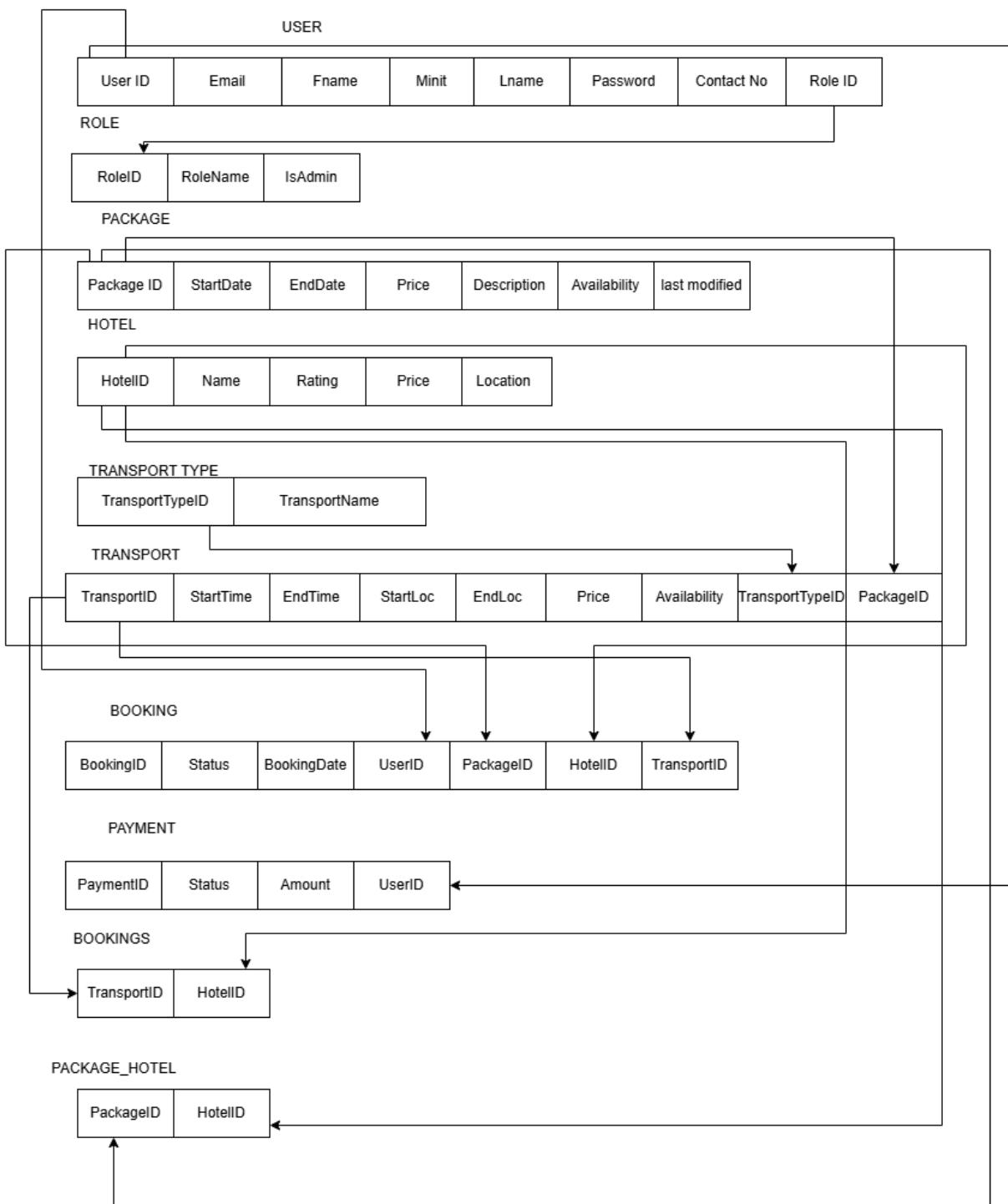
Travel and Tourism Management

NAME: **VARSHA BADRI (PES1UG22CS676)**
VARSHA JYOTHSNA SATHIAN (PES1UG22CS677)

ER DIAGRAM



RELATIONAL SCHEMA



SQL TABLES:

Screenshots:

booking

	BookingID	Status	BookingDate	UserID	PackageID	HotelID	TransportID
▶	1	Confirmed	2024-11-12 21:40:01	19	1	6	3
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

bookings:

	TransportID	HotelID
▶	3	6

hotel:

	HotelID	Name	Rating	Price	Location
▶	1	Hotel Taj	5.0	10000.00	Ooty
	6	Hotel Lakeview	4.0	8000.00	Ooty
	7	Hotel Silver Oak	3.0	6000.00	ooty
	8	Hotel Radisson	5.0	10500.00	Agra
	10	Royale Regent	4.0	5125.00	Taiganj
	11	Taj Villa	3.0	2789.00	Fatehbad
	12	Sea Breeze Residency	3.5	4200.00	Baga Beach
	13	Ocean Pearl Inn	4.0	5500.00	Candolim
	14	Palm Grove Suites	4.5	6000.00	Anjuna Beach
*	NULL	NULL	NULL	NULL	NULL

package:

	PackageID	StartDate	EndDate	Price	Description	Availability	last_modified
▶	1	2024-12-25	2024-12-29	15000.00	Ooty 5-day trip including stay and transport	1	2024-11-13 11:15:44
	3	2024-12-21	2024-12-26	13500.00	Agra-6 day trip including stay, food and transport	1	2024-11-13 11:07:30
	4	2025-03-15	2025-03-18	20000.00	Goa 4-day trip with accommodation and breakfa...	1	2024-11-13 11:07:30
	5	2025-02-12	2025-02-14	11500.00	Wayanad 3-day, 2-night stay including food.	1	2024-11-13 11:07:30
	6	2024-12-25	2024-11-28	17500.00	Hyderabad 4-day trip including food and travel ...	1	2024-11-13 11:07:30
	8	2025-05-18	2025-05-22	19000.00	Bangalore 5-day trip including food and stay	1	2024-11-13 11:07:30
	12	2025-01-08	2024-11-11	12500.00	Coorg 4-day Package	1	2024-11-13 11:07:30
*	NUL	NUL	NUL	NUL	NUL	NUL	NUL

package_hotel:

	PackageID	HotelID
▶	1	1
	1	6
	1	7
	3	8
	3	10
	3	11
	4	12
	4	13
	4	14
*	NUL	NUL

payment:

	PaymentID	Status	Amount	UserID
▶	1	Success	20700.00	19
*	NUL	NUL	NUL	NUL

role:

	RoleID	RoleName	IsAdmin
▶	1	Admin	1
	2	User	0
*	NULL	NULL	NULL

transport:

transporttype:

	TransportTypeID	TransportName
▶	1	flight
	4	train
	6	bus
◀	NULL	NULL

user:

I) CRUD OPERATIONS

CREATE

Code:

```
CREATE USER %s@'localhost' IDENTIFIED BY %s", (email, password)
```

Screenshots:

```
mysql> select * from user;
+-----+-----+-----+-----+-----+-----+-----+
| UserID | Email      | Fname | Minit | Lname   | Password | ContactNo | RoleID |
+-----+-----+-----+-----+-----+-----+-----+
|    14 | test1@gmail.com | tttt | NULL  | pppp    | 121     | 9876523  |    1  |
|    16 | test2@gmail.com | sample1 | v     | testt1  | 1234    | 98765   |    2  |
|    18 | test2@gmail.com | sample2 | vv    | abcd    | 4321    | 98765432 |    1  |
|    19 | user1@gmail.com | user1  | aaa   | sample  | 321    | 12345678 |    2  |
+-----+-----+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)
```

```
mysql> select * from role;
+-----+-----+-----+
| RoleID | RoleName | IsAdmin |
+-----+-----+-----+
|    1 | Admin    |    1  |
|    2 | User     |    0  |
+-----+-----+-----+
2 rows in set (0.01 sec)
```

Purpose:

Creates a new user with the specified email as the username, and assigns the provided password.

