



NOVA SCHOOL OF
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EasyDish

Stage 2: User and Task Analysis



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Problem description

Everyday, a lot of people struggle with cooking not only due to unclear recipes but also due to the complexity of some preparation methods. To follow a recipe, a clear and detailed guidance is needed to help understand the sequence of tasks and to adapt the recipe to their needs. Besides that, there are often many recipes that require a certain level of experience that is not reliably stated by those who use it, but by the person who presented it, which could not be very accurate. Some other problems that are frequently found while looking for a recipe or cooking could be, knowing which ingredients might be needed for a recipe, knowing what recipes could be done with an inventory of ingredients or knowing if a recipe might be safe to consume knowing the allergies of the consumer.

User analysis

For our mobile recipes application, we decided to classify our users in 3 different categories, where they differ by the amount of experience they have in cooking:

- Less/None Experience;
- Casual Experience;
- Cook/Experienced User;

Less/None Experience

This class of users embodies the individuals who have minimal to no experience in cooking. They think of the kitchen as intimidating and mostly struggle with basic tasks such as following simple recipes and even understanding cooking terms. These users typically rely on processed or already-made meals and only cook rarely, if at all.

Some characteristics may include:

- Limited knowledge of cooking techniques/terms;
- Likely to need detailed step-by-step instructions and visual aids;
- Prefers recipes with few ingredients and simple preparation methods;

Some needs this type of user may have is:

- Clear instructions with visual and/or video aids.
- Basic recipes that are beginner-friendly, with the respective tags.
- Suggestions for simple meals with minimal ingredients.
- A section with easy-to-understand explanations of cooking techniques.

Casual Experience

This class of users have some experience in cooking but don't do it regularly. They may prepare meals a few times a week and are comfortable with basic recipes, but still seek guidance for more complex and unfamiliar dishes. This class often wants quick, efficient recipes due to time constraints but is open to experimenting with new ingredients or techniques.

Some characteristics may include:

- Knowledgeable of cooking techniques but not be fully confident in their methods;
- Familiarity with common kitchen tools and ingredients but still look for guidance on new or complicated dishes;
- Likely to appreciate personalization features based on available ingredients or preferences.

Some needs this type of user may have is:

- Mid-level recipes with moderate complexity.
- Ingredient-based recommendations to help decide what to cook.
- Options to filter recipes based on tags like: time constraints or available ingredients.

Cook/Experienced User

This class includes users who are comfortable in the kitchen and cook regularly, either for personal enjoyment or as part of their profession. They have a deep understanding of ingredients, techniques, and tools, and may even enjoy experimenting with complex recipes or creating their own. These users may also be seeking inspiration for new dishes.

Some characteristics may include:

- Confident in the kitchen, with a large and comprehensive knowledge of cooking techniques;
- Likely to look for creative or challenging recipes;
- May enjoy customization features like adjusting serving sizes and/or substituting ingredients.
- Interested in sharing tips, opinions, or improvements on recipes with the community.

Some needs this type of user may have is:

- The ability to change recipes, substitute ingredients, or scale portions.
- Features that allow interaction with the community, such as sharing tips in comments or rating recipes.
- Ways of sharing their recipes with others in the application.
- Challenging or complex recipes.

Tasks analysis

1.

Goal: search for a specific recipe by name and see its steps.

Pre-conditions: to know some part of the recipe's name the user wants to search for.

Tasks & Subtasks:

Enter the Application:

- Click the Application Logo

Search for a Recipe:

- Click inside the search bar in the main menu screen
- Insert a name of a existent recipe in the body of the search bar
- Click the button to query your search

View Steps/Tasks of a Recipe:

- Scroll by the result recipes and click on its body/image/content
- Inside a recipe, scroll down to the Steps/Task Section

- Click on the Step you desire to see

Exceptions: the name of the recipe is put wrong/too incomplete in the search box, therefore the user isn't able to find the desired recipe.

2.

Goal: create a recipe.

Pre-conditions: Have an account; reach a certain level of experience (users casual to above expected level of experience); Be verified on the application.

Tasks & Subtasks:

Enter the Application:

- Click the Application Logo
- Click the Menu Icon and select 'Login'
- Insert the Login Credential in the correspondent body type

Create the Recipe:

- Click the Menu Icon
- Search 'Create Recipes' button
- Insert the Data to create the recipe
 - Insert Name
 - Insert Small Description
 - Insert Tags (from an available list)
 - Insert Images
 - Insert Ingredients and Portions
 - Insert Steps with correspondent video (generic or specific)
- Click the 'Finish Recipe' button

Exceptions: User might face upload issues; missing mandatory fields will cause the recipe to not be saved;

3.

Goal: rate recipes

Pre-conditions: Have an account.

Tasks & Subtasks:

Enter the Application:

- Click the Application Logo
- Click the Menu Icon and select 'Login'
- Insert the Login Credential in the correspondent body type

Open Recipe:

- Click inside the search bar in the main menu screen
- Insert a name of a existent recipe in the body of the search bar
- Click 'Enter' or the button to query your search

Rate Recipe:

- Click the "Rate Recipe" Button at the bottom of the recipe screen.
- Click on the amount of stars you want to give (1-5 Stars)
- Click on the description body and insert your review text (this task is optional)
- Click the "Send Review" Button

Exceptions: The user might not be able to submit a review if the recipe was not cooked and verified before.

4.

Goal: add ingredients to shopping cart from a recipe and check shopping cart

Pre-conditions: have an account, be logged in, have a recipe selected

Tasks & Subtasks:

Add ingredients:

- Click the “Ingredients” button
- See all of the ingredients and select the ones that will be added to the list or click the “Select All” Button.
- Click “Add to Cart” Button.

