



**NOVA**

**IMS**

Information  
Management  
School

**MASTER DEGREE PROGRAM IN DATA SCIENCE AND ADVANCED  
ANALYTICS**

## **STORING AND RETRIEVING DATA**

### **GROUP 11**

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## DATABASE DESCRIPTION

Our database is meant to describe a scenario for scheduling medical appointments in Portugal. The purpose of this is to facilitate the scheduling of clinical arrangements through a platform that has all the information that the medical analyst needs to plan those appointments.

This new form of planning medical consults has been easing the life of the patients due to the fact that it is easier than to go to the clinic, preventing the commute to the facility. Also, with recent events that have been modeling our behaviors and actions, such as the pandemic, this becomes the preferred form to do it.

In this situation the patient has the liberty to choose the preferred doctor, at the time that is more suitable to their availability.

In order to manage all this information is important to have a platform to manage all the data from the clinic, doctors and appointments, so this company has the following structure:

The database starts by including a **Log table**, a table that collects the information of whom and when the person accesses the platform - this works as a record of the logs.

The main characters of this relational database are the patients, the doctors and the clinics, each with their table. The **Patient's table**, where we include all the details about each patient, such as name, sex, birth date, address, cellphone and home phone numbers, and a table that includes their prescriptions (**Prescriptions' tables**). It is also connected to the **Doctor's table** that contains all the details about each doctor inside the medical facility. Each doctor is identified by their doctor's number and has a designated specialty (**Specialty's Table**) and the appointments are scheduled according to that specialty.

Each patient can schedule appointments (**Appointment's table**) at the clinic of preference (**Clinic's table**) - these clinics can be chosen by district or/and address. The appointments' location availability is based on the clinics that each doctor attends. At the end of every appointment, each patient must attribute a rating (**Rating's table**) according to their experience - quality of the clinic and service provided by the doctor involved. Afterwards, the patient pays for the service and receives an invoice associated with their tax identification number, that is then saved in the database (**Invoice's Table**).

# ERD

