

Cocktail Recommendation System



When you go to
the bar always
order the same
drink?



We have an
option for
you!





Business Problem

To build a *recommendation system* based on drink and cocktail recipes from around the world.

Machine Learning Problem

ONE OF THE CENTRAL AREAS OF
RESEARCH IN ML



Recommendation systems are a very well studied area of Machine Learning, generally relying on unsupervised learning techniques or reinforcement learning

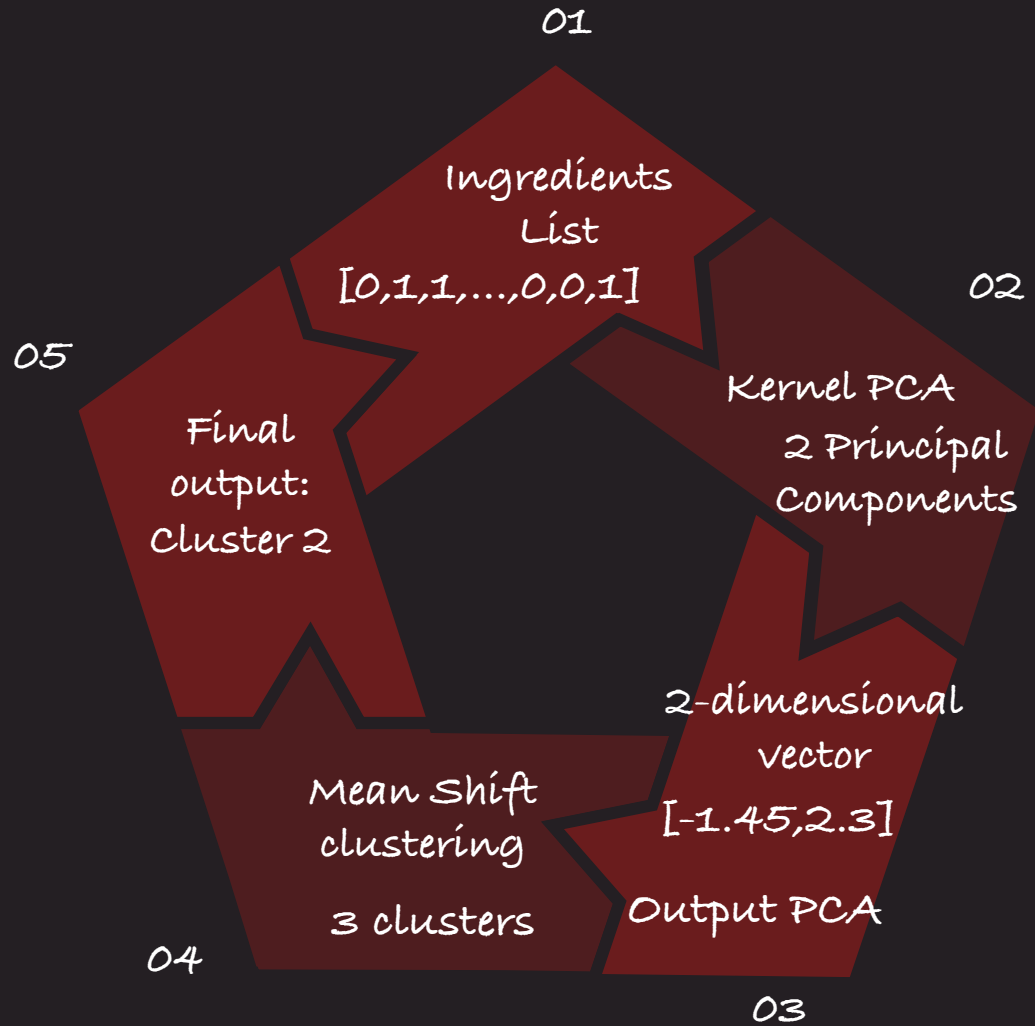
CLUSTERING RECOMMENDATION IS
