Master in Informatics and Computing Engineering

Databases  
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Hospital management

Architecture Definition Document

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**Abstract**

The management of a hospital define it’s efficiency degree. In this way, we intend to implement a database that allows the management and appointment of consultations in a hospital so that it can improve it’s services and making it more efficient

Summary

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1. Introduction

This document summarizes the work done in the Databases class of the second year of MIEIC.

The second section relates the data flow where we explain what we intend to do and the UML diagram according the Conceptual Model.

* 1. Problem overview

In this work we intend to develop the UML model according the Conceptual Model and demonstrate the context of the database we intend to develop in the next assignments.

1. Data flow

It’s important to show the data flow of the work context to better understanding the better way to develop the database.

* 1. Context

For the context of this work we intend to develop a platform that computerizes the marking and management of appointments and examinations of a hospital to invigorate the existing system in the hospital.

In order to achieve this, it is necessary to develop a database containing all the information necessary for medical appointments and / or examinations.

In this way, an appointment will be referenced by it’s time of completion, the name of the patient, the name of the doctor, the day and the start and finish hour. An appointment have only one patient and only one doctor.

The accomplishment of a consultation can afford the marking of an average examination, being that this one is defined by the type of examination, time of it’s accomplishment and the appointment involved. The exam room is defined by the type of exam.

Patients, doctors and functionaries still must be managed, so persons are identified by their name, date of birth, tax identification number, telephone and type of person. If a person is a patient it is also identified by it’s medical history record and the possession or not of a health insurance. If it’s a doctor is identified by it’s specialty and it’s week schedule in the hospital. A person and a doctor can have multiples appointments. If it’s a functionary is defined by it’s department or departments and it’s also by it’s week schedule in the hospital.

Finally, for each specialty there is a head of service who directs the medical team of the specialty in question.

* 1. Class Diagram

The context of the solution that we intend to implement is described in the figure above according the Conceptional Modal.