

Goal

- Our goal is to make your experience of choosing your next meal, and cooking it, to be as pleasant as possible.

Motivations and Objectives

- Motivations
 - What are you going to make for dinner? Lunch? Tomorrow's dinner?** Sometimes one finds it difficult to choose what to cook and figure out the instructions. One also runs the risk of finding out later that one doesn't have the required ingredients in the first place.
 - We want choosing what meal to eat to be a simpler process.
- Objectives
 - Create an easy-to-use, informative Android app that people can use to **choose which recipe to cook from, based on the ingredients they already have**
 - Keep track of the ingredients users have in their pantry, and automatically deduct them when a recipe is chosen to cook from.**
 - Allow users to add and remove pantry items at will.

Research Challenges

- Figure out how to store ingredients, quantities in the app/device
- Figure out how to generate and display recipes quickly and accurately
- Figure out how to allow the user to easily modify their pantry items

Acknowledgement

We would like to thank Professor Maria Striki for her guidance and encouragement.

Methodology

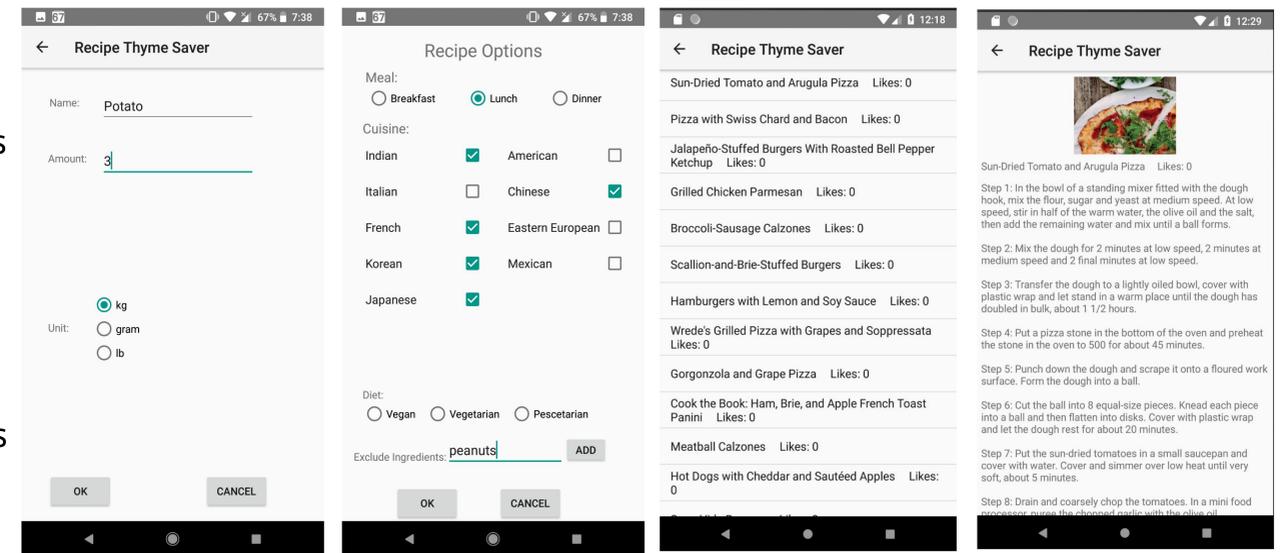
- Store pantry ingredients, quantities in a text file. Allow the user to modify pantry information using UI.
- Send pantry information to Spoonacular API to receive recipe information back.
- Why Spoonacular?
 - Low-cost access
 - Easy to input information
 - Variety of parameter options
 - Detailed output



- Receive recipe information from Spoonacular API in JSON format. Parse JSON response, insert into user-friendly template to present a list of recipes to user.
- Allow user to choose a recipe to cook, which will bring up a screen with detailed instructions on how to cook the meal. Also, automatically update the pantry by deduct the ingredients and quantities used in the recipe.
- Project was built in Android (Java + XML) using the Android Studio IDE. The application can be run on any standard Android device.

Results

- Add items to pantry
- Select recipe options or restrictions
- Display a list of possible recipes
- Display chosen recipe's details and step-by-step instructions



(1)

(2)

(3)

(4)

References

- <https://developer.android.com/guide/index.html>
- <https://market.mashape.com/spoonacular/recipe-food-nutrition>
- <https://spoonacular.com/api/docs/recipes-api>