**Project 4 (alternative proposal)**

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**Project Topic: Identifying Lifestyle Patterns that can be used to Predict Sleep Disorders**

For this project we will use a data set of 374 data points composed of lifestyle patterns, subject data, and whether that individual has a sleep disorder or not.

1. First, through the ETL process, we will transform the data using Python/Pandas, create a SQL (SQLite or Postgres) database and load the data.
2. We will then read in the data from the database to build and train a Supervised Classification model that will predict whether an individual has a sleep disorder (Scikit-learn). Additional models may be explored as well.
3. We will then explore this data further with Tableau visualizations.
4. Given time, we will create an interactive website that connects with the model and users can use drop-down menus to select their lifestyle and personal info based off the top features used in our model. The model will take in the user data, then deliver a response of whether the subject is at risk for a sleep disorder. This site will additionally include our Tableau visualizations, or visualizations created with Javascript/Plotly.