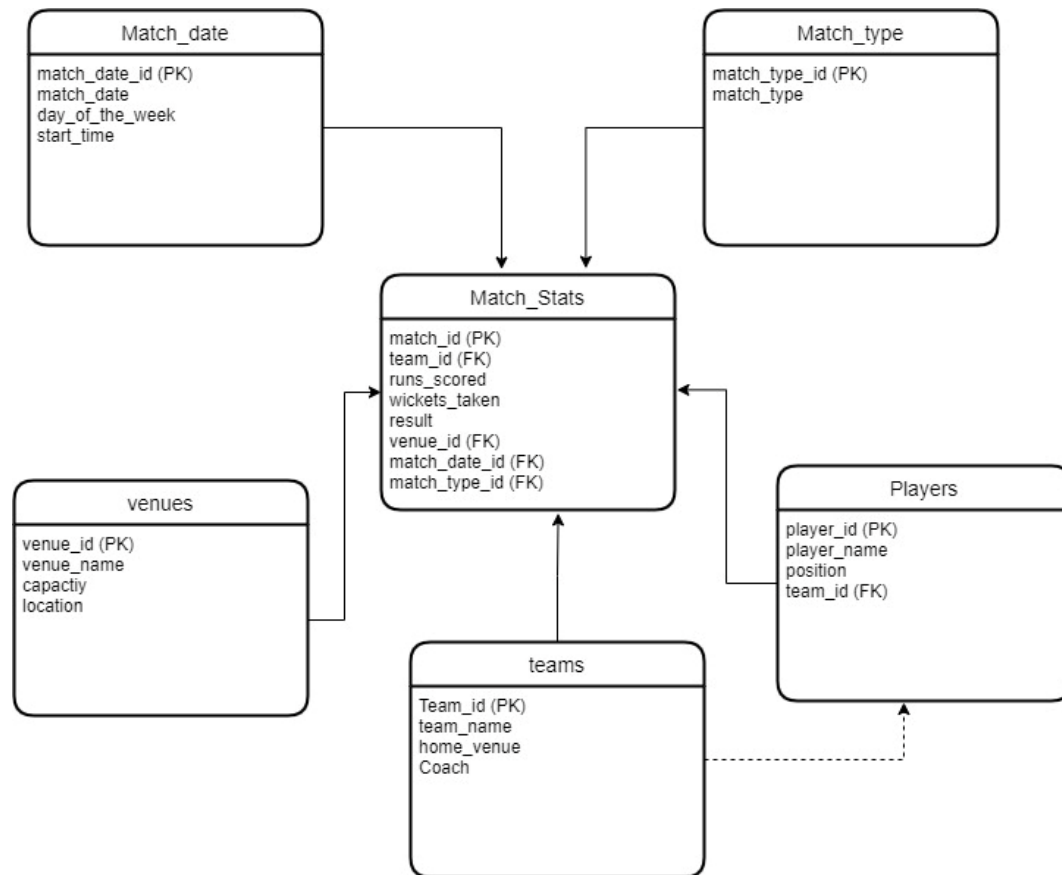


**1. Design a Data Warehouse for IPL Cricket Tournament (Asked in Flipkart Interview for Senior Data Engineer role).**



**-> Total runs scored by each team in a given season:**

```

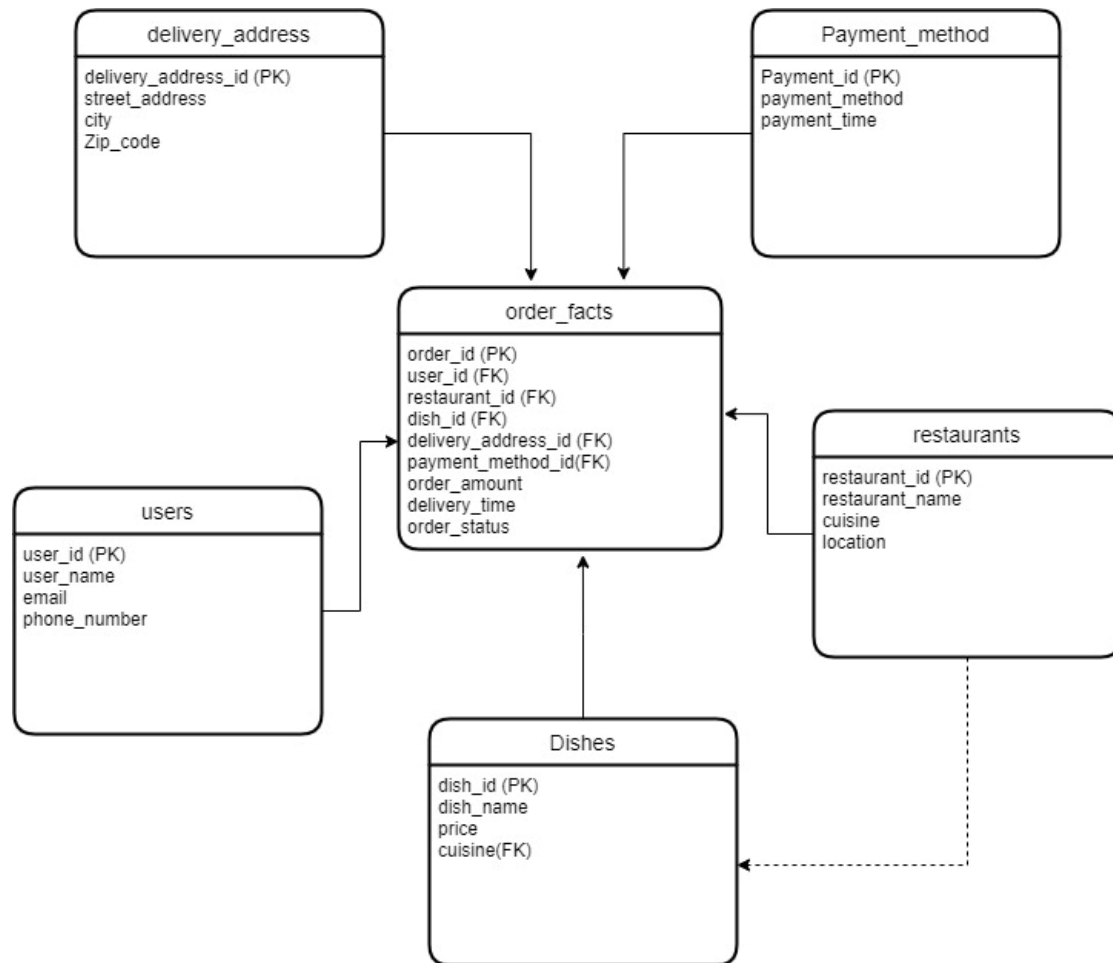
SELECT t.team_name, SUM(f.runs_scored) as total_runs
FROM teams t
JOIN match_facts f ON t.team_id = f.team_id
GROUP BY t.team_name
    
```

**-> Average runs scored by each player in a given season:**

```

SELECT p.player_name, AVG(f.runs_scored) as avg_runs
FROM players p
JOIN match_facts f ON p.player_id = f.player_id
GROUP BY p.player_name
    
```

## 2) Design a Data Warehouse for Food delivery app like Swiggy, Zomato.



### Total orders placed by each user:

```
SELECT u.user_name, COUNT(*) as total_orders
```

```
FROM users u
```

```
JOIN order_facts f ON u.user_id = f.user_id
```

```
GROUP BY u.user_name
```