GRANT

Code:

```
GRANT CREATE, SELECT, INSERT, UPDATE, DELETE ON travelmanagement.* TO
%s@'localhost'", (email,)
```

```
GRANT SELECT, INSERT ON travelmanagement.* TO %s@'localhost',
(email)
```

Purpose:

Grants the user full access (create, read, update, delete) on all tables in the travel management database. This level of access is typically assigned to administrators or users who need comprehensive control over the database.
Limits the user's access to only selecting and inserting data in the travel management database, useful for standard users who should only read and add data.

INSERT

Code:

Packages:

```
cursor.execute("""
    INSERT INTO package (StartDate, EndDate, Price, Description, Availability)
    VALUES (%s, %s, %s, %s, %s)
    """, (start_date, end_date, price, description, availability))
db.commit()
```

Screenshots:

Before:

```
mysql> select * from package;
+-----+-----+-----+-----+-----+
| PackageID | StartDate | EndDate | Price | Description |
+-----+-----+-----+-----+-----+
| 1 | 2024-12-25 | 2024-12-29 | 12000.00 | Ooty 5-day trip including stay and transport |
| 3 | 2024-12-21 | 2024-12-26 | 17000.00 | Agra-6 day trip including stay, food and transport |
| 4 | 2025-03-15 | 2025-03-18 | 20000.00 | Goa 4-day trip with accommodation and breakfast included. |
| 5 | 2025-02-12 | 2025-02-14 | 11500.00 | Wayanad 3-day, 2-night stay including food. |
| 6 | 2024-12-25 | 2024-11-28 | 17500.00 | Hyderabad 4-day trip including food and travel guide. |
| 8 | 2025-05-18 | 2025-05-22 | 19000.00 | Bangalore 5-day trip including food and stay |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

Add New Package

Start Date:
 [clear]

End Date:
 [clear]

Price:

Description:

Availability:

Add Package

[Return to Dashboard](#)

Welcome, Admin!

[View All Users](#) [Add Package](#) [Add Transport Type](#) [Add Transport](#) [Add Hotel](#) [Logout](#)

Manage Packages

Package ID	Package Name	Price	Delete	Update
1	Ooty 5-day trip including stay and transport	12000.00	Delete	Update
3	Agra-6 day trip including stay, food and transport	17000.00	Delete	Update
4	Goa 4-day trip with accommodation and breakfast included.	20000.00	Delete	Update
5	Wayanad 3-day, 2-night stay including food.	11500.00	Delete	Update
6	Hyderabad 4-day trip including food and travel guide.	17500.00	Delete	Update
8	Bangalore 5-day trip including food and stay	19000.00	Delete	Update
12	Coorg 4-day Package	12500.00	Delete	Update

```
mysql> select * from package;
+-----+-----+-----+-----+-----+
| PackageID | StartDate | EndDate | Price | Description |
+-----+-----+-----+-----+-----+
| 1 | 2024-12-25 | 2024-12-29 | 12000.00 | Ooty 5-day trip including stay and transport |
| 3 | 2024-12-21 | 2024-12-26 | 17000.00 | Agra-6 day trip including stay, food and transport |
| 4 | 2025-03-15 | 2025-03-18 | 20000.00 | Goa 4-day trip with accommodation and breakfast included. |
| 5 | 2025-02-12 | 2025-02-14 | 11500.00 | Wayanad 3-day, 2-night stay including food. |
| 6 | 2024-12-25 | 2024-11-28 | 17500.00 | Hyderabad 4-day trip including food and travel guide. |
| 8 | 2025-05-18 | 2025-05-22 | 19000.00 | Bangalore 5-day trip including food and stay |
| 12 | 2025-01-08 | 2024-11-11 | 12500.00 | Coorg 4-day Package |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

Transport Type

Code:

Insert the transport type into the database

```
cursor = db.cursor()
query = "INSERT INTO transporttype (TransportName) VALUES (%s)"
cursor.execute(query, (transport_name,))
db.commit()
```

Screenshots:

```
mysql> select * from transporttype;
+-----+-----+
| TransportTypeID | TransportName |
+-----+-----+
| 1 | flight |
| 4 | train |
| 6 | bus |
+-----+-----+
3 rows in set (0.00 sec)
```

Transport:

Code:

```
query = """
```

```
    INSERT INTO transport (StartTime, EndTime, StartLoc, EndLoc, Price,
Availability, TransportTypeID, PackageID)
    VALUES (%s, %s, %s, %s, %s, %s, %s, %s)
```

```
....
```

```
    cursor.execute(query, (start_time, end_time, start_loc, end_loc, price,
availability, transport_type_id, package_id))
    db.commit()
```

Screenshots:

TransportID	StartTime	EndTime	StartLoc	EndLoc	Price	Availability	TransportTypeID	PackageID
1	2024-12-25 08:00:00	2024-12-25 10:30:00	Bangalore	Ooty	5000.00	1	1	1
2	2024-12-26 07:00:00	2024-12-26 12:00:00	Bangalore	Ooty	1500.00	1	4	1
3	2024-12-27 06:00:00	2024-12-27 10:00:00	Bangalore	Ooty	700.00	1	6	1
5	2024-11-10 11:00:00	2024-11-10 14:30:00	Delhi	Agra	500.00	1	4	3
6	2024-11-10 09:00:00	2024-11-10 10:30:00	Delhi	Agra	3500.00	1	1	3
7	2024-11-10 07:00:00	2024-11-10 12:00:00	Delhi	Agra	300.00	1	6	3
9	2024-11-13 13:56:00	2024-11-19 13:56:00	Chennai	Goa	3700.00	1	4	6

7 rows in set (0.00 sec)

Hotel:

Code:

```
query = """
```

```
    INSERT INTO hotel (Name, Rating, Price, Location)
    VALUES (%s, %s, %s, %s)
```

```
....
```

```
cursor = db.cursor()
```

```
cursor.execute(query, (hotel_name, hotel_rating, hotel_price,
hotel_location))
```

```
hotel_id = cursor.lastrowid # Get the last inserted hotel's ID
db.commit()
```

Hotel_Package:

Code:

```
package_hotel_query = """
```

```
    INSERT INTO package_hotel (PackageID, HotelID)
    VALUES (%s, %s)
```

.....

```
cursor.execute(package_hotel_query, (package_id, hotel_id))
db.commit()
```

Screenshots:

mysql> select * from hotel;				
HotelID	Name	Rating	Price	Location
1	Hotel Taj	5.0	10000.00	Ooty
6	Hotel Lakeview	4.0	8000.00	Ooty
7	Hotel Silver Oak	3.0	6000.00	ooty
8	Hotel Radisson	5.0	10500.00	Agra
10	Royale Regent	4.0	5125.00	Taiganj
11	Taj Villa	3.0	2789.00	Fatehbad
12	Sea Breeze Residency	3.5	4200.00	Baga Beach
13	Ocean Pearl Inn	4.0	5500.00	Candolim
14	Palm Grove Suites	4.5	6000.00	Anjuna Beach

