APPLICATION ANALYSIS

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INTRODUCTION

Our working group has been assigned an application for the catering sector, this application will be a cookbook. The cookbook will have a main menu, and it will have four sections: pantry, recipes, shopping list and weekly menu. Next we will develop the operation of each of the sections.

The recipes section will consist of a main part where the recipes will be ordered alphabetically, and these recipes can be seen with the name of the recipe, an image and a brief summary. When you click on one of the recipes it will open, and you will be able to see how to make the recipe, food, utensils, difficulty and time needed to develop the recipe, you can also find the nutritional information of the recipe and a button if you want the recipe to increase food portions, if any of the ingredients you need are in the pantry, a message next to that ingredient will appear. In the recipes section there will also be a search engine with auto-complete to be able to search for recipes, and a filter in case the recipes you are looking for want to meet any requirement. Some of these filters are for example: vegetarian, vegan, meat, fish, lactose-free, gluten-free, egg-free …
In the recipes section, you can add a new recipe, modify a recipe that is already in the application, or delete it if you have not liked it or are not interested in it.

If for example we want to make a recipe and we do not have the ingredients, we can add our recipe to the shopping list. In the shopping list you can find the ingredients necessary to make the recipe, you can add several recipes at the same time, and if any of the ingredients is repeated, this food ingredient will not appear in the application twice, but will be added and therefore the amount of said ingredient will be the necessary for both recipes. If any of the ingredients is in the pantry, it will not be added to the shopping list, but instead a message will appear next to the ingredient that will indicate availability “available in the pantry”, so we will not have to buy ingredients of those that we already have.

As we have previously mentioned, this application will also consist of a pantry, in said pantry we can add the ingredients or spices that we have. In the application we will be able to see the ingredients that we have and the remaining quantities of each ingredient, and the expiration date of each of the ingredients, if it has expired, it will appear in red and an alert message will appear showing "expired ingredient".If on the contrary, the expiration date (or preferred consumption date) is very close, it will turn purple and will have an alert message next to "Preferred consumption”. When we make a recipe, we can go to the pantry, search for that recipe and select the number of servings we have made and press the "recipe made" button so that the number of ingredients that have been used in said recipe are subtracted from those that are in the pantry.

The last section of the application to be developed is the weekly menu. In this section we can create a weekly recipe calendar. This calendar can be created randomly, but if we want each of the dishes to meet a series of requirements, when we go to create the weekly recipe, we can select in the filter which we want these dishes to have, this filter will be equal or similar to the recipe filter. If you did not like any of the recipes that the program has added for you, you can click on that recipe and change it to any of the recipes that we have in the application. You can also create your own weekly recipe calendar yourself and select the recipe you want one by one. If you liked any of these weeks or want to repeat it again a week later you can save it, with the name you want and it will be stored in a section of the weekly menu. When you are clear about how your weekly recipe calendar will be, you can press the "Weekly menu" button and thus the application will put the necessary ingredients in the shopping list to carry out that week. You can also find a daily and weekly summary of the nutritional information that it will provide you. When you need to see what food you have on a daily basis, you can enter the calendar and select the day, this day will stand out from the rest so that you know the day you are in. Pressing the day you can see what recipes correspond and how to prepare them and the necessary ingredients.

In short, we have been commissioned to create a simple and everyday easy -to-use application. It will have a somewhat simple interface, but it will be quite intuitive so that nobody has problems using it, since the catering sector needs simple and quick applications. New improvements and updates will be added over time.

REQUIREMENTS SPECIFICATION

System requirements

The system requirements for our Cooking App, are compounded by a repository in GitHub which contains both the software application and a small database with the main data of the application, such as a list of ingredients in the pantry, well known recipes, images of the dishes, etc. The second system requirement that could be mentioned, it is the database itself and finally, a single computer for each user in order to use the application locally.

