# UNIVERSIDAD DE LAS FUERZAS ARMADAS - ESPE -



# Object Oriented Programming Project Introduction

Team #4

Software Development Crafters

**MEMBERS**:

Paguay Alex

Páez Adrian

Patiño Daniel

Risueño Santiago

Román Yulliana

#### 1. THE PROBLEM

We need a program that maintains an orderly registry of patients, in which an appointment calendar and clinical history can be viewed. Where, the patient's pathology will be specified and depending on the diagnosis, the treatment period will be determined. We also need to generate an annual income report.

### 2. A LITTLE OVERVIEW

Now you already know what our project is about, but, beyond that, I am going to tell you what is the real use of it. Hasn't it happened to you that you forget what people say to you? Our software will have the basic functions of an agenda, but also, it will allow you to add notes with colors, topics and subtopics. With smart reminders, it will be easier to schedule appointments, in addition to the fact that our software will be integrated with the patient database, allowing the user to add the name, symptoms and age, among other data.

#### 3. BACKGROUNDING THE PROJECT

A physiotherapist is a person with special skills obtained through training and experience, its main objective is to assist patients who demand attention for physical or mental problems, with the mission of improving the quality of life of these people.

As mentioned, in this branch experience is important, in many cases the memory of the specialists tends to forget certain treatments in people who suffer from such a disease, so they could not remember which treatments worked with patients with a certain disease and which did not, in order not to repeat them and have a more orderly record and where you can easily look for all the treatment you have given. In addition, having a large number of patients in certain weeks makes them forget about already scheduled appointments, so they have schedules that cross and they have problems. Also,

paying a personal assistant or secretary to keep track of their schedules would be very costly, so they do not prefer to do it.

Below is a real-life example that happened to a physical therapist. She has worked in this profession for over 10 years and has had a wide variety of clients, many returning and others returning after a long time. She is called by a patient from 5 years ago, to help her with the same treatment she had done at that time, since that person felt well after that, however, the problem was that she did not remember the medicine and treatment she used at that time, since she did not keep a record of the patients she visited at home, so this represented a problem that led to a loss of time, something valuable for those who practice in the health area.

For this reason, it can be said that the organization, having a history of each patient attended and knowing the different treatments that have worked, will save time and, in a certain way, costs for the physical therapist, so that he works in an orderly manner and without worrying about forgetting some details with which he treated, at that moment, any patient.

## 4. COMPARISON WITH COMPETENCE

This program will allow the physiotherapist or his secretary a greater organization at the time of use, in addition to providing an agile tool to obtain useful information for care:

Organization

It allows to schedule appointments in an agile way, without having conflicts in the schedules and having available shifts at hand, in addition, modifications to the shifts could be made when there are cancellations.

Database

You can have a record of all the patients that have been treated, their complaints, treatments, allergies, contact numbers, recovery time used.

#### Statistics

This program would present statistics of the treatments performed during the selected period. In these reports you can obtain the number of appointments attended, the number of appointments made due to discomfort, recovery times in the different cases of discomfort.

#### Calculate cost estimates

It will allow obtaining an approximate value of the cost of treatment according to the history of cases attended and recovered. This will provide the client with useful information for decision-making for treatment.