9 rows in set (0.01 sec)

READ

Code:

```
"SELECT UserID, Fname AS FirstName, Lname AS LastName, Email FROM
user"
```

Screenshots:

All Registered Users

UserID	First Name	Last Name	Email
14	ttt	ppp	test1@gmail.com
16	sample1	test1	test@gmail.com
18	sample2	abcd	test2@gmail.com
19	user1	sample	user1@gmail.com

[Return to Dashboard](#)

DELETE

Code:

```
cursor.execute("DELETE FROM package_hotel WHERE PackageID = %s",
(package_id,))
```

```
# Then, delete the package record from the database
```

```
cursor.execute("DELETE FROM package WHERE PackageID = %s",
(package_id,))
```

Screenshots:

Before:

```
mysql> select * from package;
+-----+-----+-----+-----+-----+
| PackageID | StartDate | EndDate | Price | Description |
+-----+-----+-----+-----+-----+
| 1 | 2024-12-25 | 2024-12-29 | 12000.00 | Ooty 5-day trip including stay and transport |
| 3 | 2024-12-21 | 2024-12-26 | 17000.00 | Agra-6 day trip including stay, food and transport |
| 4 | 2025-03-15 | 2025-03-18 | 20000.00 | Goa 4-day trip with accommodation and breakfast included. |
| 5 | 2025-02-12 | 2025-02-14 | 11500.00 | Wayanad 3-day, 2-night stay including food. |
| 6 | 2024-12-25 | 2024-11-28 | 17500.00 | Hyderabad 4-day trip including food and travel guide. |
| 8 | 2025-05-18 | 2025-05-22 | 19000.00 | Bangalore 5-day trip including food and stay |
| 12 | 2025-01-08 | 2024-11-11 | 12500.00 | Coorg 4-day Package |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

Welcome, Admin!

View All Users Add Package Add Transport Type Add Transport Add Hotel Logout

Manage Packages

Package ID	Package Name	Price	Delete	Update
1	Ooty 5-day trip including stay and transport	12000.00	<button>Delete</button>	<button>Update</button>
3	Agra-6 day trip including stay, food and transport	17000.00	<button>Delete</button>	<button>Update</button>
4	Goa 4-day trip with accommodation and breakfast included.	20000.00	<button>Delete</button>	<button>Update</button>
5	Wayanad 3-day, 2-night stay including food.	11500.00	<button>Delete</button>	<button>Update</button>
6	Hyderabad 4-day trip including food and travel guide.	17500.00	<button>Delete</button>	<button>Update</button>
8	Bangalore 5-day trip including food and stay	19000.00	<button>Delete</button>	<button>Update</button>
12	Coorg 4-day Package	12500.00	<button>Delete</button>	<button>Update</button>

After:

```
mysql> select * from package;
+-----+-----+-----+-----+-----+
| PackageID | StartDate | EndDate | Price | Description | Availability |
+-----+-----+-----+-----+-----+
| 3 | 2024-12-21 | 2024-12-26 | 17000.00 | Agra-6 day trip including stay, food and transport | 1 |
| 4 | 2025-03-15 | 2025-03-18 | 20000.00 | Goa 4-day trip with accommodation and breakfast included. | 1 |
| 5 | 2025-02-12 | 2025-02-14 | 11500.00 | Wayanad 3-day, 2-night stay including food. | 1 |
| 6 | 2024-12-25 | 2024-11-28 | 17500.00 | Hyderabad 4-day trip including food and travel guide. | 1 |
| 8 | 2025-05-18 | 2025-05-22 | 19000.00 | Bangalore 5-day trip including food and stay | 1 |
| 12 | 2025-01-08 | 2024-11-11 | 12500.00 | Coorg 4-day Package | 1 |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

Welcome, Admin!

View All Users	Add Package	Add Transport Type	Add Transport	Add Hotel	Logout
Manage Packages					
Package ID	Package Name	Price	Delete	Update	
3	Agra-6 day trip including stay, food and transport	17000.00	Delete	Update	
4	Goa 4-day trip with accommodation and breakfast included.	20000.00	Delete	Update	
5	Wayanad 3-day, 2-night stay including food.	11500.00	Delete	Update	
6	Hyderabad 4-day trip including food and travel guide.	17500.00	Delete	Update	
8	Bangalore 5-day trip including food and stay	19000.00	Delete	Update	
12	Coorg 4-day Package	12500.00	Delete	Update	

From this, we infer that the Ooty package has been deleted.

UPDATE

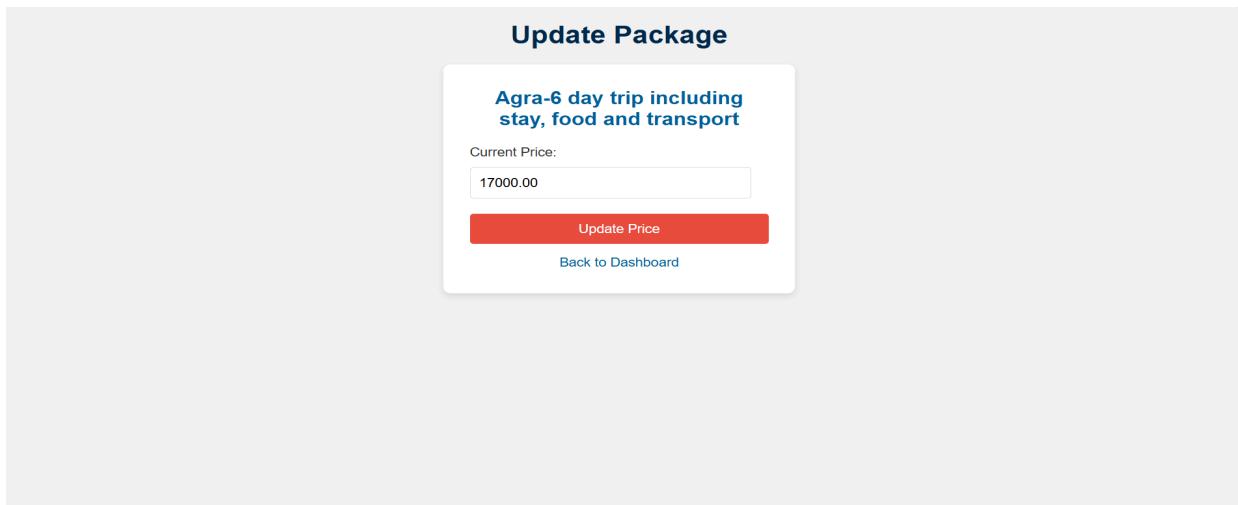
Code:

```
cursor.execute("UPDATE package SET Price = %s WHERE PackageID = %s",
(new_price, package_id))
db.commit()
```