### Total orders placed at each restaurant:

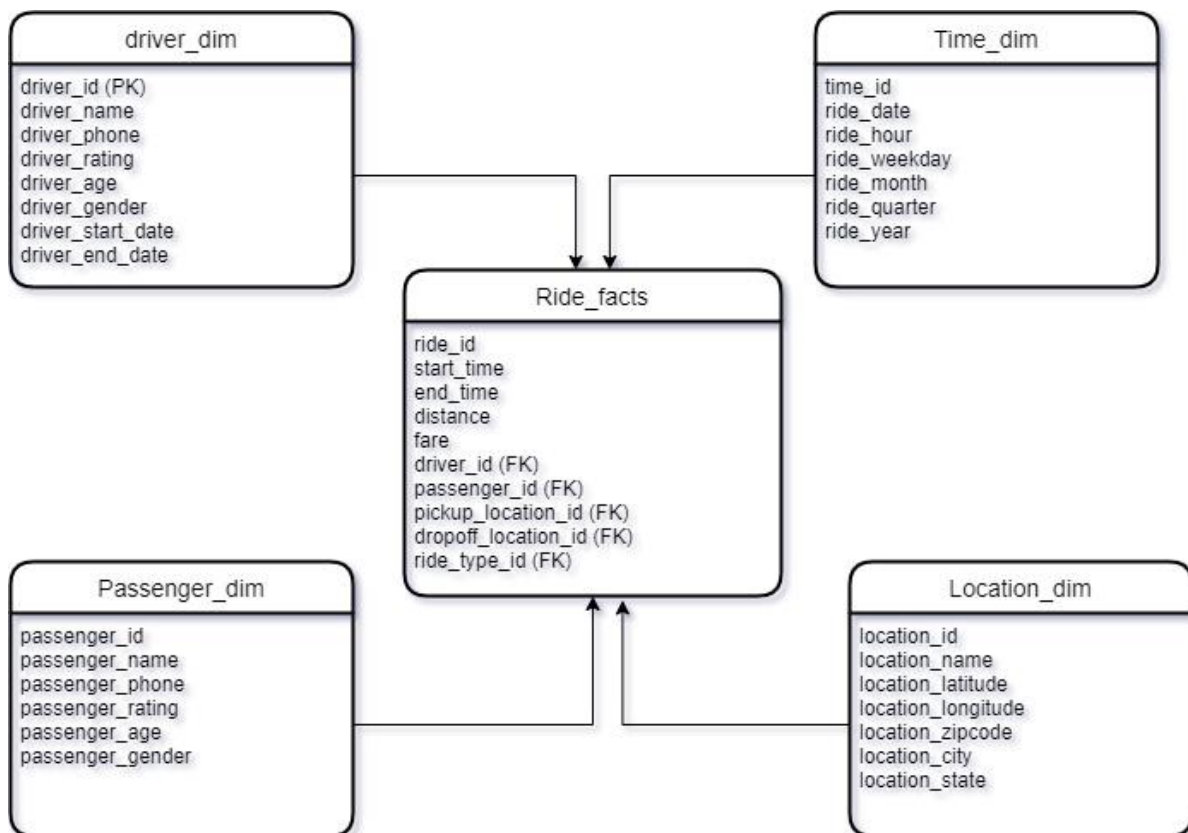
```
SELECT r.restaurant_name, COUNT(*) as total_orders
```

```
FROM restaurants r
```

```
JOIN order_facts f ON r.restaurant_id = f.restaurant_id
```

```
GROUP BY r.restaurant_name
```

