Interação Pessoa-Máquina

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EasyDish

Stage 4: Functional prototype

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Prototype URL

[Google Drive Link](#)
This link provides access to our app, **EasyDish**, in the APK extension file. In the subsequent sections of this report, you will find an explanation of the app's purpose, along with scenarios that showcase its primary features and functionalities.

Startup Instructions

To make use of our application, the user is required to have an Android device and install the APK provided in the link mentioned in the previous section. Once installed, the user can launch the app by opening it on their device and begin enjoying it.

Briefing

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.

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 searches for easy recipes for a large group of people. 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, 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 looks for the recipe he previously bookmarked. 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 starts to create a recipe. 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 publishes the recipe, making it 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.

Project URL

Github link: [EasyDish](#)
In this link, we made visible the repository, so that it can be viewed what and how we created our application.

Project Development

Our application was developed using Flutter, a toolkit that enables development for both Android and iOS platforms, but we only developed with Android in mind. The app utilizes Dart, Flutter's programming language.

Our app doesn't have data consistency, meaning that if the user closes and reopens EasyDish, it goes back to the initial state, as in it doesn't store the information between uses of the application.

For user management, the app uses a singleton pattern to manage user-related data, such as created recipes, ensuring the possibility to test a normal user experience throughout the app, even if it doesn't save between usages.

Known errors:
- Some images, like those of recipes and such, seem to not load sometimes but they are supposed to appear next to the recipe name and tags in the home page;
- Our logo does not appear in the icon of the application, but it's in the first page of the application for the user to see;
- We initially planned to include a feature that would allow users to upload a picture or video for each step while creating a recipe. However, due to the complexity of implementing this functionality and the limited development time available, we decided to postpone its implementation;

- When adding ingredients to a recipe, the "Add" button initially appears as plain text instead of being styled as a button. However, after the first ingredient is added, the UI updates, and the button is displayed correctly.

For a brief explanation about our application, in case the Briefing section was not explanatory enough, our application serves as an all-in-one platform for recipe management and culinary exploration. It allows users to create personalized recipes by introducing details such as the recipe name, image, tags, ingredients, and, more important, step-by-step instructions.

The app can scale ingredient quantities based on the desired servings, ensuring accuracy and convenience for users cooking for varying group sizes. Additionally, it fosters a sense of community by enabling users to leave comments and ratings on shared recipes, promoting interaction and feedback.