

Overview of the application

LabManagementSystem will be an application that will allow the user to keep track of its laboratory reagents inventory and location. It will allow the user to manage its inventory with the following actions: create, search, edit (transfer and delete), classify and buy.

Input data.

The input data will depend on the action the user wants to do. There will be two main actions: create and search.

The user should fill a web form for CREATE, the available fields will be the following:

- Where the reagent is going to be stored (Fridge/Freezer/Shelf) and its distribution (how many shelves, drawers inside the shelves and boxes inside the drawers)
- Reagent
 - Name and concentration
 - Label (the user can create personalized labels)
 - Reference
 - Stock
 - Link
 - Photo

The user should fill a web form for SEARCH, using as tags for the search the following fields:

- A Fridge/Freezer/Shelves to display its content. In addition, the user can also specify a drawer of the selected item.
- Reagent
 - Name
 - Label
 - Reference
 - Date when it was opened (if the reagent was not used, it doesn't have a date)

After searching, the user will have the possibility to edit the reagent:

- Remove the reagent
- Transfer it to another Fridge/Freezer/Shelf
- Mark it as opened adding the date

In addition, it will be possible to buy more.

The data will be obtained by storing the user's input provided at the web form (CREATE), and it will be stored in the database with the appropriate structure. The database will store each laboratory's inventory.

Associated applications: Associated applications are not needed.

Output.

The result of the search will be displayed in the web page as a list, showing four columns for each reagent that matched the search: the name, the label, the reference and the manufacturer's link. By clicking on the name, it redirects the user to a page containing specific information about the reagent. By clicking on the manufacturer, it redirects the user to the web where the reagent was bought.

Page containing specific information: it will display where that reagent is stored, the date if it was opened, the remaining stock, photo, and an option to edit (remove, transfer, mark as opened).

**Users: permissions and multi-lab users

**Threshold of products (e-mail, notifications and warnings)

**Notes for all the reagents