### 3.Design a Data Warehouse for cab ride service like Uber, Lyft (Asked in Google for Data Engineer role)



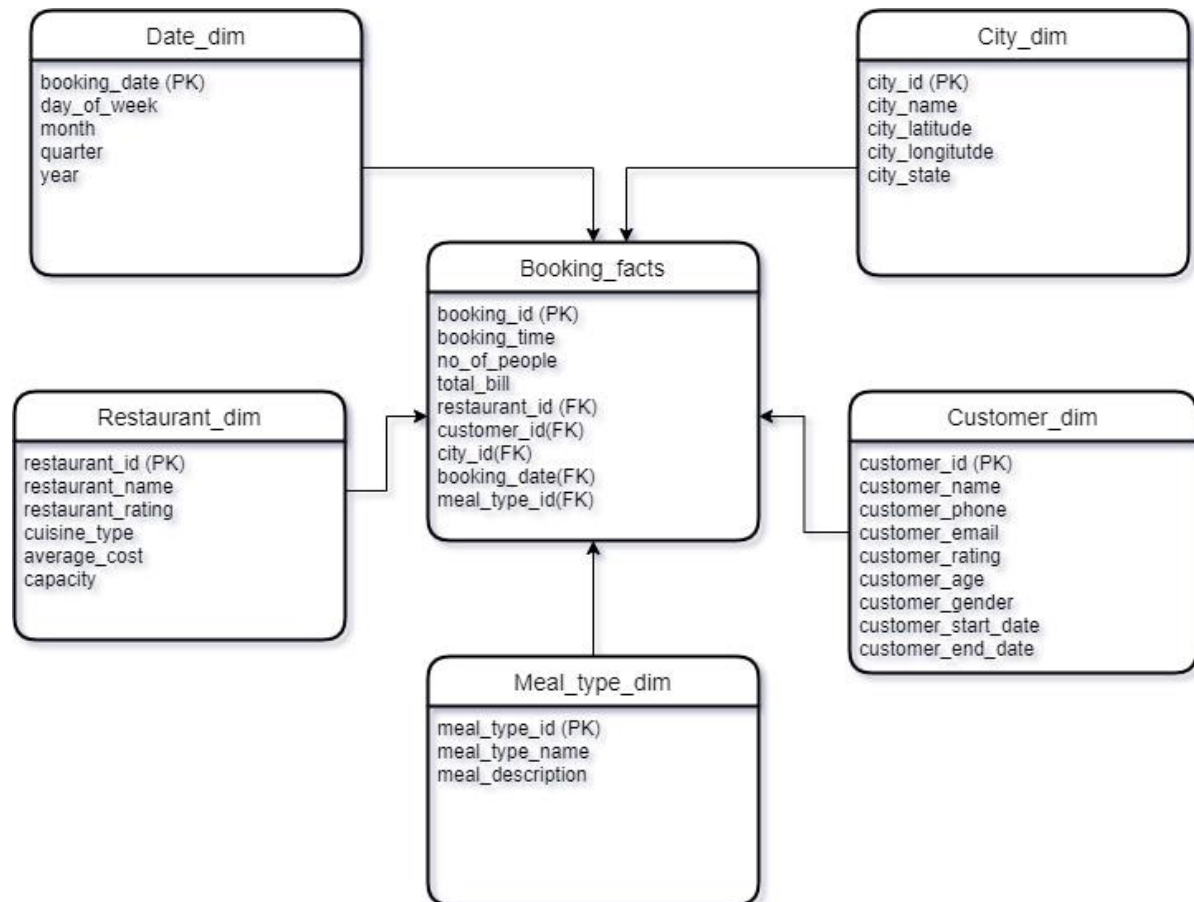
#### Average rating per driver:

```
SELECT AVG(driver_dim.driver_rating) as avg_rating, driver_dim.driver_name
FROM ride_facts
JOIN driver_dim ON ride_facts.driver_id = driver_dim.driver_id
GROUP BY driver_dim.driver_name
```

#### Total number of rides by location:

```
SELECT location_dim.location_name, COUNT(ride_facts.ride_id) as ride_count
FROM ride_facts
JOIN location_dim ON ride_facts.pickup_location_id = location_dim.location_id
GROUP BY location_dim.location_name
```

**4. Design a Data Warehouse for Restaurant table booking app like Dineout (Asked in McKinsey for Consultant Data Engineer role)**



**Average total bill by city:**

```
SELECT city_dim.city_name, AVG(booking_facts.total_bill) as avg_bill
FROM booking_facts
JOIN city_dim ON booking_facts.city_id = city_dim.city_id
GROUP BY city_dim.city_name
```