WELL STUDIED



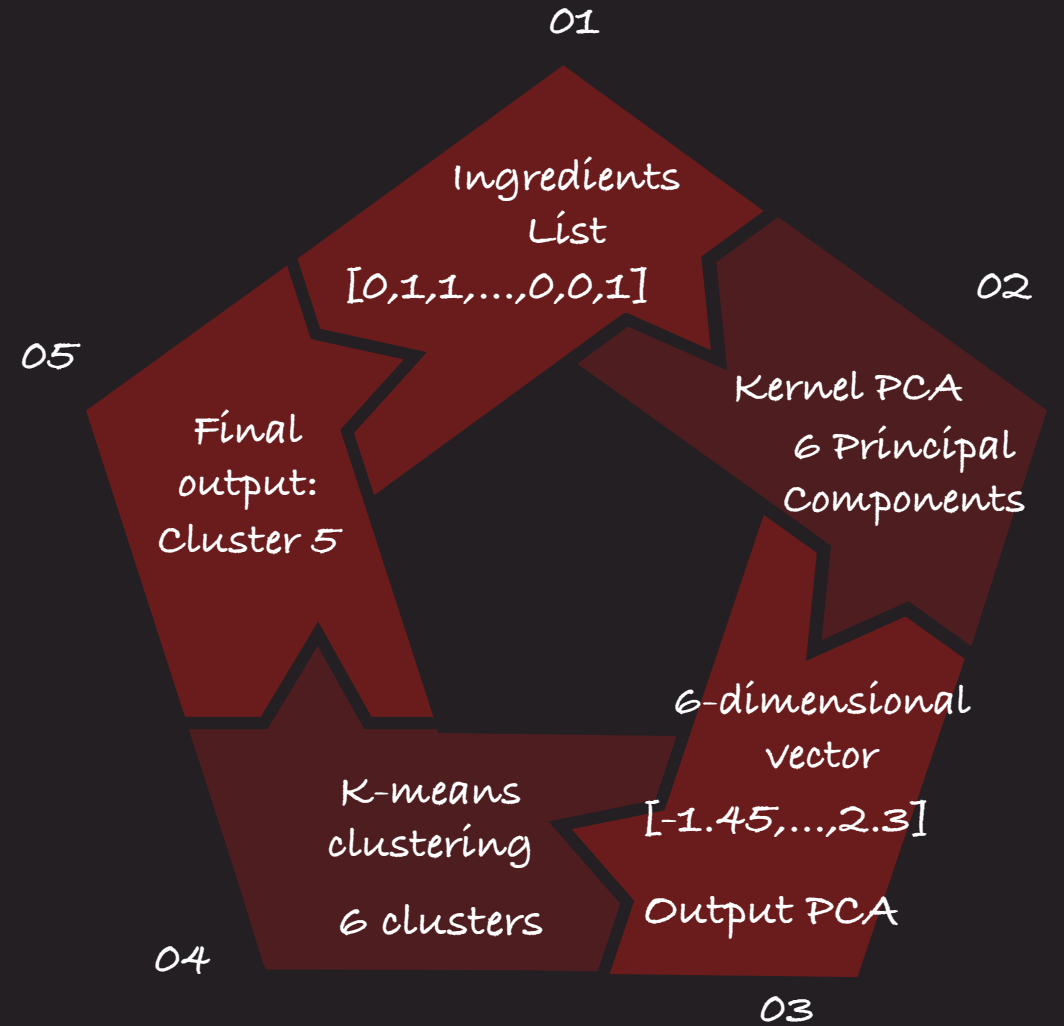
For our specific problem, we implement two different clustering models to generate the predictions: K-Means and Mean-Shift



Machine Learning Components



Mean Shift
clustering



K-means
clustering

Data Ingestion and Feature Engineering



DATA SOURCES

We call TheCocktailDB API, the output is a JSON object with the information that we requested.



CLOUD STORAGE

We access the extracted data in Big Query, where we build a table that stores the info.

