

UNIVERSIDAD DE LAS FUERZAS ARMADAS ESPE



DEPARTMENT OF COMPUTER SCIENCES

SOFTWARE ENGINEERING CAREER

FIRST PARTIAL

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TEMA: MEDICBYTE

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NRC 6382



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MEDICBYTE SYSTEM

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1. TITLE

MedicByte

2. DEFINITION AND JUSTIFICATION OF THE PROBLEM

In our country, technology is advancing slowly and the bureaucratic systems that have passed are still part of our daily life. This is very evident in the health area, specifically in the request for medical appointments, which in addition to appearing simple and logical, no one implements an online appointment system in public sector hospitals, so to take a medical appointment Long procedures, such as calls to medic centers or long lines, still need to be done, unnecessary and age-old difficulties faced by the majority of the population to obtain a busy medical appointment. That many of the time it doesn't even exist.

3. INTRODUCTION

This document describes the project development plan to be presented by the students of the Software Engineering degree in the determined MedicByte system, its technical specifications and an overview of the proposed development approach. The objective of the software is to make it easier for people to access medical appointments more efficiently, making the software a tool for the user to adapt medical appointments according to their needs. As for users, the system has a simple interface graph that is simple to use.

4. OBJECTIVES

4.1. General objective

- To develop and implement a system of medical appointments that allows the actions or roles of an administrator and a patient to be carried out when requesting and assigning a medical appointment, with the administrator being in charge of the assignment and the patient requesting it.

4.2. Specific Objectives

- Register a new patient using personal data forms.
- Implement a user and administrator friendly graphic interface.
- Develop unit tests of the functionality of the medical appointment system to ensure proper functioning for the administrator and the patient.

5. PURPOSE

The development of this software is to simulate a solution to the problems presented day by day by hundreds of users who want to get a medical appointment, leaving behind the many calls, long lines and having to get up early, saving time on their day for your personal tasks.

The software developed belongs to the same developers and project managers with the sole purpose of simulating a software that solves a social problem in such a way that there is no express request from an entity for the development of this software.

6. SCOPE OF THE PROJECT

The software that we will develop because of its features and its focus on patient care either in a medical center or in a hospital takes the name of MedicByte.

6.1. Application for the administrator

- Create appointment
- Add doctor
- Show doctor

- Deleted Doctor
- Show Medical Appointment

6.2. Application for the user

- Request a medical appointment and the chosen specialty, and on the available date assigned by the system.
- Consult the available appointments in the specialty that requires it.
- You may eliminate a previously requested medical appointment in case it is required or needed.
- You can schedule one or more medical appointments if they are available in the system
- You may only register once, and this is when you first request a medical appointment.

7. SUMMARY

The main objective of this document is to provide enough information about the medical appointment software starting with its general description and justification of the problem making reference that this part will detail the problems that a user has when requesting a medical appointment, followed by this we have a brief description of the scope of the system based on the two main actors that are the administrators and the users, ending this section we have the roles of each member of the development team.

8. GENERAL DESCRIPTION

8.1. