

# **SUMMARY.**

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When developing our project, we wanted to make a program that would be easy to use, helpful and most importantly, functional.

As we wanted to make something related to the medical field, we realized that the management of rare diseases, even with all the developments in this field, could be difficult as not every hospital treats every disease due to shortage of resources and treatments. With this in mind, we came up with the idea of creating a database that stores all the information necessary to be able to sort patients in different hospitals, depending on the illness that they have.

Our program is connected to a database that stores information about patients, illnesses, machines or treatments for those illnesses, doctors and hospitals. This way everything is taken into account when sorting patients.

This program is able to do many things, for example:

- Registering a new patient.
- Showing patient data.
- Updating patient data: which includes updating general data, such as: name, surname and photo; also it can update illness data, as well as assigning a new illness to the patient (because the patient is never deleted from our database).
- Showing doctor data.
- Updating doctor data: which includes updating general data, such as: name, surname and salary.
- Deleting doctor, which would be used in case they are fired or they retire, for example.
- Show the information of all the hospitals our database manages.
- Create XMLs of: patient, hospital, doctor, illness and machine.
- Create HTMLs from the XMLs (patient, hospital, doctor, illness and machine).
- Selecting a hospital for a patient.

When showing patient data, it shows the personal information as well as the hospital they've been assigned and the illnesses they have.

When showing doctor data, the program gives us their personal information, including salary and specialty, the hospital they work at and the illnesses that they treat.

The main and most important function of our program, and what we centered it around, is to select a hospital for a patient. When this option is selected, the program goes through the doctors, machines and hospitals in order to connect all of them to look for a hospital where there's a doctor that treats the illness, that has the correct treatments and that has availability in order to treat the patient.