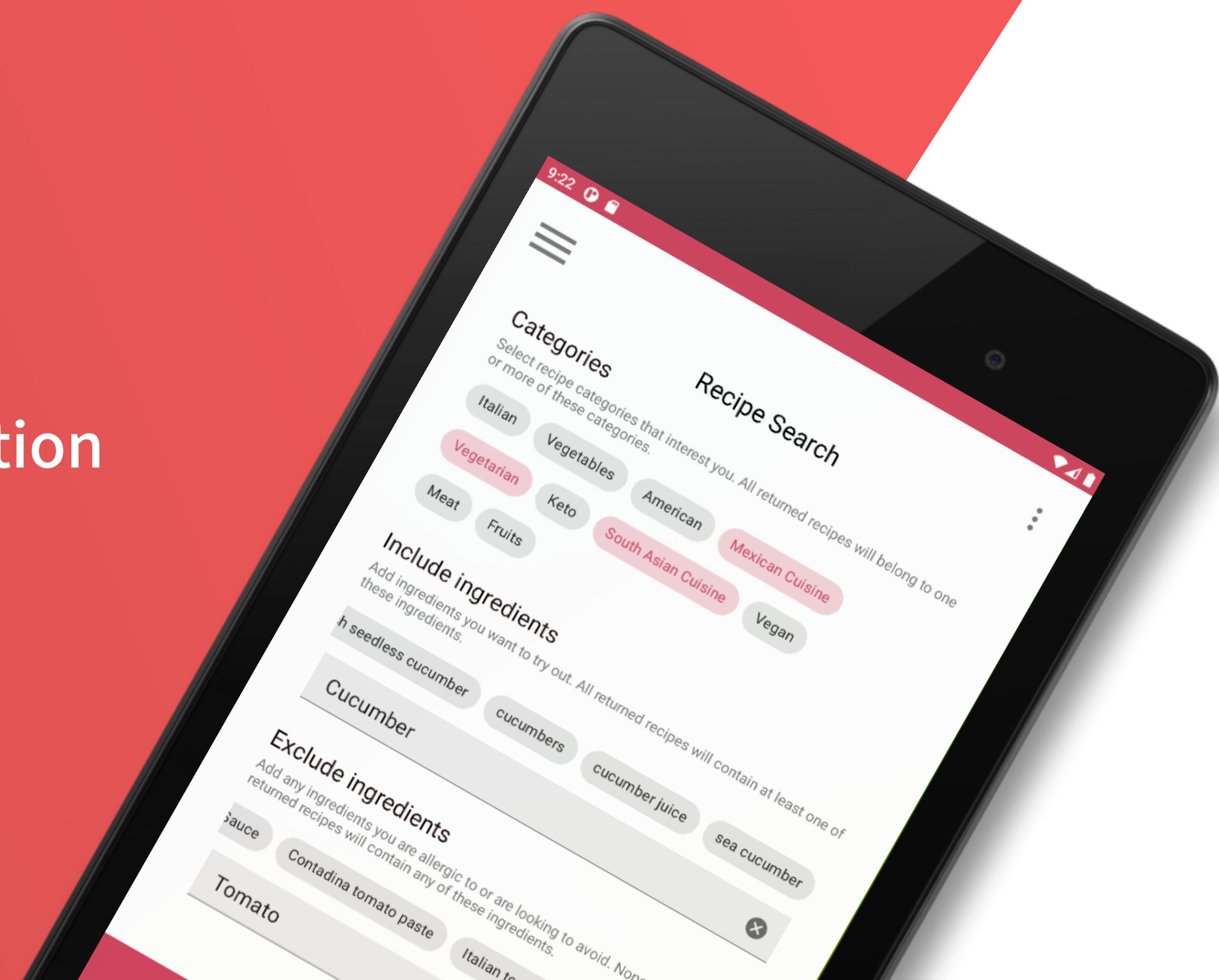


Mealgo

Meal & Recipe Recommendation

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Dietary restrictions make it hard to find new meals

When making changes to one's diet, whether that be due to a medical condition or just to be healthier, finding new meals is difficult. Where do you even start?

Satisfying nutrition goals doesn't have to be costly

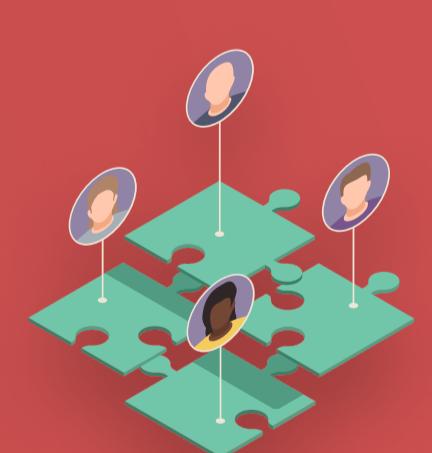
While looking for healthy meal options can be achieved with meal planners like **Yummly**, **PlateJoy**, and **Paprika**, these services are rarely personalized and never consider the high costs associated with healthy eating. But it doesn't have to be this way...

Find delicious recipes to fit your goals!

Mealgo is a mobile Android application built in Java. It aims to provide intuitive filtering options to find recipes users will love. Mealgo looks at ingredients and nutrients as the first steps to finding delicious and healthy options...

