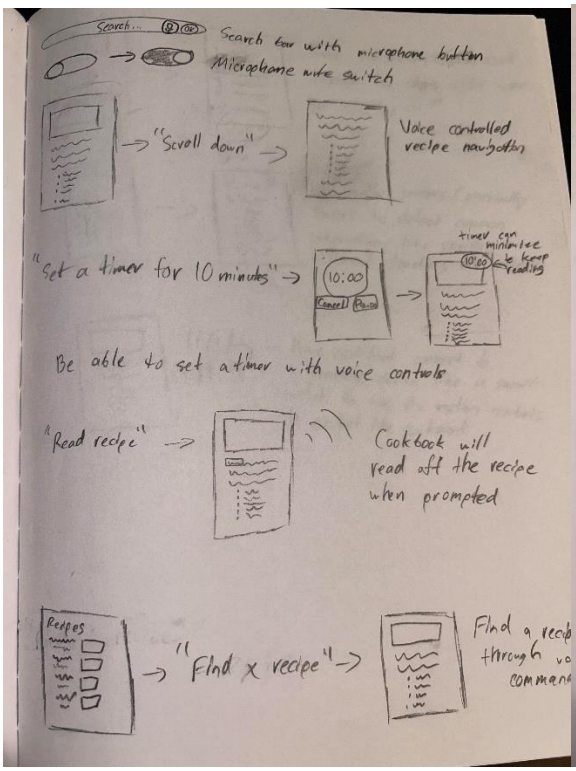
For this project, I designed a simple user interface for a smart cookbook.

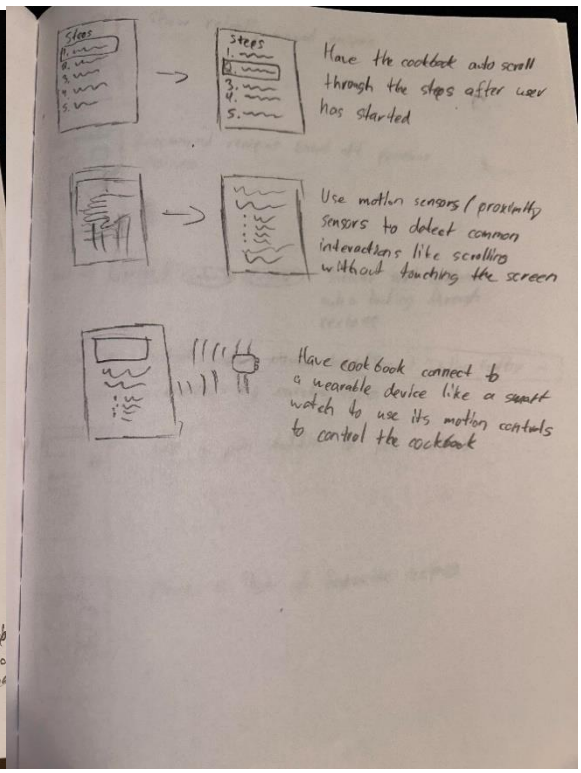
Github link: https://github.com/nsuce/UIProject1

C-level Sketches:

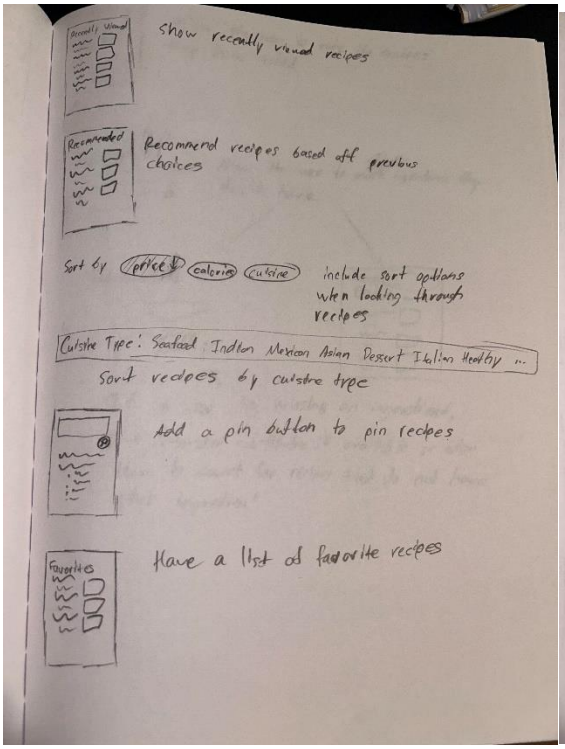
Design challenges:

