

Team Members:

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Core Questions:

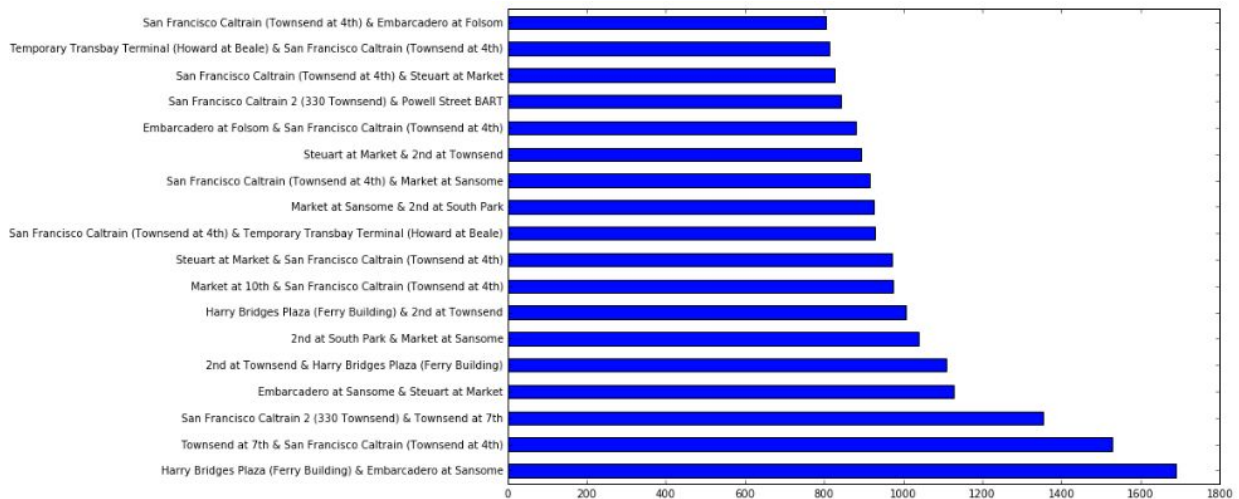
- “What could this bike sharing business do with this data?”
 - Overall bike usage
 - Subscriber routine
 - Customer routine
 - Bike wear-and-tear
 - Migration behavior
 - Do stations run out of bikes? Have too much of a surplus?
 - Does the bike company need to shuttle bikes around to make sure each station is balanced appropriately?
 - When do riders go over 30 minutes? (Premium time frame)
 - What impact does weather make?
 - Are there times when it makes sense to shut down specific stations?
 - How does usage change? “Do we make more money due to extended trips?”
 - Do special events radically change business? How to accommodate?
 - Business data
 - Where do subscribers come from?
 - Should the company try other timing/pricing models to increase bike usage? Or to deal with peak hours? Should there be surge pricing?
 - Do other businesses impact how people use bicycles? (Trader Joes/Whole Foods)
 - Did a new company or a lapsed company impact behavior in any way?
 - Is there a time in the day where we should surge charge? Is 30 minutes the correct amount of time for both bicyclists and the business?
 - Behavioral change over time -- did this happen? Did it impact the business?
 - Are there investments the business should make based on this data?
 - Should they build more stations?
 - Should they have less stations?
 - Are the locations correctly placed?
 - Is there data the business is missing that could give it more agency over growth and success?

Initial Analysis:

df.head()

	TripID	Duration	StartDate	StartStation	StartTerminal	EndDate	EndStation	EndTerminal	Bike#	SubscriberType	ZipCode	full_route
0	432946	406	2014-08-31 22:31:00	Mountain View Caltrain Station	28	2014-08-31 22:38:00	Castro Street and El Camino Real	32	17	Subscriber	94040	Mountain View Caltrain Station & Castro Street...
1	432945	468	2014-08-31 22:07:00	Beale at Market	56	2014-08-31 22:15:00	Market at 4th	76	509	Customer	11231	Beale at Market & Market at 4th
2	432944	534	2014-08-31 22:06:00	Beale at Market	56	2014-08-31 22:15:00	Market at 4th	76	342	Customer	11231	Beale at Market & Market at 4th
3	432942	1041	2014-08-31	Embarcadero at Sansome	60	2014-08-31	Steuart at Market	74	603	Customer	94521	Embarcadero at Sansome & Steuart at

Count of specific routes taken from March 2014 - August 2014:



Additional Resources:

- Mapping module for SF: <https://pypi.python.org/pypi/gmplot/1.0.5>
- Bicycle routes SF: <https://data.sfgov.org/Transportation/SFMTA-Bikeway-Network/t6vv-tjkd>
- Bicycle crash reports (2012): <https://gist.github.com/pranavr/11348749>
- Event schedules: SF Giants