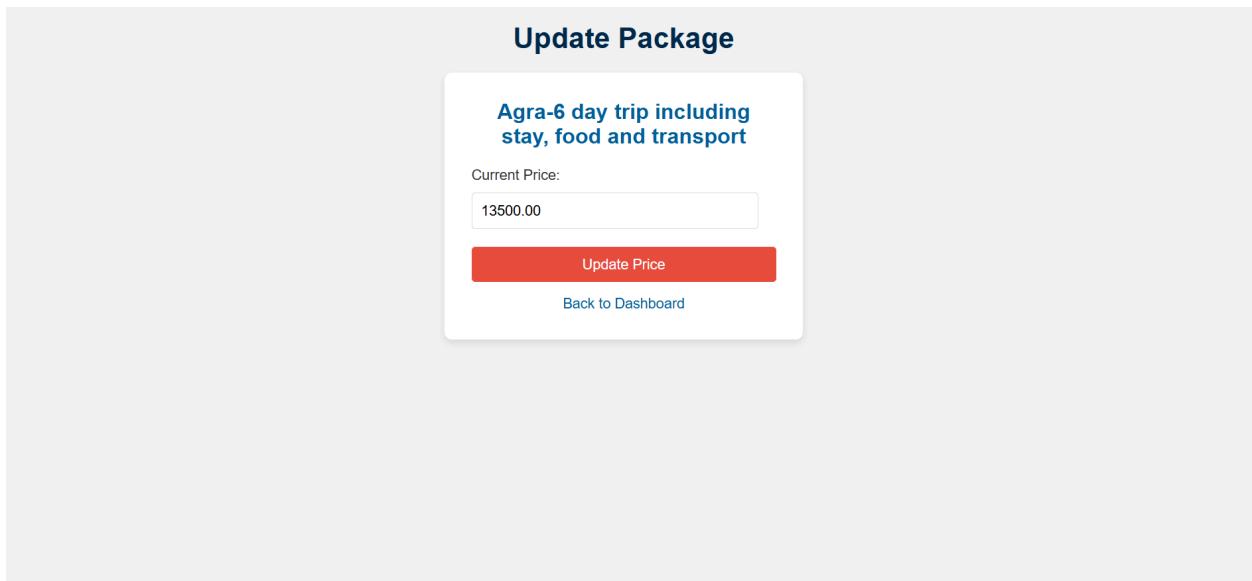
Screenshots:

Before:

```
mysql> select * from package;
+-----+-----+-----+-----+-----+
| PackageID | StartDate | EndDate | Price | Description | Availability |
+-----+-----+-----+-----+-----+
| 1 | 2024-12-25 | 2024-12-29 | 12000.00 | Ooty 5-day trip including stay and transport | 1 |
| 3 | 2024-12-21 | 2024-12-26 | 17000.00 | Agra-6 day trip including stay, food and transport | 1 |
| 4 | 2025-03-15 | 2025-03-18 | 20000.00 | Goa 4-day trip with accommodation and breakfast included. | 1 |
| 5 | 2025-02-12 | 2025-02-14 | 11500.00 | Wayanad 3-day, 2-night stay including food. | 1 |
| 6 | 2024-12-25 | 2024-11-28 | 17500.00 | Hyderabad 4-day trip including food and travel guide. | 1 |
| 8 | 2025-05-18 | 2025-05-22 | 19000.00 | Bangalore 5-day trip including food and stay | 1 |
| 12 | 2025-01-08 | 2024-11-11 | 12500.00 | Coorg 4-day Package | 1 |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```



After:



mysql> select * from package;					
PackageID	StartDate	EndDate	Price	Description	Availability
1	2024-12-25	2024-12-29	12000.00	Ooty 5-day trip including stay and transport	1
3	2024-12-21	2024-12-26	13500.00	Agra-6 day trip including stay, food and transport	1
4	2025-03-15	2025-03-18	20000.00	Goa 4-day trip with accommodation and breakfast included.	1
5	2025-02-12	2025-02-14	11500.00	Wayanad 3-day, 2-night stay including food.	1
6	2024-12-25	2024-11-28	17500.00	Hyderabad 4-day trip including food and travel guide.	1
8	2025-05-18	2025-05-22	19000.00	Bangalore 5-day trip including food and stay	1
12	2025-01-08	2024-11-11	12500.00	Coorg 4-day Package	1

II) TRIGGERS

TRIGGER 1

Code:

```
DELIMITER //
```

```
CREATE TRIGGER check_package_availability
AFTER INSERT ON booking
FOR EACH ROW
BEGIN
    DECLARE booking_count INT;

    -- Count current confirmed bookings for the package
    SELECT COUNT(*) INTO booking_count
    FROM booking
    WHERE PackageID = NEW.PackageID AND Status = 'Confirmed';

    -- Update package availability if booking count reaches the limit
    IF booking_count >= 2 THEN
        UPDATE package
        SET Availability = 0
        WHERE PackageID = NEW.PackageID;
    END IF;
END;
//
```

```
DELIMITER ;
```

Purpose:

This trigger, `check_package_availability`, automatically checks the availability of a package each time a new booking is added to the `booking` table. It performs the following:

1. Count Bookings: Counts the current confirmed bookings for the specific package being booked (PackageID).

2. Update Availability: If the count reaches or exceeds the limit (in this case, 2), it updates the Availability field of the package table to `0`, marking the package as unavailable.

This ensures that once a package reaches its maximum booking limit, it is no longer available for further bookings.

Screenshot:

Before:

```
mysql> select * from package;
+-----+-----+-----+-----+-----+
| PackageID | StartDate | EndDate | Price | Description |
+-----+-----+-----+-----+-----+
| 1 | 2024-12-25 | 2024-12-29 | 12000.00 | Ooty 5-day trip including stay and transport |
| 3 | 2024-12-21 | 2024-12-26 | 17000.00 | Agra-6 day trip including stay, food and transport |
| 4 | 2025-03-15 | 2025-03-18 | 20000.00 | Goa 4-day trip with accommodation and breakfast included. |
| 5 | 2025-02-12 | 2025-02-14 | 11500.00 | Wayanad 3-day, 2-night stay including food. |
| 6 | 2024-12-25 | 2024-11-28 | 17500.00 | Hyderabad 4-day trip including food and travel guide. |
| 8 | 2025-05-18 | 2025-05-22 | 19000.00 | Bangalore 5-day trip including food and stay |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

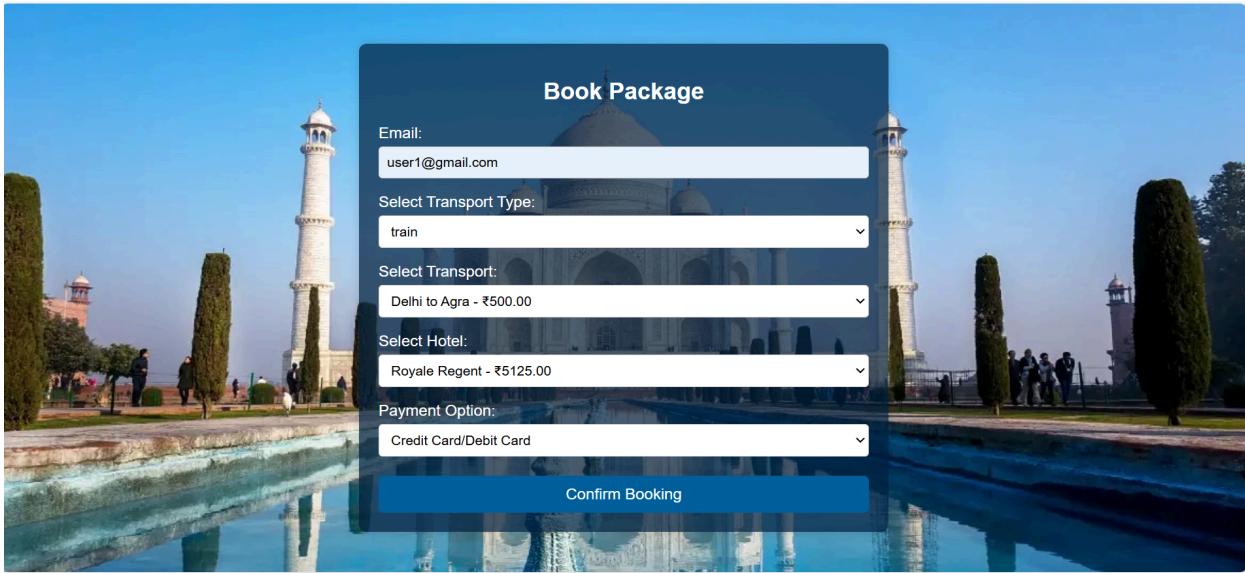
The screenshot shows the 'TravelGo' website's 'Packages' section. At the top, there is a navigation bar with links for 'Home', 'Login', and 'Register'. Below the navigation, the page title is 'Packages'. The main content area displays six travel packages in a grid format. Each package card contains the following information:

- Title:** The name of the package trip.
- Details:** Start Date, End Date, and Base Price.
- Actions:** Three buttons labeled 'View Transport', 'View Hotels', and 'Book Now'.

The packages listed are:

- Ooty 5-day trip including stay and transport
- Agra-6 day trip including stay, food and transport
- Goa 4-day trip with accommodation and breakfast included.
- Wayanad 3-day, 2-night stay including food.
- Hyderabad 4-day trip including food and travel guide.
- Bangalore 5-day trip including food and stay

Two Bookings:



After:

The website interface for "TravelGo" displays a "Packages" section with six travel options:

- Ooty 5-day trip including stay and transport**
 - Start Date: 2024-12-25
 - End Date: 2024-12-29
 - Base Price: ₹12000.00
 - [View Transport](#)
 - [View Hotels](#)
 - [Book Now](#)
- Goa 4-day trip with accommodation and breakfast included.**
 - Start Date: 2025-03-15
 - End Date: 2025-03-18
 - Base Price: ₹20000.00
 - [View Transport](#)
 - [View Hotels](#)
 - [Book Now](#)
- Wayanad 3-day, 2-night stay including food.**
 - Start Date: 2025-02-12
 - End Date: 2025-02-14
 - Base Price: ₹11500.00
 - [View Transport](#)
 - [View Hotels](#)
 - [Book Now](#)
- Hyderabad 4-day trip including food and travel guide.**
 - Start Date: 2024-12-25
 - End Date: 2024-11-28
 - Base Price: ₹17500.00
 - [View Transport](#)
 - [View Hotels](#)
 - [Book Now](#)
- Bangalore 5-day trip including food and stay**
 - Start Date: 2025-05-18
 - End Date: 2025-05-22
 - Base Price: ₹19000.00
 - [View Transport](#)
 - [View Hotels](#)
 - [Book Now](#)

```
mysql> select * from package;
+-----+-----+-----+-----+-----+-----+
| PackageID | StartDate | EndDate | Price | Description | Availability |
+-----+-----+-----+-----+-----+-----+
| 1 | 2024-12-25 | 2024-12-29 | 12000.00 | Ooty 5-day trip including stay and transport | 1 |
| 3 | 2024-12-21 | 2024-12-26 | 17000.00 | Agra-6 day trip including stay, food and transport | 0 |
| 4 | 2025-03-15 | 2025-03-18 | 20000.00 | Goa 4-day trip with accommodation and breakfast included. | 1 |
| 5 | 2025-02-12 | 2025-02-14 | 11500.00 | Wayanad 3-day, 2-night stay including food. | 1 |
| 6 | 2024-12-25 | 2024-11-28 | 17500.00 | Hyderabad 4-day trip including food and travel guide. | 1 |
| 8 | 2025-05-18 | 2025-05-22 | 19000.00 | Bangalore 5-day trip including food and stay | 1 |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

TRIGGER 2

Code:

```
ALTER TABLE package ADD COLUMN last_modified TIMESTAMP DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP;
DELIMITER $$

CREATE TRIGGER update_package_last_modified
BEFORE UPDATE ON package
FOR EACH ROW
BEGIN
    SET NEW.last_modified = NOW();
END$$
```

DELIMITER ;

Screenshots:

```
mysql> ALTER TABLE package
-> ADD COLUMN last_modified TIMESTAMP DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP;
Query OK, 0 rows affected (0.15 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> DELIMITER $$

mysql> CREATE TRIGGER update_package_last_modified
-> BEFORE UPDATE ON package
-> FOR EACH ROW
-> BEGIN
->     SET NEW.last_modified = NOW();
-> END$$
Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;
```

Before:

Manage Packages						
Package ID	Package Name	Price	Last Modified	Delete	Update	
1	Ooty 5-day trip including stay and transport	12000.00	2024-11-13 11:13:49	<button>Delete</button>	<button>Update</button>	
3	Agra-6 day trip including stay, food and transport	13500.00	2024-11-13 11:07:30	<button>Delete</button>	<button>Update</button>	
4	Goa 4-day trip with accommodation and breakfast included.	20000.00	2024-11-13 11:07:30	<button>Delete</button>	<button>Update</button>	
5	Wayanad 3-day, 2-night stay including food.	11500.00	2024-11-13 11:07:30	<button>Delete</button>	<button>Update</button>	
6	Hyderabad 4-day trip including food and travel guide.	17500.00	2024-11-13 11:07:30	<button>Delete</button>	<button>Update</button>	
8	Bangalore 5-day trip including food and stay	19000.00	2024-11-13 11:07:30	<button>Delete</button>	<button>Update</button>	
12	Coorg 4-day Package	12500.00	2024-11-13 11:07:30	<button>Delete</button>	<button>Update</button>	

```
mysql> select * from package;
+-----+-----+-----+-----+-----+
| PackageID | StartDate | EndDate | Price | Description |
+-----+-----+-----+-----+-----+
| 1 | 2024-12-25 | 2024-12-29 | 12000.00 | Ooty 5-day trip including stay and transport |
| 3 | 2024-12-21 | 2024-12-26 | 13500.00 | Agra-6 day trip including stay, food and transport |
| 4 | 2025-03-15 | 2025-03-18 | 20000.00 | Goa 4-day trip with accommodation and breakfast included. |
| 5 | 2025-02-12 | 2025-02-14 | 11500.00 | Wayanad 3-day, 2-night stay including food. |
| 6 | 2024-12-25 | 2024-11-28 | 17500.00 | Hyderabad 4-day trip including food and travel guide. |
| 8 | 2025-05-18 | 2025-05-22 | 19000.00 | Bangalore 5-day trip including food and stay |
| 12 | 2025-01-08 | 2024-11-11 | 12500.00 | Coorg 4-day Package |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

After:

Update Package

Ooty 5-day trip including stay and transport

Current Price:

[Back to Dashboard](#)