Functional requirements

Several functional requirements have been identified based on this proposal. These requirements are the following:

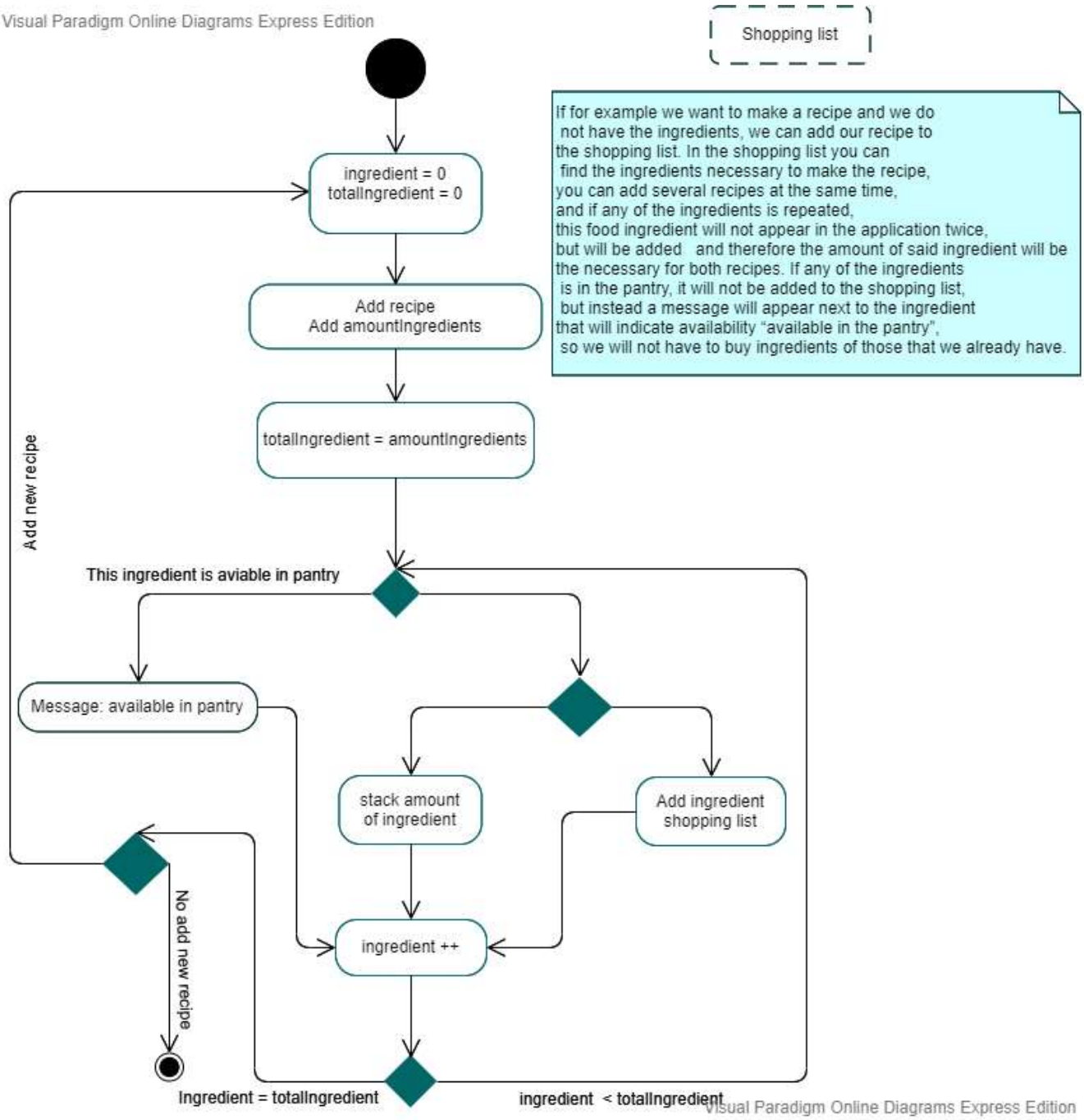
- In the main menu the user will choose an option among pantry, recipes, shopping list and weekly menu.
- The user will be able to read/add/modify/delete/search ingredients of the pantry. If the user selects a recipe as done, all its ingredients with their quantities will be removed from the pantry.
- The user will be able to read/add/modify/delete recipes and search them by vegetarian, vegan, meat, fish, without lactose, without gluten or using another filter. The amount of portions of a recipe could be also modified by the user.
- The user will be able to read/add/modify/delete ingredients of the shopping list and also add ingredients directly from a recipe.

