**A concise statement of the goal of your project**

* Improve reporting and compliance rates for San Francisco’s Existing Commercial Buildings Energy Performance Ordinance.

**What question or questions you hope to answer**

* What is the aggregate electric and natural gas meter threshold for:
  + All commercial buildings in San Francisco?
  + All buildings subject to the ordinance?
  + All buildings that have complied with the ordinance?
  + All buildings that have not complied with the ordinance?
* For every building that data is available, how many meters does it have?
* What’s the total kWh accounted for at each meter threshold?
* What’s the total square footage accounted for at each meter threshold?
* What is the likelihood that a particular building will comply with the ordinance?

**What data set you plan to use and how you will obtain the data**

* PG&E commercial energy use data
  + Service addresses
  + Electric and gas meter numbers
  + Account IDs
  + Usage
* Existing Commercial Buildings Energy Performance Ordinance Complete Building Report
* San Francisco’s Planning Department’s:
  + Land use database
  + Building footprint layer in GIS
  + Parcel layer in GIS
  + Creating various new layers in GIS

**What type of machine learning problem this is (from our 2x2 matrix)**

Supervised categorical

**Why you chose this project**

* Currently, whole-building energy use data from utilities is not available to the public due to the California Public Utilities Commission’s 15/15 rule. The rule prohibits the release of any aggregated data unless it is made up by at least 15 customers and no single customer accounts for more than 15% of an assigned category.
* This is a difficult situation when trying to obtain whole-building energy use data for the commercial building landscape of SF.
* So, I’m working on formulating a quantitative argument with my team to bring to state legislature that will necessitate the disclosure of aggregated energy use data by PG&E at a lower meter threshold, making compliance with the city’s energy efficiency policy more convenient. My aim is transparency and accountability for the way in which we, and our buildings, consume energy.
* SUMMARY
  + Compliance rates low because data access is difficult.
  + Working on a quantitative argument with my team to lower the aggregate meter threshold in order to streamline data access from utilities.
  + Data access = more buildings eligible for reporting
  + More buildings that report = more transparency into our consumption behavior