View All Users	Add Package	Add Transport Type	Add Transport	Add Hotel	Logout																																																
<h3 style="margin: 0;">Manage Packages</h3> <p style="margin: 0;">• Package with ID 1 updated successfully.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #004a99; color: white;"> <th style="padding: 5px;">Package ID</th> <th style="padding: 5px;">Package Name</th> <th style="padding: 5px;">Price</th> <th style="padding: 5px;">Last Modified</th> <th style="padding: 5px;">Delete</th> <th style="padding: 5px;">Update</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">1</td> <td style="padding: 5px;">Ooty 5-day trip including stay and transport</td> <td style="padding: 5px;">15000.00</td> <td style="padding: 5px;">2024-11-13 11:15:44</td> <td style="padding: 5px;">Delete</td> <td style="padding: 5px;">Update</td> </tr> <tr> <td style="padding: 5px;">3</td> <td style="padding: 5px;">Agra-6 day trip including stay, food and transport</td> <td style="padding: 5px;">13500.00</td> <td style="padding: 5px;">2024-11-13 11:07:30</td> <td style="padding: 5px;">Delete</td> <td style="padding: 5px;">Update</td> </tr> <tr> <td style="padding: 5px;">4</td> <td style="padding: 5px;">Goa 4-day trip with accommodation and breakfast included.</td> <td style="padding: 5px;">20000.00</td> <td style="padding: 5px;">2024-11-13 11:07:30</td> <td style="padding: 5px;">Delete</td> <td style="padding: 5px;">Update</td> </tr> <tr> <td style="padding: 5px;">5</td> <td style="padding: 5px;">Wayanad 3-day, 2-night stay including food.</td> <td style="padding: 5px;">11500.00</td> <td style="padding: 5px;">2024-11-13 11:07:30</td> <td style="padding: 5px;">Delete</td> <td style="padding: 5px;">Update</td> </tr> <tr> <td style="padding: 5px;">6</td> <td style="padding: 5px;">Hyderabad 4-day trip including food and travel guide.</td> <td style="padding: 5px;">17500.00</td> <td style="padding: 5px;">2024-11-13 11:07:30</td> <td style="padding: 5px;">Delete</td> <td style="padding: 5px;">Update</td> </tr> <tr> <td style="padding: 5px;">8</td> <td style="padding: 5px;">Bangalore 5-day trip including food and stay</td> <td style="padding: 5px;">19000.00</td> <td style="padding: 5px;">2024-11-13 11:07:30</td> <td style="padding: 5px;">Delete</td> <td style="padding: 5px;">Update</td> </tr> <tr> <td style="padding: 5px;">12</td> <td style="padding: 5px;">Coorg 4-day Package</td> <td style="padding: 5px;">12500.00</td> <td style="padding: 5px;">2024-11-13 11:07:30</td> <td style="padding: 5px;">Delete</td> <td style="padding: 5px;">Update</td> </tr> </tbody> </table>						Package ID	Package Name	Price	Last Modified	Delete	Update	1	Ooty 5-day trip including stay and transport	15000.00	2024-11-13 11:15:44	Delete	Update	3	Agra-6 day trip including stay, food and transport	13500.00	2024-11-13 11:07:30	Delete	Update	4	Goa 4-day trip with accommodation and breakfast included.	20000.00	2024-11-13 11:07:30	Delete	Update	5	Wayanad 3-day, 2-night stay including food.	11500.00	2024-11-13 11:07:30	Delete	Update	6	Hyderabad 4-day trip including food and travel guide.	17500.00	2024-11-13 11:07:30	Delete	Update	8	Bangalore 5-day trip including food and stay	19000.00	2024-11-13 11:07:30	Delete	Update	12	Coorg 4-day Package	12500.00	2024-11-13 11:07:30	Delete	Update
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PackageID	StartDate	EndDate	Price	Description	Availability	last_modified
1	2024-12-25	2024-12-29	15000.00	Ooty 5-day trip including stay and transport	1	2024-11-13 11:15:44
3	2024-12-21	2024-12-26	13500.00	Agra-6 day trip including stay, food and transport	1	2024-11-13 11:07:30
4	2025-03-15	2025-03-18	20000.00	Goa 4-day trip with accommodation and breakfast included.	1	2024-11-13 11:07:30
5	2025-02-12	2025-02-14	11500.00	Wayanad 3-day, 2-night stay including food.	1	2024-11-13 11:07:30
6	2024-12-25	2024-11-28	17500.00	Hyderabad 4-day trip including food and travel guide.	1	2024-11-13 11:07:30
8	2025-05-18	2025-05-22	19000.00	Bangalore 5-day trip including food and stay	1	2024-11-13 11:07:30
12	2025-01-08	2024-11-11	12500.00	Coorg 4-day Package	1	2024-11-13 11:07:30

7 rows in set (0.00 sec)

Purpose:

The purpose of this trigger is to automatically update the `last_modified` column in the `package` table to the current timestamp whenever any record in the table is updated. This helps track the most recent changes made to each package, providing an accurate history of modifications for administrative oversight.

III) PROCEDURE

Code:

DELIMITER //

```
CREATE PROCEDURE BookPackage(
```

```
    IN user_id INT,
    IN package_id INT,
    IN hotel_id INT,
    IN transport_id INT,
    OUT booking_status VARCHAR(20),
    OUT total_amount DECIMAL(10, 2)
```

)

BEGIN

```
    DECLARE EXIT HANDLER FOR SQLEXCEPTION
```

```
    BEGIN
```

```
        SET booking_status = 'Failure';
```

```
        SET total_amount = 0;
```

```
        ROLLBACK;
```

```
    END;
```

```
START TRANSACTION;
```

```
-- Calculate the total amount using SUM aggregate function
```

```
SELECT SUM(price) INTO total_amount
```

```
FROM (
```

```
    SELECT Price AS price FROM package WHERE PackageID = package_id
```

```
    UNION ALL
```

```

SELECT Price FROM hotel WHERE HotelID = hotel_id
UNION ALL
SELECT Price FROM transport WHERE TransportID = transport_id
) AS combined_prices;

-- Insert booking information
INSERT INTO booking (UserID, PackageID, HotelID, TransportID, Status,
BookingDate)
VALUES (user_id, package_id, hotel_id, transport_id, 'Confirmed', NOW());

-- Insert payment information
INSERT INTO payment (Status, Amount, UserID)
VALUES ('Success', total_amount, user_id);

SET @booking_status := 'Success';
SET @total_amount := total_amount;

-- Set output parameters for success
SET booking_status = 'Success';
COMMIT;
END //

```

DELIMITER ;