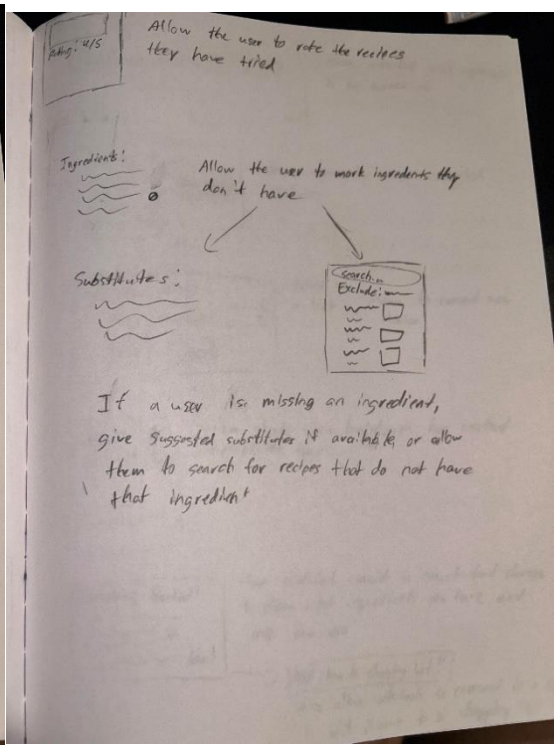
User wants to be able find recipes that they will enjoy



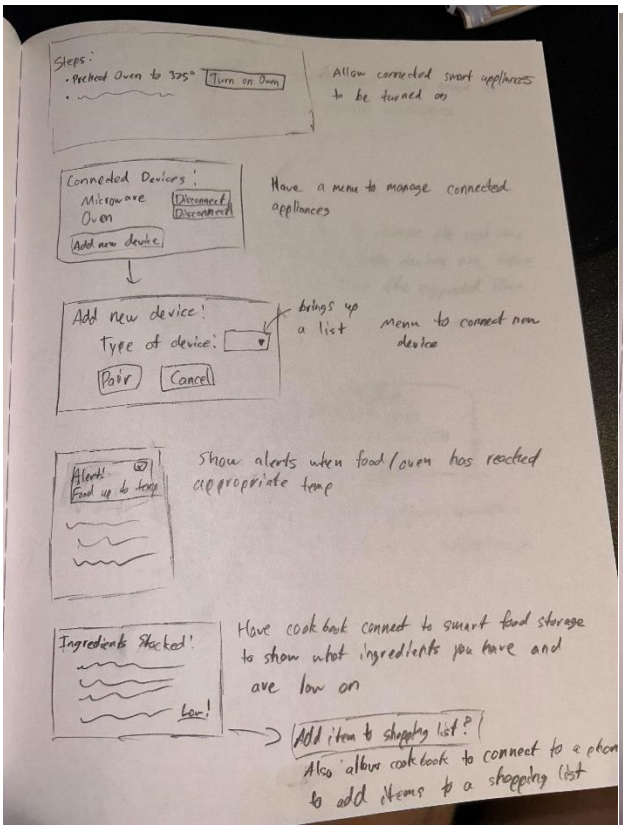


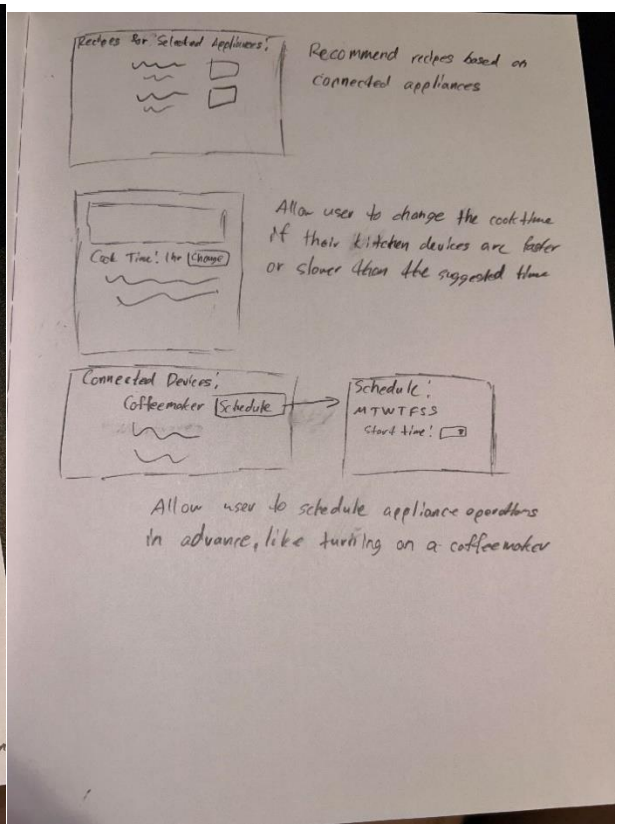
User wants to be able to use the cookbook without their hands if needed





