

## **The business outcomes**

### 1. Analyze how much time is spent per ride

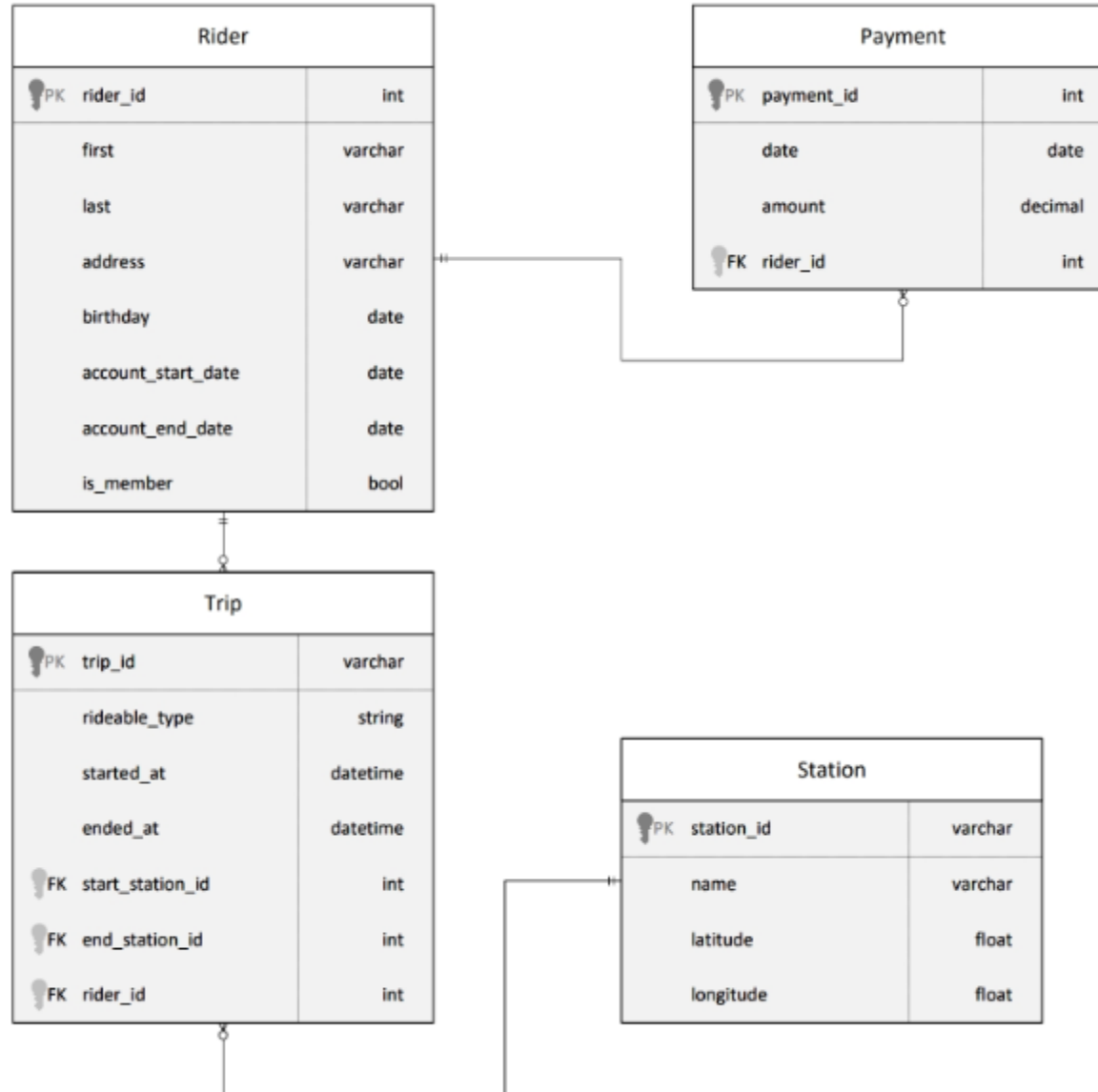
1. Based on date and time factors such as day of week and time of day
2. Based on which station is the starting and / or ending station
3. Based on age of the rider at time of the ride
4. Based on whether the rider is a member or a casual rider

### 2. Analyze how much money is spent

1. Per month, quarter, year
2. Per member, based on the age of the rider at account start

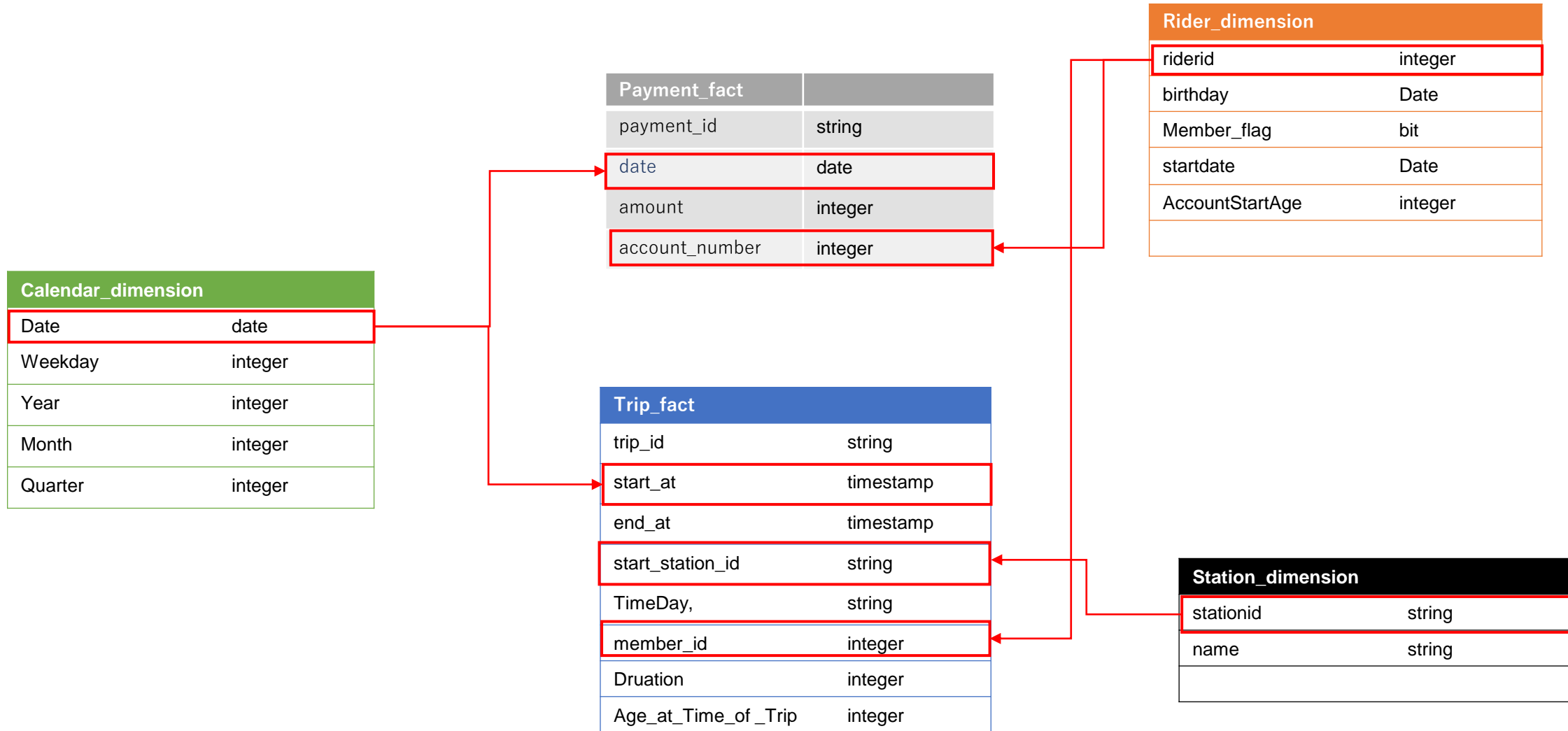
### 3. EXTRA CREDIT - Analyze how much money is spent per member

1. Based on how many rides the rider averages per month
2. Based on how many minutes the rider spends on a bike per month



Relational ERD for the Divvy Bikes Dataset (with fake data tables)