Screenshots:

```

mysql> DELIMITER //
mysql>
mysql> CREATE PROCEDURE BookPackage(
->     IN user_id INT,
->     IN package_id INT,
->     IN hotel_id INT,
->     IN transport_id INT,
->     OUT booking_status VARCHAR(20),
->     OUT total_amount DECIMAL(10, 2)
-> )
-> BEGIN
->     DECLARE EXIT HANDLER FOR SQLEXCEPTION
->     BEGIN
->         SET booking_status = 'Failure';
->         SET total_amount = 0;
->         ROLLBACK;
->     END;
->
->     START TRANSACTION;
->
->     -- Calculate the total amount using SUM aggregate function
->     SELECT SUM(price) INTO total_amount
->     FROM (
->         SELECT Price AS price FROM package WHERE PackageID = package_id
->         UNION ALL
->         SELECT Price FROM hotel WHERE HotelID = hotel_id
->         UNION ALL
->         SELECT Price FROM transport WHERE TransportID = transport_id
->     ) AS combined_prices;
->
->     -- Insert booking information
->     INSERT INTO booking (UserID, PackageID, HotelID, TransportID, Status, BookingDate)

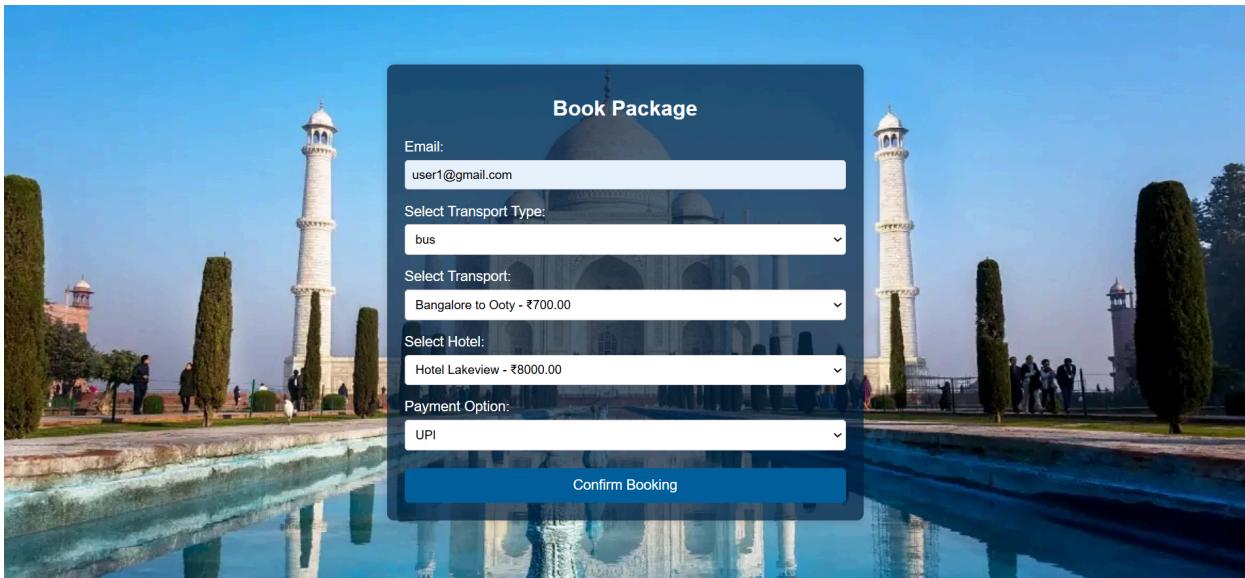
```

```

--> -- Insert booking information
--> INSERT INTO booking (UserID, PackageID, HotelID, TransportID, Status, BookingDate)
--> VALUES (user_id, package_id, hotel_id, transport_id, 'Confirmed', NOW());
-->
--> -- Insert payment information
--> INSERT INTO payment (Status, Amount, UserID)
--> VALUES ('Success', total_amount, user_id);
-->
--> SET @booking_status := 'Success';
--> SET @total_amount := total_amount;
-->
--> -- Set output parameters for success
--> SET booking_status = 'Success';
--> COMMIT;
--> END //
Query OK, 0 rows affected (0.02 sec)

mysql> DELIMITER ;

```



Payment Successful!

Thank you for your booking. Your payment was successful.

[Return to Homepage](#)

```
mysql> select * from booking;
+-----+-----+-----+-----+-----+-----+
| BookingID | Status      | BookingDate          | UserID | PackageID | HotelID | TransportID |
+-----+-----+-----+-----+-----+-----+
|       1 | Confirmed   | 2024-11-12 21:40:01 |     19 |         1 |       6 |         3 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.01 sec)
```

```
mysql> select * from bookings;
+-----+-----+
| TransportID | HotelID |
+-----+-----+
|       3 |       6 |
+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> select * from payment;
+-----+-----+-----+
| PaymentID | Status    | Amount   | UserID |
+-----+-----+-----+
|       1 | Success   | 20700.00 |     19 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

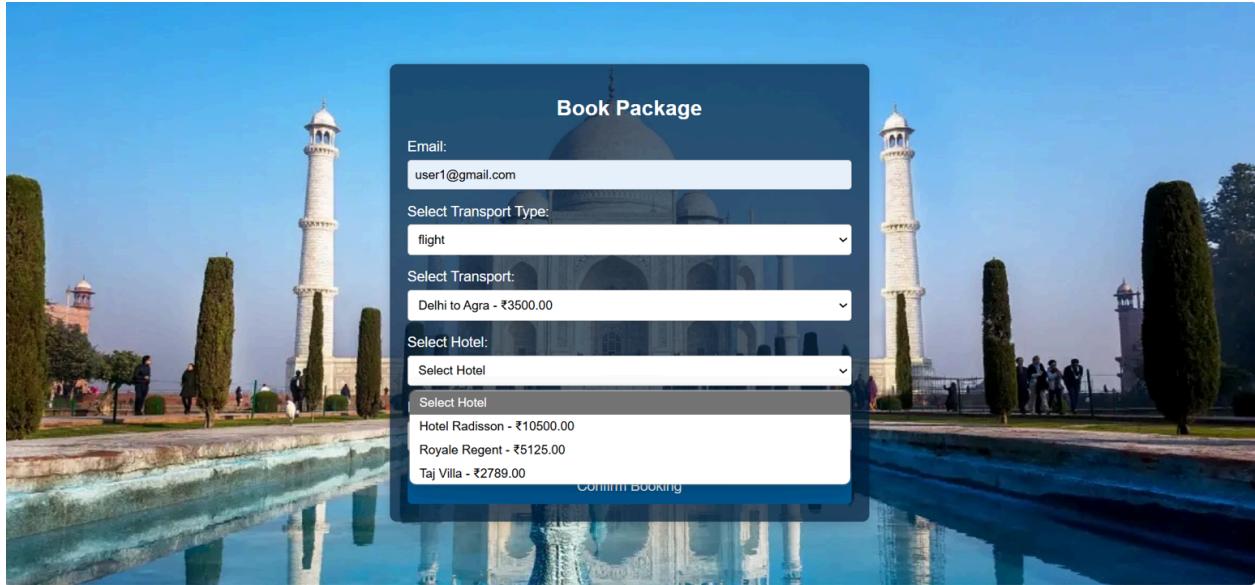
IV) JOIN QUERY

JOIN QUERY 1

Code:

```
cursor.execute("""
    SELECT h.* FROM hotel h
    JOIN package_hotel ph ON h.HotelID = ph.HotelID
    WHERE ph.PackageID = %s
    """, (package_id,))
hotels = cursor.fetchall()
```

Screenshots:



```
mysql> SELECT h.* FROM hotel h JOIN package_hotel ph ON h.HotelID = ph.HotelID WHERE ph.PackageID = 1;
+-----+-----+-----+-----+
| HotelID | Name | Rating | Price | Location |
+-----+-----+-----+-----+
| 1 | Hotel Taj | 5.0 | 10000.00 | Ooty |
| 6 | Hotel Lakeview | 4.0 | 8000.00 | Ooty |
| 7 | Hotel Silver Oak | 3.0 | 6000.00 | ooty |
+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```

Purpose:

The purpose of this query is to retrieve all hotels associated with a specific package from the database. It joins the hotel table and the package_hotel table based on the HotelID, and filters the results to only include hotels linked to a given PackageID.

