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CSE 403 AA
Project Proposal

Cook-E

Vision

Our product is an Android application to help people cook more time efficiently. When cooking, it is common to make multiple foods at the same time. The application will provide access to interactive recipes that can be scheduled and done simultaneously, saving time and synchronizing food completion. The application is for anybody that likes to cook and wants to do it more quickly.

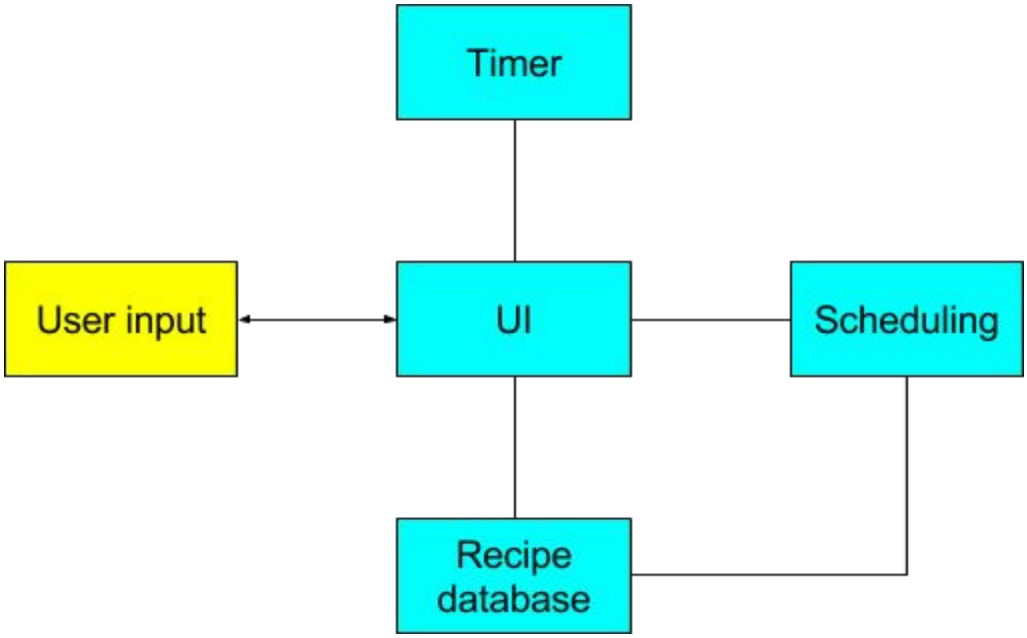
Today there are many cooking applications on the Android app store, but it does not seem like there are any that are focused on simultaneous cooking in order to save time. Some examples of these applications are My Cookbook, Cookpad, and Food Network In the Kitchen. Our cooking application is different and has value because it focuses on the timing aspects of cooking. This is something that the others do not seem to be doing. We think that this is an underestimated aspect and that more and more people are looking for the fastest way to make delicious food. Out product aims to fill this need and give people the ability to make great food more quickly.

Software Architecture

The main user application will run on Android and be written in Java. This part will be where users interact with the system to schedule and complete recipes. In order to retrieve the recipes, the application will either query a SQL database with our own maintained recipes or parse recipes from publicly available websites HTML.

In order to implement the application, we will query recipes required by users from the database, find the schedule, then display the schedule to users step by step. Since some steps requires timing functionality, the system also needs a timer module. The most interesting part of this app in terms of technical point of view is the implementation of the scheduling functionality. Scheduling is the core of this app. Different users may take different amounts of time to complete tasks and different recipes have different times as well. We believe that it would be really interesting to find the best approach to scheduling this.

The following is a diagram of the architecture of the system:



Challenges and Risks

The most challenging part of this project is the optimization of the cooking schedule. The purpose of this app is to find a good schedule for users when they are cooking multiple dishes at the same time. However,different users have various cooking skills, so the cooking time of each step may vary. And recipes are arbitrarily chosen by users, so the number and content of the steps are also different each time the app is used. Therefore, it is very important to find a good algorithm for optimizing the schedule. It should be fast, accurate, and flexible for different recipes.

The easiest way to minimize this risk is implement it first. Since finding the schedule is the core of this app, all other functionalities are relatively simple, we can just implement it first and make sure it works properly.