## **Recipe2Cuisine**

#### **Please limit yourself to 4 hours time!**

#### **Please place your submissions to the Submissions sub-folder with the naming convention: lastname\_firstname.**

## **The Goal**

You've just joined the data team at an online publishing company. One of your verticals is a food publication. A product manager on your team wants to build a feature for this vertical that enables users to query by cuisine, not just by ingredients. Most of your recipes are unlabeled, and it's infeasible to label them by hand. Luckily, you have [a small training set](https://drive.google.com/open?id=1SZ3ZtQDEqbSsQ57Qs4nRRrKDRMi-rW8u) of about 10,000 recipes with labeled cuisines.

Design and execute a method to predict the cuisine of a recipe given only its ingredients. How could you design this to be robust enough to understand similarities / substitutions between ingredients? For each major cuisine, what are the driving ingredients that characterize it?

Your product manager indicates a likelihood that you will only need to write a guideline for an outsourced team to hand label the remaining corpus. How would you go about writing this guide for a few major cuisines?