

# Cooking Instructor Horizontal Prototype

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# Redesign Rationale of Horizontal Prototype

After analyzing our system through walkthroughs of tasks using the initial prototype, we discovered some usability issues, but there were no direct violations of the tasks. The redesign of the system will not produce any drastic changes compared to the initial prototype. The changes are mainly going to be made to address minor issues and improve usability.

Below is the list of problems that will be addressed with our redesigned prototype:

1. The filter bars on our search screen currently only have icons to indicate: Difficulty, Rating, Ingredient count and Duration. Users might be unfamiliar with these icons. We have redesigned the icon for difficulty to be more intuitive and also added labels for each filter option. (Snapshot #1)
2. The main search screen in the initial design has two options for searching: search by name and search by ingredients. The two search bars being adjacent may be confusing to the user. To solve this problem, we have modified the screen to provide a small gap between the two search bars so that they are more easily distinguishable. (Snapshot #1)
3. When searching for a recipe by ingredients, the user may not be motivated to enter all the ingredients, one at a time. Autofill is a functionality and was thus not represented.
4. On the recipe step screen, initial design had an arrow pointing to right for next step and arrow pointing to left for previous step. A potential problem was that the user's hands may be a bit too dirty to interact with the interface and might not be able to press on the arrow precisely. We have made the interaction arrows prominent for both the arrows and added labels. (Snapshot #21 )
5. After searching for recipes, the user is presented with a list of recipes. User might accidentally click on the wrong recipe. To address this problem, we have included a defined border around each recipe and enlarged the clickable area to ensure that they select the correct recipe.(Snapshot #8)
6. In the recipe profile screen, initial design had an ingredients list with a checkbox beside each ingredient. The intention of the design was to provide an option for the user to use the list as a shopping list. But, the user might not be aware that he can check the items off from the recipe page, as this feature is not intuitive enough. We have addressed this with a simple solution of changing the label from "Ingredients" to "Ingredient Checklist" to provide a bit more knowledge to the user. (Snapshot #13)

7. In the recipe profile screen, the initial design also contained checkboxes for both the equipment list and steps list. We decided to keep both lists since they provide essential information, but remove the checkboxes as they would barely ever be used.(Snapshot #9)
8. In the recipe profile screen, we removed the ability to enlarge the recipe picture. The reason being that the scaling wouldn't be much different due to the portrait form factor. (Snapshot #9)
9. In the recipe step screen, the initial design had a pull-down ingredients page that gives quick reference to the ingredients list without going back to the recipe profile page. We will implement this feature so that the pull-up step page button can both accommodate for tapping and swiping. This will allow users with different intuitions to perform the same action. (Snapshot #22)
10. We added the ability to rate a recipe directly in its recipe profile page, rather than simply displaying a rating. This establishes more consistent behaviour for the ratings-bar throughout the design as a whole. (Snapshot #11)
11. In the recipe profile screen, the scrollable area has been condensed for compactness. The inclusion of the three dot icons provides an indication to the user that more information can be found by scrolling.(Snapshot #14)
12. In the recipe profile screen, we added increment and decrement arrows for scaling portion size rather than having to type it in which was what we originally had for our initial prototype. Reason being is to increase noticeability (walkthrough #7 potential problem) as well as to increase user-friendliness of the interface. Normally, an expected user wouldn't want to scale to very high portions anyway. (Snapshot #9)
13. In the recipe profile screen, we added yellow buttons surrounding ingredients that are able to be substituted, to increase noticeability and therefore user knowledge (walkthrough 7 potential problem). (Snapshot #9)
14. In the modifying steps screen, we added arrow increments for better user-interface experience. Also, a bigger text box for steps, as steps could be long. (Snapshot #33)

There were some potential usability issues that we noticed, but did not incorporate into our redesigned version. Below is the list of such problems and the accompanying rationale for not redesigning them:

1. In the recipe profile page, there is an option to download. However, there is no option to print directly. For some users, this may appear as though a recipe cannot be printed. We decided not to address this issue because the system already provided the feature to download as a file permitting the user to print the file if they wanted to. There is no additional value to implement an

extra feature or interface element for a somewhat rarer task.

2. The requirement to have the ability to add new personal recipes is a rare task and not many users will be performing this action. It falls under low priority for implementation. Therefore, it will not be part of our redesigned prototype. There were some usability bugs related to that, but we will not be addressing those in here since we are omitting this feature from the horizontal prototype.
3. In the Search screen, there is a horizontal scrollable bar for categories (Snapshot #1) . One might find this tedious to scroll through, the categories, our solution is to have the category bar be dynamic and have the most used categories float to the top. This is functionality and is therefore not presented here.
4. In the Search screen, someone may find the process of searching tedious. We decided to not address this problem as we don't think that is not a problem with our design, or one that is addressable in the context of our interface beyond what we have already and can implement.