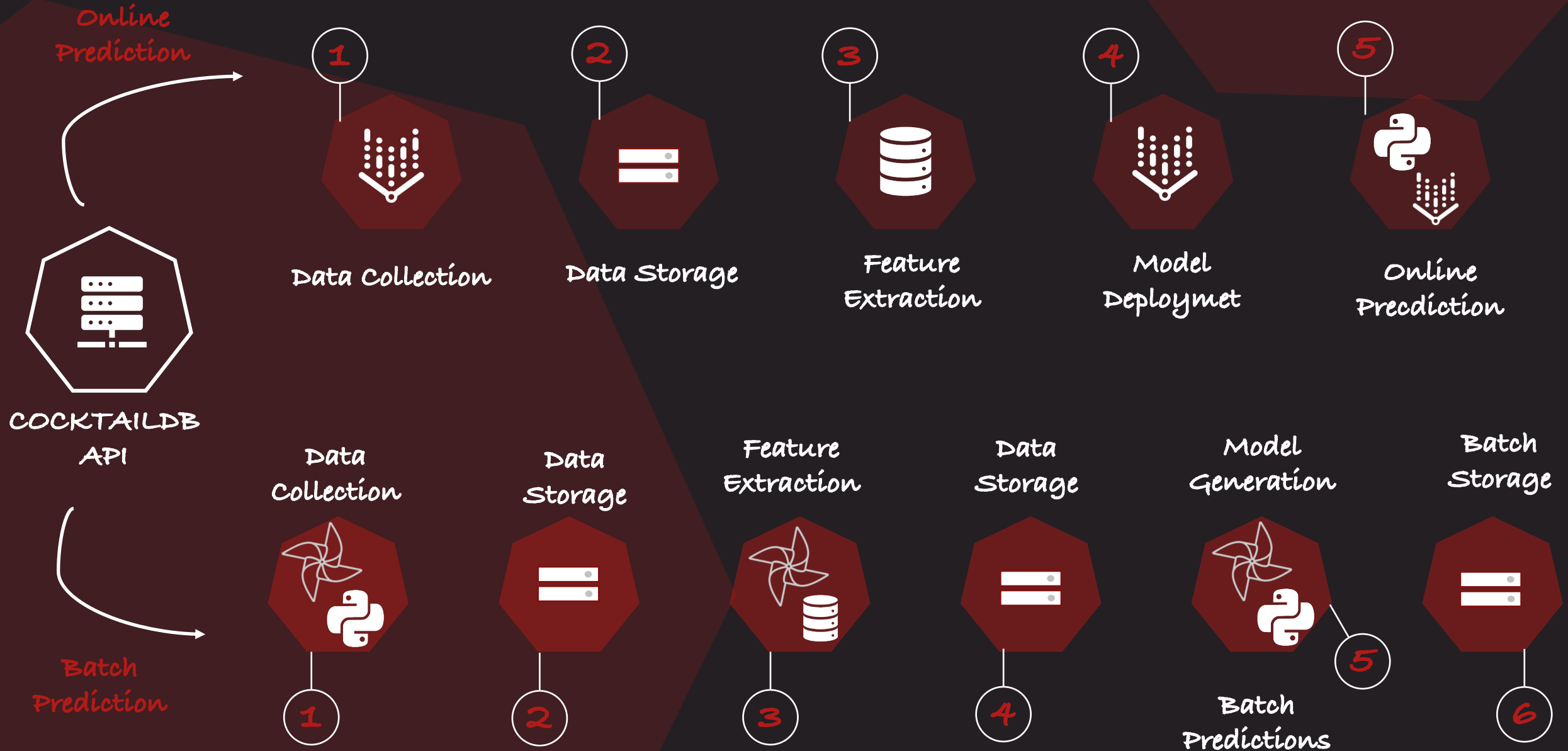


DATA PROCESSING

After our initial data load, we manipulate and transform the data in SQL as a follow up step to be able to use it.

The first thing we do is that we turn the cocktails into an occurrence matrix for ingredients, 0 if it does not occur in the cocktail, 1 if it does.

System Design





thank
you