Personalized meal recommendations

In the future, beyond just allowing for easy searching of over 500,000 recipe options, Mealgo hopes to provide recommendation that is personalized to each user. We additionally hope to provide meal budgeted meal planning.



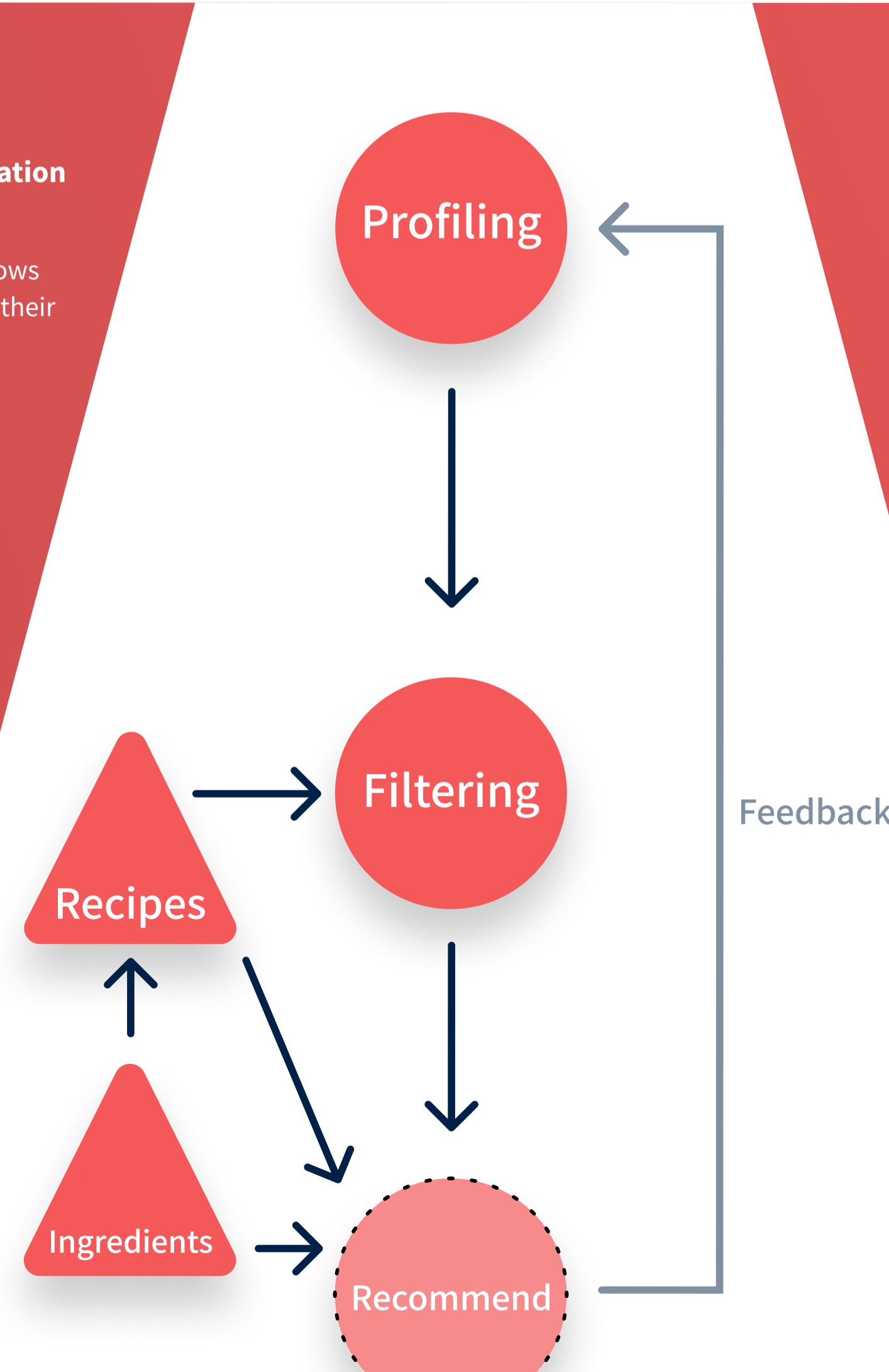
- Input relevant health and nutrition information (e.g., allergies)
- Registered users save their data on the cloud. Allows users to save recipes they like for later, as well as their food preferences.



- Implemented with **Google Firebase Firestore** servers
- Database of over 8,000 ingredients with detailed nutrition information.
- Nutrition information is obtained from the **USDA Nutrition Database**.



- Over 500,000 recipes, collected from **Food.com**
- Detailed nutritional data, ingredient information, preparation time, preparation instructions, images, and more.



- Users are able to query the database of recipes

- Filter by category
- Filter by included ingredient
- Filter by excluded ingredient

- Output a list of matching recipes with additional filtering options.



- Users are able to rate recipes they like and store those that they've tried

- Mealgo uses collaborative filtering to recommend new recipes based on other, similar user feedback.

- Mealgo aims to consider cost of preparation by optimizing meal combinations.
- Fetches up-to-date pricing data from grocery store APIs or by web-scraping ingredient prices.



Given a number of days and a budget:

- provides a set of recipes
- fits nutritional and monetary costs
- Uses a Knapsack-style optimization algorithm.