JOIN QUERY 2

Code:

```
SELECT transport.TransportID, transport.StartTime, transport.EndTime,
transport.StartLoc, transport.EndLoc, transport.Price, transport.Availability
FROM transport
JOIN transporttype ON transport.TransportTypeID = transporttype.TransportTypeID
WHERE transport.PackageID = 1 AND transport.TransportTypeID = 4 AND
transport.Availability = 1;
```

Screenshot:

```

mysql> SELECT transport.TransportID, transport.StartTime, transport.EndTime, transport.StartLoc, transport.EndLoc, transport.Price, transport.Availability
-> FROM transport
-> JOIN transporttype ON transport.TransportTypeID = transporttype.TransportTypeID
-> WHERE transport.PackageID = 1 AND transport.TransportTypeID = 4 AND transport.Availability = 1;
+-----+-----+-----+-----+-----+-----+
| TransportID | StartTime | EndTime | StartLoc | EndLoc | Price | Availability |
+-----+-----+-----+-----+-----+-----+
| 2 | 2024-12-26 07:00:00 | 2024-12-26 12:00:00 | Bangalore | Ooty | 1500.00 | 1 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

```

Purpose:

This query retrieves available transport options for a specific package and transport type. It joins the `transport` and `transporttype` tables to filter options by `PackageID` (set to 1) and `TransportTypeID` (set to 4), showing only those with availability. The result includes each transport option's ID, timing, locations, price, and availability. This is useful for displaying transport choices that meet specific criteria for booking purposes.

V) NESTED QUERY:

Code:

```

query = """
    SELECT * FROM hotel
    WHERE HotelID IN (SELECT HotelID FROM package_hotel WHERE PackageID =
%s)
"""

cursor.execute(query, (package_id,))
hotels = cursor.fetchall()
cursor.close()

```

Screenshots:

Hotels for Package 1

**Hotel Taj**

Rating: 5.0/5

Price: ₹10000.00 per night

Location: Ooty

**Hotel Lakeview**

Rating: 4.0/5

Price: ₹8000.00 per night

Location: Ooty

**Hotel Silver Oak**

Rating: 3.0/5

Price: ₹6000.00 per night

Location: ooty

[Back to Packages](#)

```
mysql> SELECT * FROM hotel WHERE HotelID IN (SELECT HotelID FROM package_hotel WHERE PackageID = 1);
+-----+-----+-----+-----+
| HotelID | Name      | Rating | Price   | Location |
+-----+-----+-----+-----+
|     1 | Hotel Taj  | 5.0   | 10000.00 | Ooty    |
|     6 | Hotel Lakeview | 4.0   | 8000.00  | Ooty    |
|     7 | Hotel Silver Oak | 3.0   | 6000.00  | ooty    |
+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```

Hotels for Package 3

**Hotel Radisson**

Rating: 5.0/5

Price: ₹10500.00 per night

Location: Agra

**Royale Regent**

Rating: 4.0/5

Price: ₹5125.00 per night

Location: Taiganj

**Taj Villa**

Rating: 3.0/5

Price: ₹2789.00 per night

Location: Fatehbad

[Back to Packages](#)

```
mysql> SELECT * FROM hotel WHERE HotelID IN (SELECT HotelID FROM package_hotel WHERE PackageID = 3);
+-----+-----+-----+-----+
| HotelID | Name      | Rating | Price   | Location |
+-----+-----+-----+-----+
|     8 | Hotel Radisson | 5.0   | 10500.00 | Agra    |
|    10 | Royale Regent  | 4.0   | 5125.00  | Taiganj |
|    11 | Taj Villa       | 3.0   | 2789.00  | Fatehbad|
+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```

Purpose:

This query is designed to fetch all details for hotels that are associated with a specific package. It uses a subquery to find HotelIDs in the package_hotel table that match the provided PackageID, then retrieves details from the hotel table for those IDs. This allows you to list hotels related to a particular package.

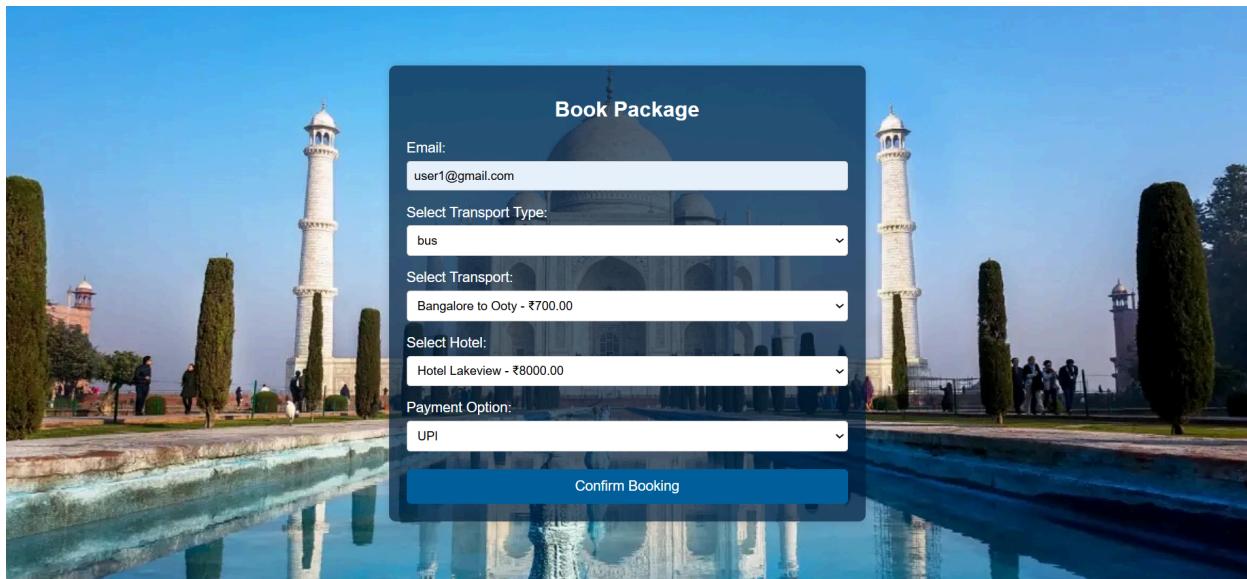
VI) AGGREGATE QUERY:

Code:

- Calculate the total amount using SUM aggregate function

```
SELECT SUM(price) INTO total_amount  
FROM (  
    SELECT Price AS price FROM package WHERE PackageID = package_id  
    UNION ALL  
    SELECT Price FROM hotel WHERE HotelID = hotel_id  
    UNION ALL  
    SELECT Price FROM transport WHERE TransportID = transport_id  
) AS combined_prices;
```

Screenshots:



Payment Successful!

Thank you for your booking. Your payment was successful.

[Return to Homepage](#)

```
mysql> select * from payment;
+-----+-----+-----+
| PaymentID | Status | Amount | UserID |
+-----+-----+-----+
| 1 | Success | 20700.00 | 19 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

Purpose:

This SQL query calculates the total booking amount by summing up prices from three different tables (**package**, **hotel**, and **transport**) based on their respective IDs. It uses the **SUM** aggregate function to add up:

- the package price (**PackageID**),
- the hotel price (**HotelID**), and
- the transport price (**TransportID**).

The purpose of this query is to combine prices from these tables for a booking and store the total in the variable **total_amount**, facilitating accurate billing on the travel management website.