The user will be able to read/add/modify/delete weekly menus as well as the name for the menu. In order to create a weekly menu, the app will allow to do it in two different ways: randomly or manually. For this function, also different filters (as the recipes search) will be available. Existing menus can be used to create new menus.

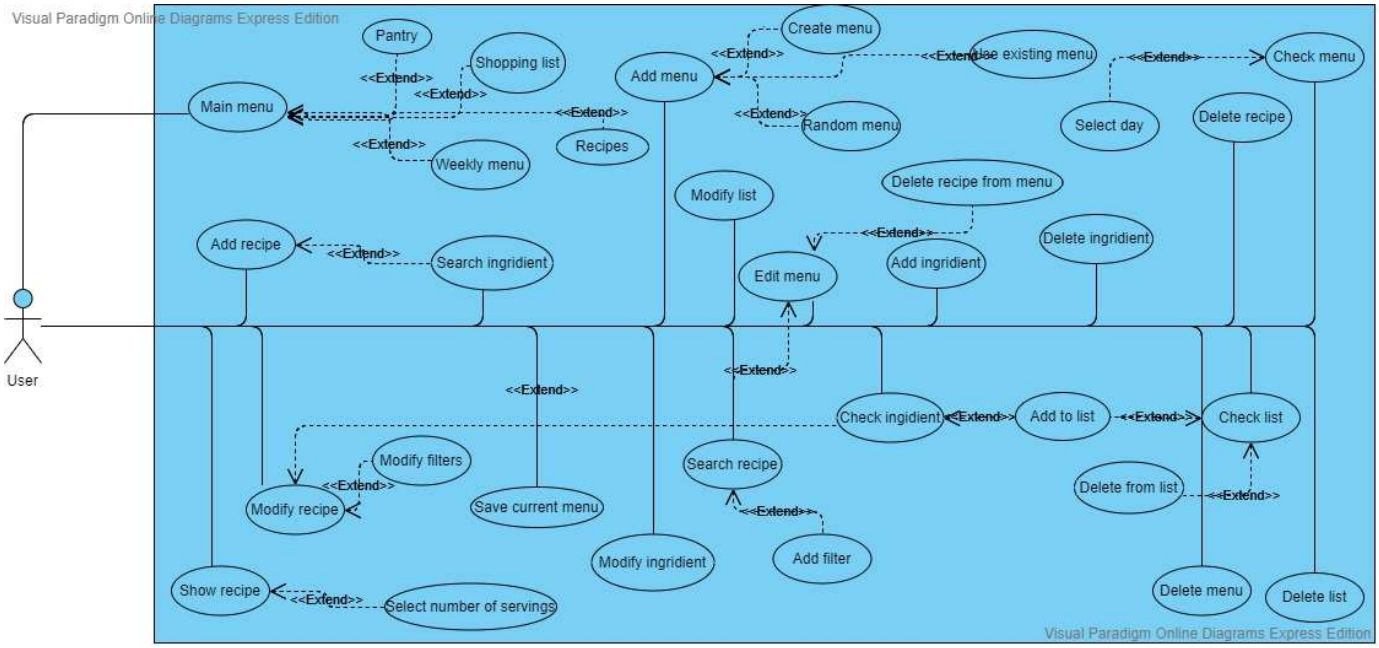
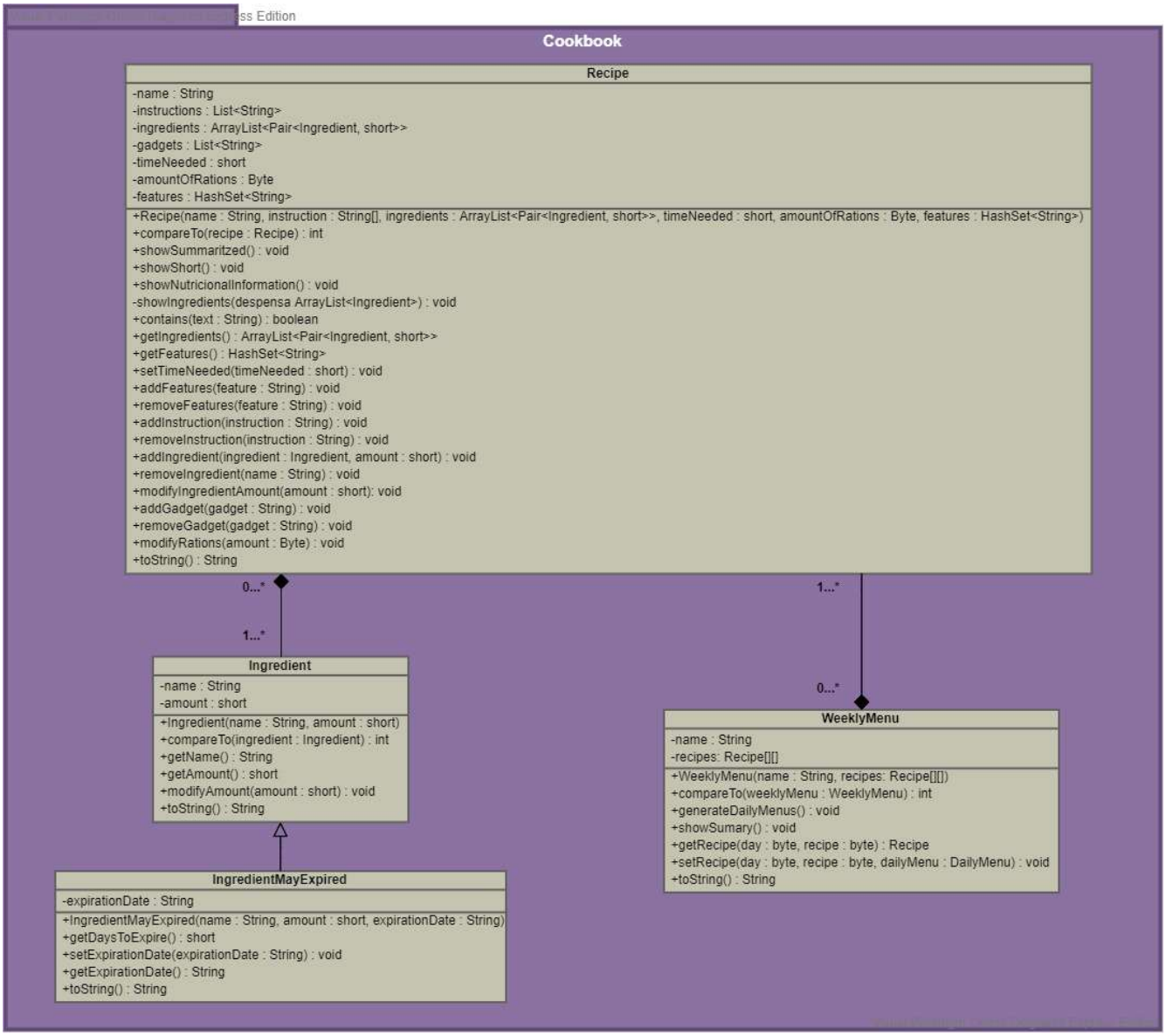
Non functional requirements

This application should be intuitive and easy to use in order to save time and help the user with new recipes, do the shopping list and prepare weekly menus.

ACTIVITY DIAGRAM



USE CASE DIAGRAM



CLASS DIAGRAM