## Star schema based on the relational diagram and the business problems



Analyze how much time is spent per ride

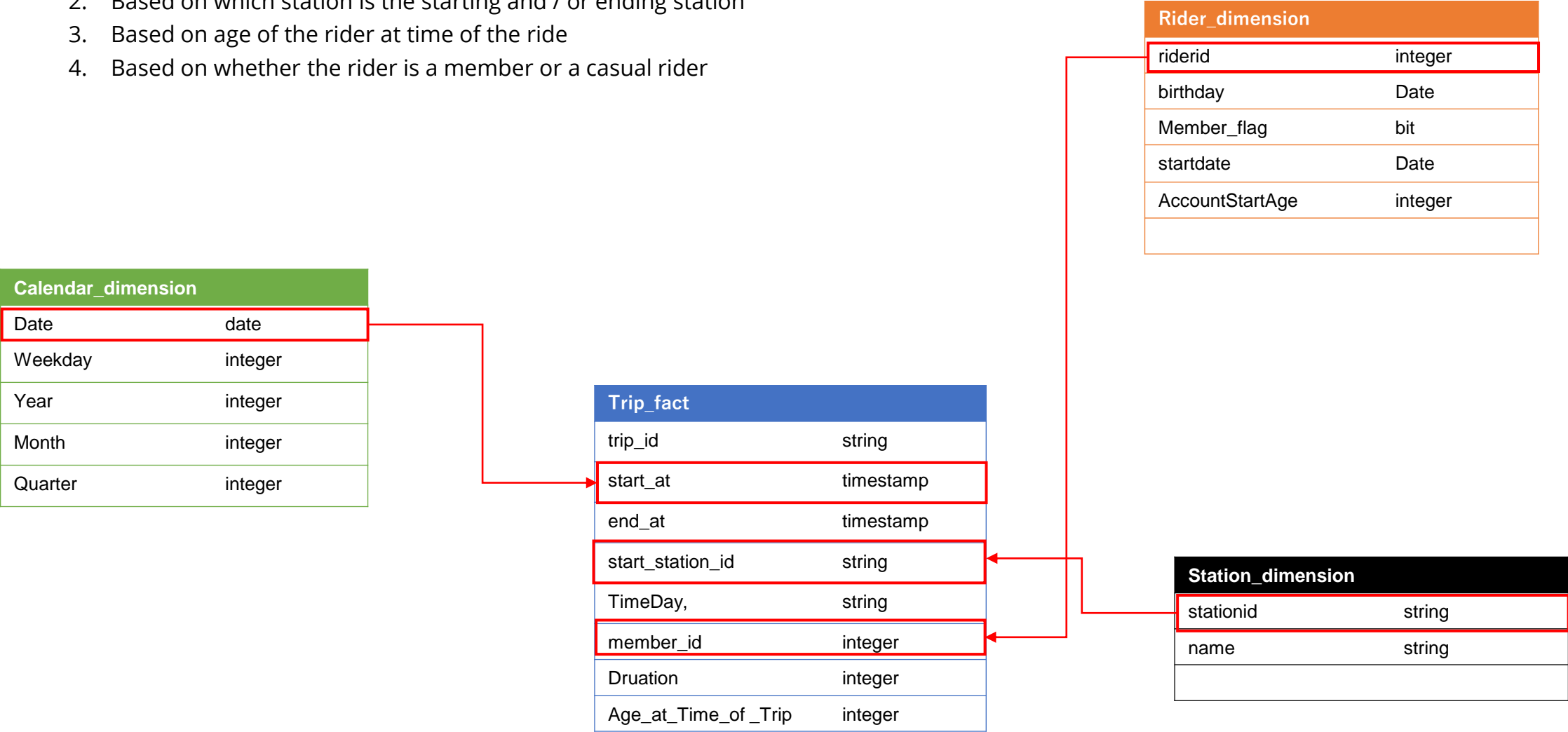
- 1. Based on date and time factors such as day of week and time of day
- 2. Based on which station is the starting and / or ending station
- 3. Based on age of the rider at time of the ride
- 4. Based on whether the rider is a member or a casual rider

Calendar_dimension	
Date	date
Weekday	integer
Year	integer
Month	integer
Quarter	integer

Trip_fact	
trip_id	string
start_at	timestamp
end_at	timestamp
start_station_id	string
TimeDay,	string
member_id	integer
Druation	integer
Age_at_Time_of_Trip	integer

Rider_dimension	
riderid	integer
birthday	Date
Member_flag	bit
startdate	Date
AccountStartAge	integer

Station_dimension	
stationid	string
name	string



Analyze how much money is spent

- 1. Per month, quarter, year
- 2. Per member, based on the age of the rider at account start

Calendar_dimension	
Date	date
Weekday	integer
Year	integer
Month	integer
Quarter	integer

Payment_fact	
payment_id	string
date	date
amount	integer
account_number	integer

Rider_dimension	
riderid	integer
birthday	Date
Member_flag	bit
startdate	Date
AccountStartAge	integer

EXTRA CREDIT - Analyze how much money is spent per member

- 1. Based on how many rides the rider averages per month
- 2. Based on how many minutes the rider spends on a bike per month

Calendar_dimension	
Date	date
Weekday	integer
Year	integer
Month	integer
Quarter	integer

Trip_fact	
trip_id	string
start_at	timestamp
end_at	timestamp
start_station_id	string
TimeDay,	string
member_id	integer
Druation	integer
Age_at_Time_of_Trip	integer

Payment_fact	
payment_id	string
date	date
amount	integer
account_number	integer

member_behavior	
member_id	
CountTripPerMonth	
SpentTimePerMonth	

