Defining the product

Alejandra Martinez, my mother, takes charge of the food supply of her home, and she freezes. However, she does it so frequently that the freezer is full and it is difficult to distinguish the different ingredients of the freezer, so that sometimes she gets the wrong things out. Also, she sometimes forgets that she has put some ingredients in the freezer, so that they stay there for too long.

Because of this, the purpose of this solution is to manage a database with the ingredients in the freezer, to have recorded where everything is so that Mrs. Martínez is able to search for the ingredient that she wants and the application will tell her where each ingredient of this type is, and their consumption date. The application should also be able to warn Mrs. Martínez whenever something is approaching its consumption date, as things cannot be freezed for such a long time. Finally. the application should be able to propose recipes based on the ingredients disposable. These goals were defined on the basis of the interview that can be found in the appendix.

Mr. Losantos, my computer science teacher, managed databases professionally, so he agreed to advise me in the creation of this application.

Rationale for the solution

The product will have the form of a web application, since this format will allow the client and her family to easily access the information about the freezer wherever any of them is, since they use different electronic devices. Also, as it can be seen in the interview (that can be found in the appendix), the client specifically commented that the web app format seemed the most comfortable for her, because she would be able to access it from her cellphone.

The product will be coded in html since it will be a web application, and formatted graphically with the use of Bootstrap, so that the first load of the page is faster if the computer already has Bootstrap designed and it is graphically more appealing and faster to build. Bootstrap is also responsive and very easy to use, which are other reasons why use it.

The management of the database will be coded with PHP to manage MySQL, since MySQL is fast, open-source and very compatible. PHP will be used since it is fast, secure, platform independent and has a big community of users with online ressources facilitating its learning.

Success criteria

- Data entry forms allow the client to record the ingredients added to the refrigerator, a description (quantity and notes), the place (Drawers, shelves or door) where they were put and the date of freezing.
- Data entry forms allow the client to record new recipes and the ingredients needed to make them.
- The client is able to search for products of a certain type
- The client is able to search for products in a certain place, and in more than one place at a time
- The client can search the ingredients that form a recipe, and know if they are in the freezer
- The client can search the recipes that contain an ingredient
- The client is warned whenever any product approaches its consumption date
- The client is able to retrieve ingredients and remove them from the database
- The client is able to modify ingredients from the inventory
- Data is verified - the client can commit errors registering new data, but this will be notified and will not be used