User wants to be able to utilize their smart cookbook in conjunction with other smart kitchen devices





From my interviews I got the below needs for user needs and design requirements

User needs:

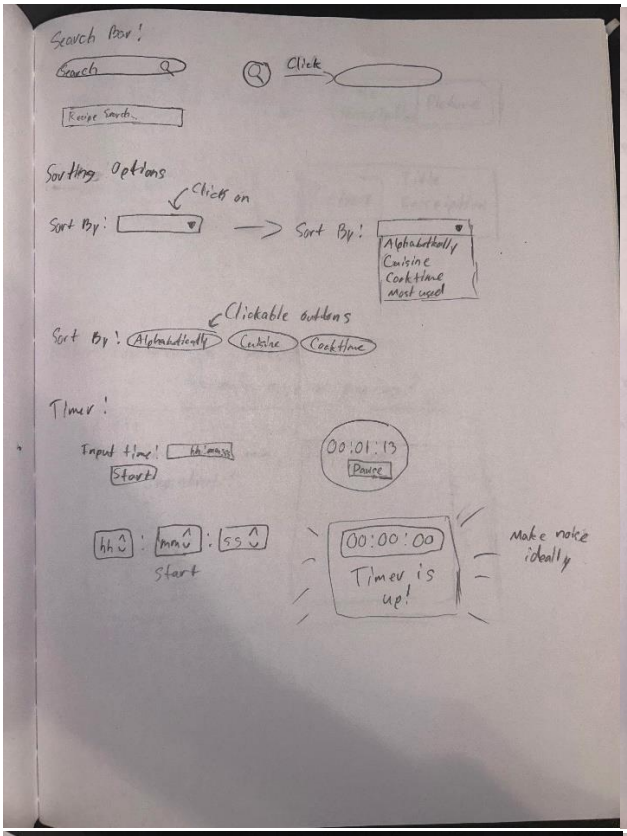
- Users should be able to discover/search for new recipes based on their dietary preferences, available ingredients, or cuisine preferences.
- Users require clear and concise cooking instructions, including step-by-step guidance and cooking times.
- Some users may prefer hands-free interaction with the cookbook, especially with particularly messy recipes, so it should support voice commands for recipe navigation and cooking timers.
- Users want to access nutritional information for recipes to make informed dietary choices.
- Users may need assistance in finding suitable ingredient substitutions in recipes when they run out of or want to replace certain ingredients.
- Users need the capability to adjust recipe quantities to match the number of servings they require, which can help reduce food waste.
- Users should be able to save some of their favorite recipes so that they are easily accessible in the future.
- Users would like the cookbook to connect to other smart appliances in their kitchen

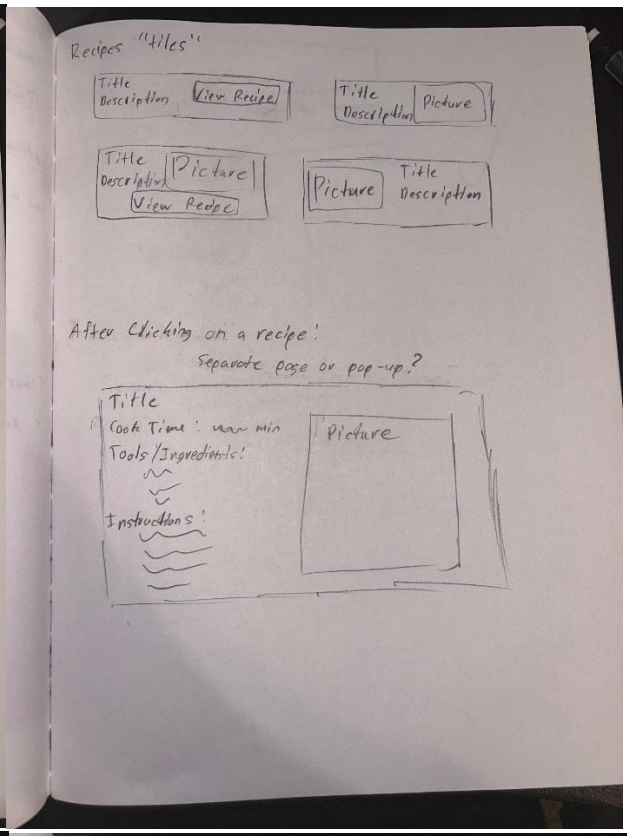
Design Requirements:

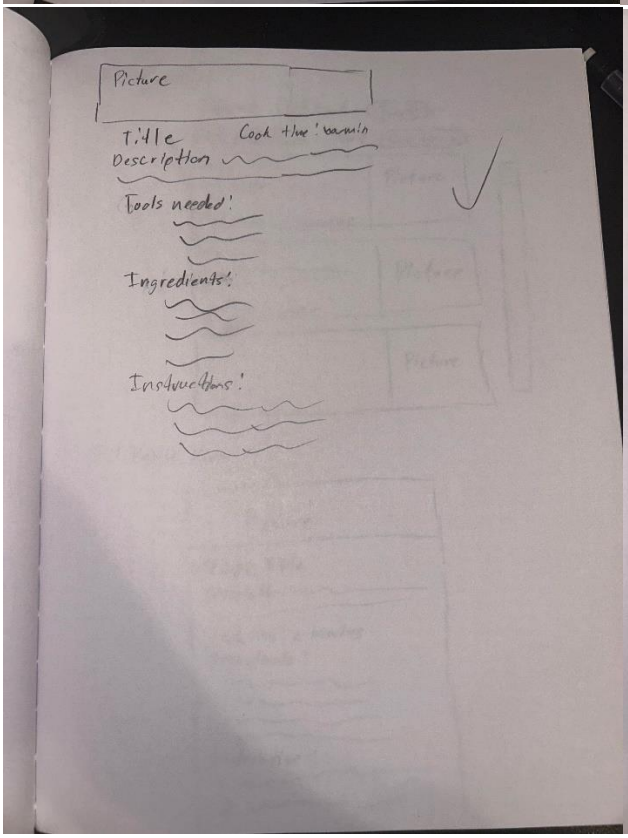
- Recipe search
- Sort recipes by cuisine or dietary restrictions/Exclude recipes with certain ingredients in them
- Adjustable recipe sizes
- Hands-free interaction
- Pin favorite recipes
- Show nutritional information
- Detailed recipe pages
- Meal Planning

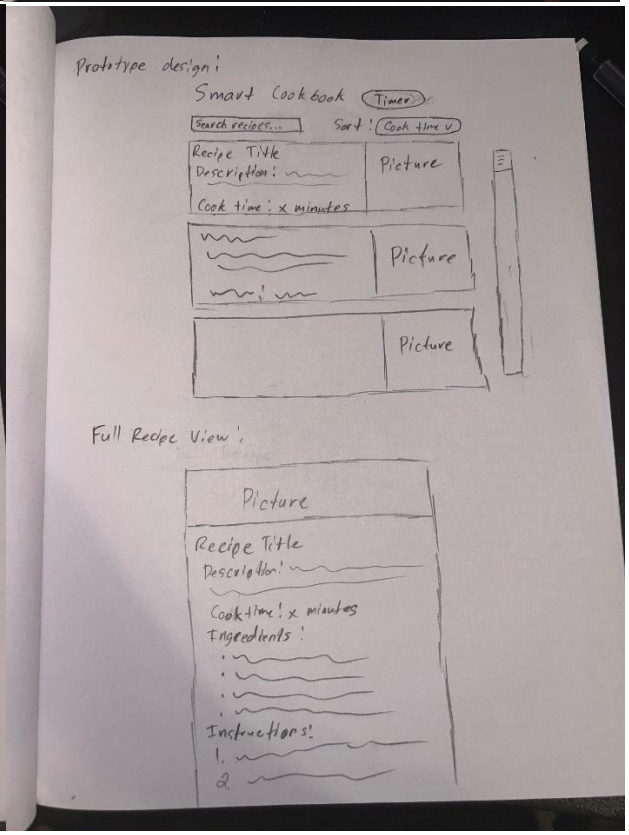
I didn't end up doing anywhere close to all of initial design requirements, and ended up adding things that weren't in this initial list later down the line. Some things just weren't very feasible to include due to the medium in which we are creating the UI, like the hands-free interaction, and because of my overall lack of skill using react. I mainly focused on having detailed recipe pages that were able to be searched through and sorted and I also ended up adding a timer feature as I thought that would be important.

A/B/Prototype Sketches:









When the UI is loaded up, the user will see a scrollable list of 10 recipes. The list on the main screen doesn't show the full details of the recipe, just the name, description, and cook time along with a photo. More can be added fairly easily, but I felt that 10 was a good number to demonstrate what the UI does well enough. There is a set timer button, as well as a search bar and a sort feature for all of the recipes. The search feature allows you to search for the names of the recipes. The sort feature currently only allows for sorting the list of recipes alphabetically and by cook time. In the future adding cuisine type to the list of sortable options would be good. To view the full recipe, simply click on the box containing the recipe you would like to view, and a large pop-up will appear that will also include any kitchen equipment needed to complete the recipe along with the ingredients list and preparation instructions for the recipe. The set timer button will bring up a small pop-up that allows you to set a timer, while the timer is running you are able to pause and reset it. When the timer reaches 0 the pop-up will indicate that it is completed in big read letters.

For this project I also did utilize ChatGPT a little bit. Mostly for generating the recipes, but it also helped me a bit with debugging and styling.