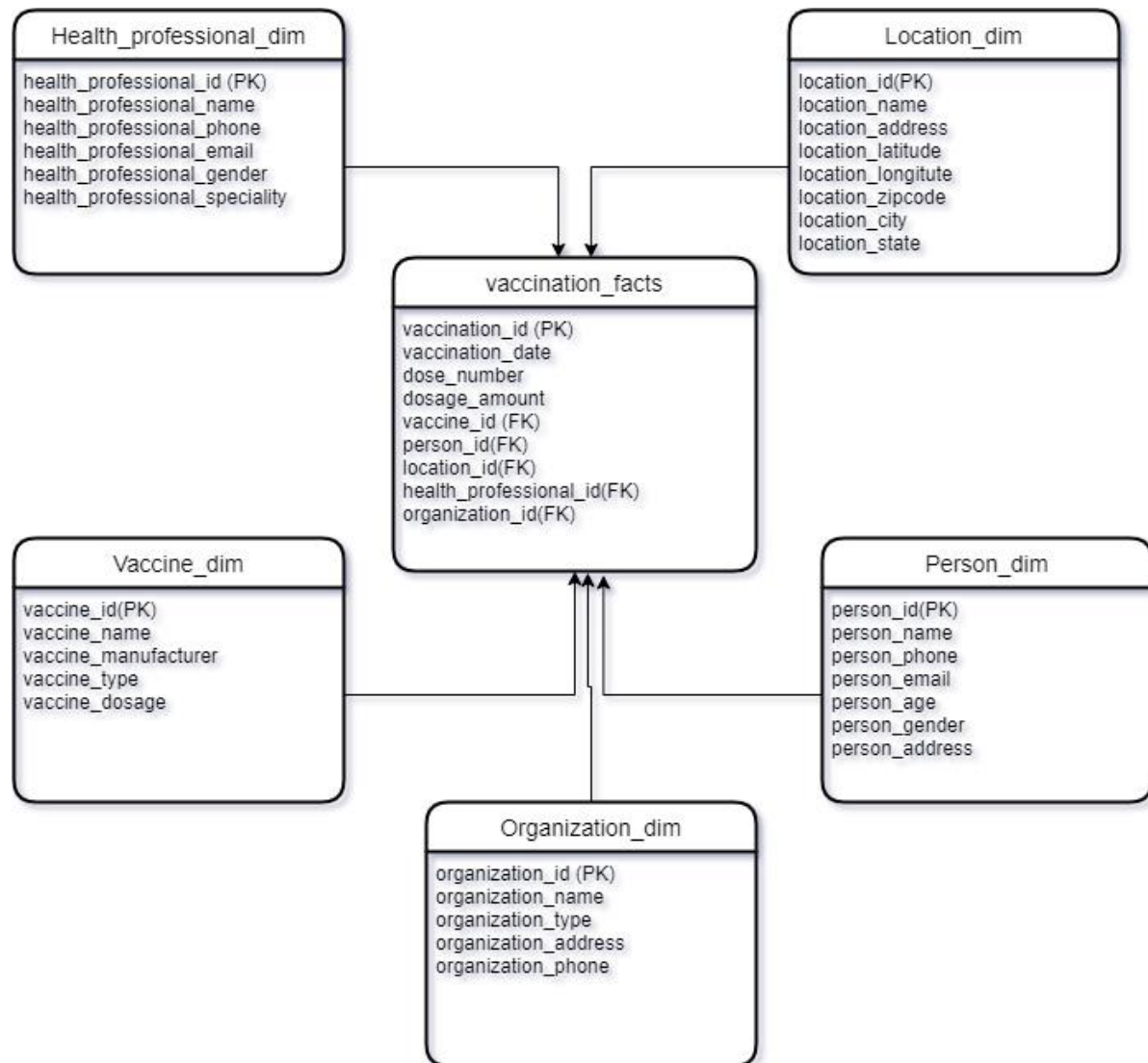
This query will return the average total bill for each city, which can help the business understand which cities are the most profitable.

**Average rating per customer:**

```
SELECT AVG(customer_dim.customer_rating) as avg_rating, customer_dim.customer_name
FROM booking_facts
JOIN customer_dim ON booking_facts.customer_id = customer_dim.customer_id
GROUP BY customer_dim.customer_name
```

This query will return the average rating for each customer, which can help the business understand which customers are the most satisfied.

**5. Design a Data Warehouse for Covid Vaccination Application (Asked in Livspace for Data Engineer role)**



**Average dosage amount by vaccine name:**

```
SELECT vaccine_dim.vaccine_name, AVG(vaccination_facts.dosage_amount) as avg_dosage
FROM vaccination_facts
JOIN vaccine_dim ON vaccination_facts.vaccine_id = vaccine_dim.vaccine_id
GROUP BY vaccine_dim.vaccine_name
```

**Number of vaccinations by location:**

```
SELECT location_dim.location_name, COUNT(vaccination_facts.vaccination_id) as vaccination_count
FROM vaccination_facts
JOIN location_dim ON vaccination_facts.location_id = location_dim.location_id
GROUP BY location_dim.location_name
```