

The business outcomes

1. Analyze how much time is spent per ride

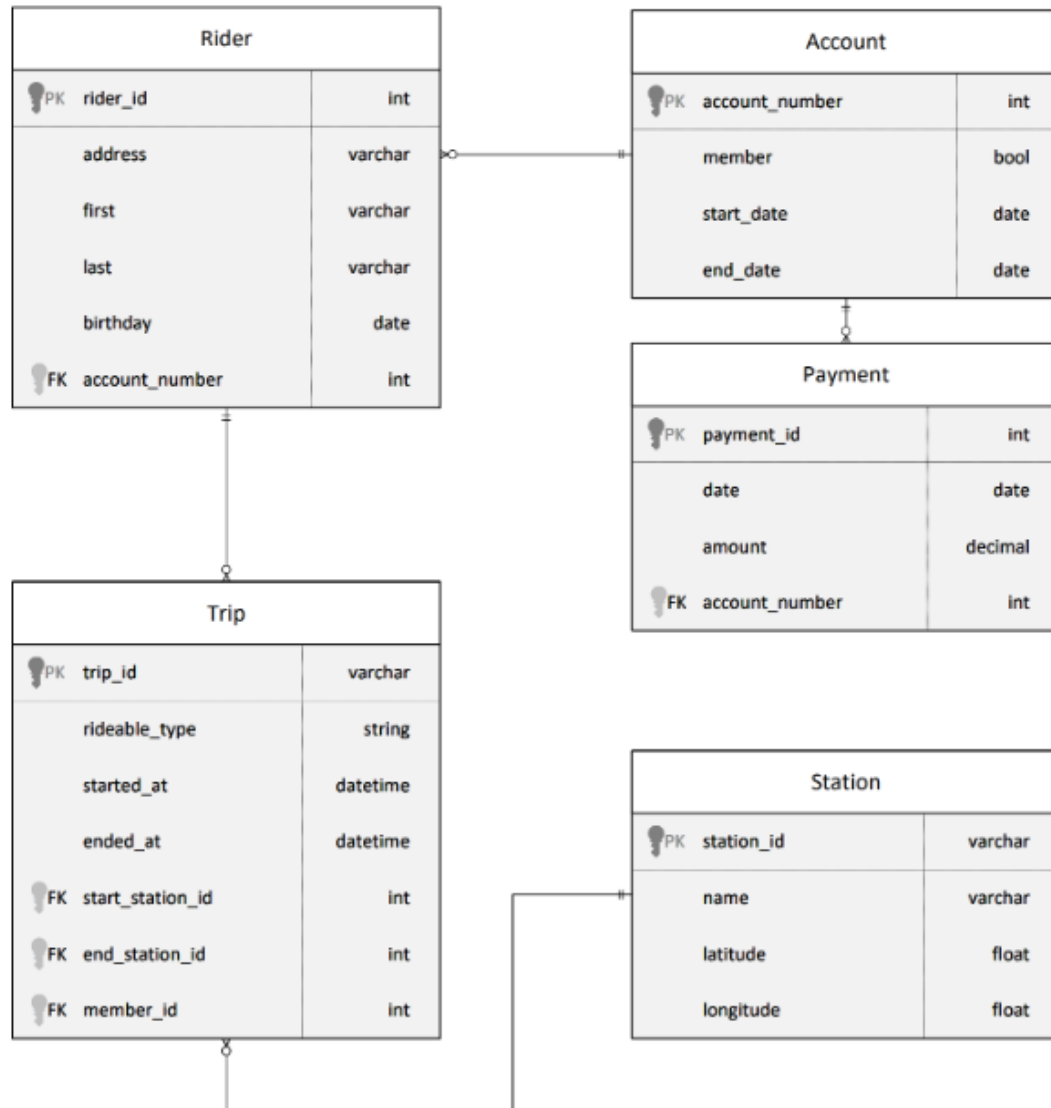
1. Based on date and time factors such as day of week and time of day
2. Based on which station is the starting and / or ending station
3. Based on age of the rider at time of the ride
4. Based on whether the rider is a member or a casual rider

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 Bikeshare Dataset (with fake data tables)

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	
Date	Date
Day of week	TINYINT
Year	Year
Month	CHAR(6)
Quarter	CHAR(6)

Trip	
trip_id	nvarchar(4000)
rideable_type	nvarchar(4000)
start_at	nvarchar(4000)
end_at	nvarchar(4000)
start_station_id	nvarchar(4000)
end_stationid	nvarchar(4000)
member_id	bigint
SpentTime	

Rider	
riderid	bigint
address	nvarchar(4000)
firstname	nvarchar(4000)
lastname	nvarchar(4000)
birthday	nvarchar(4000)
member	bit
startdate	nvarchar(4000)
enddate	nvarchar(4000)
age	

Station	
stationid	nvarchar(4000)
name	nvarchar(4000)
latitude	float
longlitude	float

Aggregate Average and sum for **SpentTime** base on each item

- TimeDay
- WeekDay
- StartStation
- EndStation
- AgeYear
- Member_flag

TimeSpentPerRide
trip_id
SpentTime
TimeDay(start)
WeekDay(start)
StartStation
EndStation
AgeYears
member_flag



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	
Date	Date
Day of week	TINYINT
Year	Year
Month	CHAR(6)
Quarter	CHAR(6)

Payment	
payment_id	nvarchar(4000)
date	nvarchar(4000)
amount	nvarchar(4000)
account_number	nvarchar(4000)

Rider	
riderid	bigint
address	nvarchar(4000)
firstname	nvarchar(4000)
lastname	nvarchar(4000)
birthday	nvarchar(4000)
member	bit
startdate	nvarchar(4000)
enddate	nvarchar(4000)

Aggregate Average and sum for **amount** base on each item

- Year
- Quarter
- Month
- accountStartAge
- Account_number

MoneySpentPerRide
account_number
amount
quarter
AccountStartAge
month
year

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

Payment	
payment_id	nvarchar(4000)
date	nvarchar(4000)
amount	nvarchar(4000)
account_number	nvarchar(4000)



Calendar	
Date	Date
Day of week	TINYINT
Year	Year
Month	CHAR(6)
Quarter	CHAR(6)

Trip	
trip_id	nvarchar(4000)
rideable_type	nvarchar(4000)
start_at	nvarchar(4000)
end_at	nvarchar(4000)
start_station_id	nvarchar(4000)
end_stationid	nvarchar(4000)
member_id	bigint
SpentTime	

member_behavior	
member_id	
CountTripPerMonth	
SpentTimePerMonth	

Aggregate Average and sum for **total_payment** base on each item

- CountTripPerMonth
- SpentTimePerMonth

SpentPerMember	
account_number	
total_payment	
CountTripPerMonth	
SpentTimePerMonth	