# **Background & Current Conditions**

#### **Current Situation**

Cooks/meal planners struggle to find definitive meals to cook on a day-to-day basis. The process of meal planning can be very challenging and overwhelming for cooks who are looking to make a change in their diets/are starting out/have a vast amount of ingredients and appliances with no clear/easy choices. The process of meal selection can follow a path like the following: Conduct inventory of what the cook as available, conduct research to determine a subset of recipes that are of interest, cross reference the subset of recipes' ingredient list and appliance requirements to filter out the viable options, and finally arbitrarily select a recipe. While there are still aspects of the situation that are unclear, with consultation from domain experts, this current situation can start to provide insight into what the domain looks like.

#### **Problems**

Cooks cannot make clear choices of what to make because there are too many variables to consider when making a meal. These limitations are, but not limited, to their pantry(ingredients/appliances), time constraints(prep/cook). Even after narrowing down a list of viable recipes, sometimes there is an ambiguity to the final selection of a recipe to be prepared.

#### Needs

There needs to be a way to find recipes that meet adjustable criteria provided by a cook.

The process of meal planning (pantry sorting/recipe finding/scheduling the meals to be cooked) needs to be optimized.

The ambiguity of recipe selection needs to be diminished in some way.

The cook should be able to clearly see why a recipe was recommended to them.

#### Ideas

Create a system that can take the cooks' pantry, time constraints, along with preferences (calorie count, flavor profiles, difficulty level, popularity) to generate a list of possible recipes. Additionally allow the possibility for meal planning on a larger scope to potentially allow more clarity on which choice is the best, which can help to reduce the ambiguity of the final selection.

### **Goal Statement & Target Condition**

Enhance the visibility of the criteria used in the selection of a recipe by providing a step-by-step process that will lead the cook to an optimal recipe

## **Cause Analysis**

### Why?

There are too many variables to consider when making a meal.

#### Why?

It is an extensive and time-consuming process that contains many layers.

#### Why?

There is no way to clearly decide what recipe to select aside from using arbitrary selection, unless there is a degree of filtering applied.

#### Why?

It can be hard to determine what filters to apply aside from time/viability that will leave me satisfied with my selection.

### Why?

There is a desire to be certain that the recipe that was chosen is the best choice to make for a given moment.

# Implementation Plan &

### Countermeasures

Create a web application that can guide a cook through a step-by-step workflow that will provide them with a narrowed down selection of recipes; these recipes should meet all the criteria specified by the cook.

Establish the criteria that a cook can apply to obtain a listing of recipes.

#### Check and Standardize

It is important to check if the cook understands why a given recipe was recommended to them. The use of surveys/questionnaires can be used to gain feedback from the cooks.

This web application can act as a base for future applications that relate to the meal preparation process, such as but not limited to a walkthrough of the actual recipe preparation, a forum that allows for cooks to interact with one another and share their recommended recipes.

It is important to standardize the way the cooks look for and see recipes.