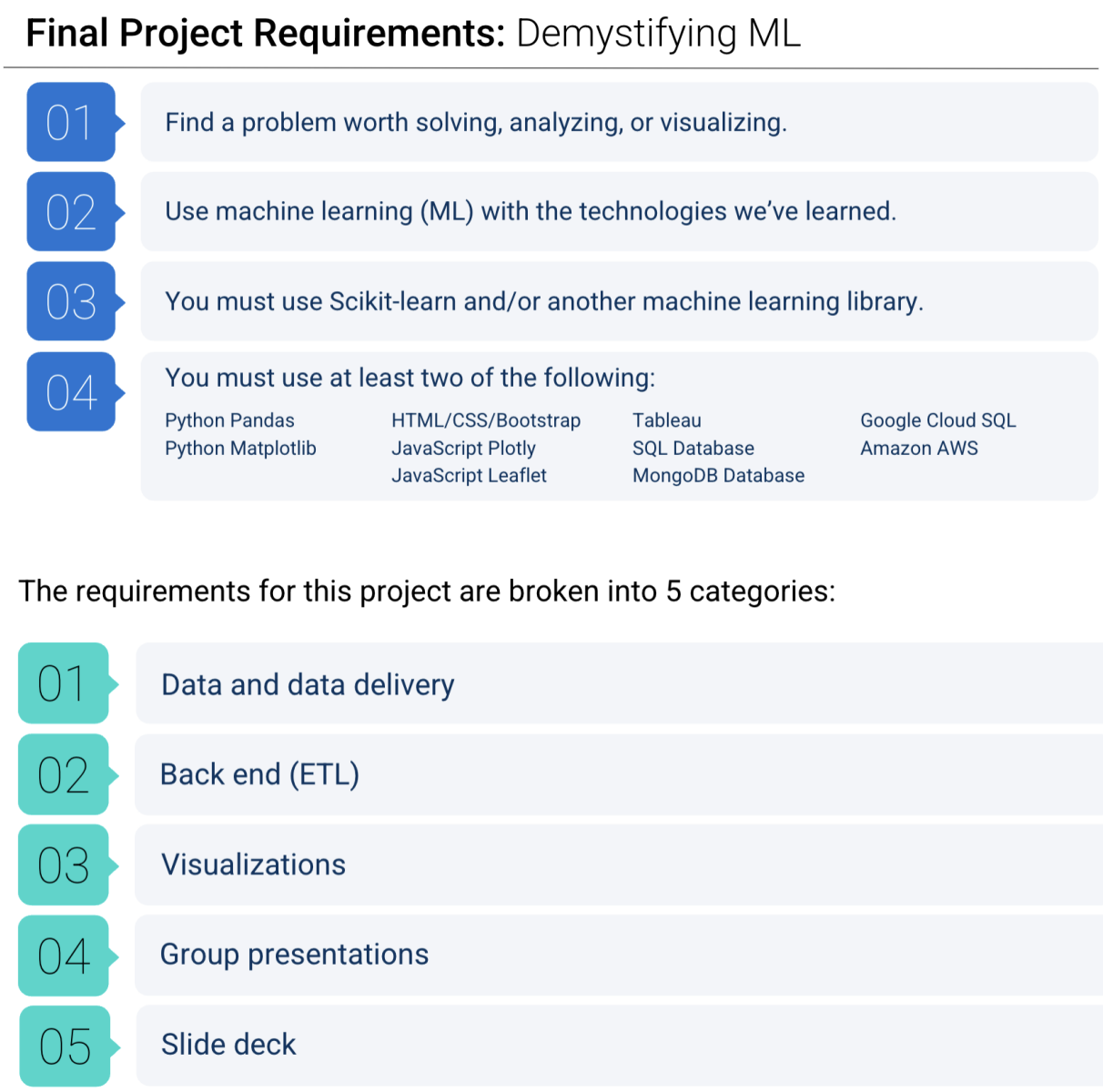
Project 4 [Which food do Americans prefer: Italian or Mexican food?]



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Data :

https://docs.developer.yelp.com/reference/v3_business_search (Yelp API)

Yelp API restaurant data (Project 3 data):

- What could we predict? Predict price? Predict rating by cuisine.
- Can use location data to make robust visualizations through Tableau and/or JavaScript Leaflet
- Analyze pricing trends?
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- We can build a predictive model to estimate the price range of a restaurant based on various features such as location, cuisine type, customer reviews. This can help users filter restaurants by their budget.
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- We can create a model that predicts a restaurant's rating based on its cuisine type

Predicting Seasonal Trends:

- Analyze review data to predict seasonal trends in customer preferences and behaviors for businesses in various industries.

Data Description:

Analyzing Yelp restaurant data by coastal (CA, NY) to predict seasonal trends in customer preferences and behaviors for businesses in various industries. In addition to that training the two different models predicting restaurant rating and compare accuracy.

Task Breakdowns:

- Vidhya: Extracting and cleaning the data
- Wook: Data Visualization
- Joe: Unsupervised machine learning model
- Nilusha: Tableau visualization
- Caleigh: Supervised machine learning model

Data Preparation: Extracting data from the Yelp API under specified location parameters. Converting the price column to integers. Cleaning and converting data to a Pandas data frame.

Data Visualization: Using Tableau we can visualize locations of restaurants, possibly filter and alter the visualizations based on rating, price, etc.

Machine learning Modeling: Using both supervised and unsupervised learning to train our data to predict a restaurant's rating based on price, location, cuisine and customer reviews.