Relation Schema:

Users : (**User_id**, Name, Password, Role)

Users_Email : (**User_id ,Email**)

Users_Phone : (**User_id ,Phone_Number**)

Hotel_Bookings : (**Hotel_Book_id**, Check_in_date, Check_out_date,**User_id**)

Hotels: (**Hotel_id**, Hotel_name, Amenities,Room_type, Price_per_night,**Hotel_Book_id**)

Hotel_location : (**Hotel_id ,location**)

Bookings : (**Booking_id**, Booking_date, Booking_type, Total_Price , **User_id ,Flight_id)**

Multi_city_flights: (**Multi_city_id**,)

Tracks: (**Multi_city_id, Booking_id**,Sequence,**Flight_id**)

Flights: (**Flight_id,** Flight_number, Seat_class, Airline, Departure_city, Destination_city, Departure_date, Price)

Purchase_Request: (**Request_id,**Request_status,Request_Date, **Flight_id,User_id**)

Explained the Mapping between ER diagram and the relational schema.

1) The relationship between **Users** to **bookings** is 1 to Many . So, The primary key **user_id** will be added to the **bookings** side as a foreign key.

2) Email is a multivalued attribute. So this attribute will have a schema. the attribute will be the **user_id** and **Email** as a composite primary key.

3) Phone number is a multivalued attribute. So this attribute will have a schema. the attribute will be the **user_id** and **phonenumber** as a composite primary key.

4) bookings to multicity_flight has many to many relationship . So, bookings and multicity_flight of ERD will be transformed into one relation schema. Tracks of ERD will be one relation schema. The attributes **Multi_city_id** and **Booking_id** will be the primary keys and **sequence** is a descriptive attributes of this tracks relationship.

5) the relationship between **flights** and **boookings** is 1 to many . So we follow the similar approach of Number (1).

6) the relationship between **flights** and **multicity_flights** is 1 to many . So we follow the similar approach of Number (1).

7) the relationship between **flights** and **purchase_request** is 1 to many . So we follow the similar approach of Number (1).

8) the relationship between **users** and **purchase_request** is 1 to many . So we follow the similar approach of Number (1).

9) the relationship between **users** and **hotel_bookings** is 1 to many . So we follow the similar approach of Number (1).

10) the relationship between **hotel_bookings** and **hotel** is 1 to many . So we follow the similar approach of Number (1).

11) **location** is a multivalued attribute. So this attribute will have a schema. the attribute will be the hotel_id and **location** as a composite primary key.