Open Cart and see Ingredients:

- Click in the button on the top right with the shopping cart image
- Click on the search bar and search for an ingredient

Exceptions: the limit of items had been reach so no more items can be added to the shopping cart;

5.

Goal: save recipes to the user’s personal collection and see the list

Pre-conditions: have an account and be logged in; have a recipe selected;

Tasks & Subtasks:

Save Recipe:

- Click the”Bookmark” Button on the selected recipe

See User Collection of Recipes:

- Click on the Menu Button
- Click on the “Bookmarks List” menu option
- Click on the search bar and search for a bookmarked/saved recipe

Exceptions: the limit of recipes had been reach so no more recipes can be added to the saved recipes list;

6.

Goal: filter recipes in the search bar

Pre-conditions: have an account and be logged in;

Tasks & Subtasks:

Search for a filtered recipe:

- Open the Recipes Tab using the correspondent button
- Select the button with the filter image
- Select any filter option from the list of tags
- Click the “Search” button

Exceptions: there might not be any recipe that has all of the filter conditions

Scenarios

Scenario 1: Maria's Family Dinner

Maria has a big family dinner on Sunday, and she's feeling a bit stressed since she doesn't cook much. She needs to make something for 20 people but has no idea where to start. Remembering a recommendation from a friend, she decides to try **EasyDish**.

When she opens the app, Maria feels overwhelmed by all the recipe options. Unsure how to choose, she clicks the filter button and selects "easy" recipes for large groups. Since she's Portuguese, she also chooses Portuguese cuisine, hoping for something familiar.

After a quick search, she finds a recipe for Arroz de Pato (Duck Rice), but it's only for 2 people. No problem—Maria adjusts the serving size to 20, and the ingredient amounts update automatically, saving her the trouble of calculating it herself.

With clear step-by-step instructions and helpful video clips for each part, Maria watches a video on preparing the duck and feels more confident. She follows the recipe exactly, finishing the dish just in time for dinner. Her family loves it, and Maria leaves a comment in the app thanking the recipe creator, feeling proud of her success.

Scenario 2: João's Bookmark for Later Use

João recently downloaded **EasyDish** and is setting up his account for the first time. He uploads a profile picture, selects his dietary preferences—no restrictions, but a love for meat—and chooses his favorite ingredients, like garlic and basil. He adds a fun description to his profile: **Meat Lover !!!** 😊 and sets his cooking experience to "Casual."

With his account ready, João starts exploring the app. Since he only cooks when he has time, which isn't often, he decides to plan a meal for the next day. Knowing he'll be in a rush before work, João searches for a quick recipe.

Thanks to the previous preferences settings, he easily spots a recipe for **Pasta Primavera** and bookmarks it to save for later. The next day, right before lunch, João opens the app again and goes straight to the **My Recipes** section, where his bookmarked recipes are stored.

Following the step-by-step instructions and short videos, João quickly sautés the vegetables and prepares the meal. He finishes just in time to sit down for lunch before heading to work. Satisfied, he leaves a 4-star review on the recipe.

Scenario 3: Sara Creates and Shares a Lactose-Free Recipe

Sara loves cooking and spends hours in the kitchen every day. As an experienced cook with lactose intolerance, she enjoys experimenting with new recipes. Today, she decided to create and share her own recipe for a "Lactose-Free Lemon Tart" using the **EasyDish** app.

Sara logs into her account and heads to the Create Recipe section. She fills in the recipe's name, a brief description, and tags like "lactose-free" and "vegan." Next, she uploads pictures of the tart and

enters the ingredients, portions, and step-by-step instructions. Since the crust is tricky, Sara uploads a video demonstrating how to make it properly.

Once she's satisfied with everything, Sara clicks Publish, making the recipe available to everyone. A few days later, she returns to see that a few users have rated the recipe and left comments. One person suggests substituting almonds for hazelnuts, and Sara thanks all the good comments.

Interviews

For each representative user, a set of questions were asked to find out more about their cooking experience in the kitchen. These included general questions like their occupation, cooking experience and dietary experience as well as their cooking habits (such as time spent in the kitchen and favorite type of cuisine) and how they find and choose their recipes. Users were also asked about their frustrations with current recipes applications and websites, how they organize their favorite recipes and how often they need video guidance while cooking.

The first user, Tiago, is a 21-year-old student with little to no experience who prefers Italian cuisine. He usually spends up to 1 hour cooking per day and chooses his recipes according to his cravings, complexity and time it takes to prepare the dish. He uses video guidance 90% of the time and prefers step-by-step instructions so he prefers mobile applications for their portability. Finally, he thinks interacting with other people with the same level of experience builds up his confidence when it comes to cooking.

The second user, Rita, is a 61-year-old university professor who enjoys cooking casually. She spends roughly 30 minutes to an hour cooking daily, and prefers cooking traditional Portuguese dishes. She doesn't use any external tools to learn recipes (apart from the occasional TV programme), and relies on family recipes that have been passed down for generations. For her, the most important thing in a recipe is to have all possible information available, and she doesn't adapt the recipes to her ingredients - making sure to buy everything she needs beforehand. Rita picks her recipes based on what she's craving at the moment, and doesn't have time to interact with other users.

Lastly, the third user, Sara, is a 23-year-old advanced cook with lactose intolerance. She spends around 3 hours per day cooking and mainly focuses on Mediterranean cuisine and pastry. She prefers step-by-step instructions for cooking and videos for more complex pastry dishes. She mostly values sustainability, filtering recipes based on available ingredients. Besides that, she also recommends features like ingredient adjustments for different serving sizes and a shopping list in cooking applications.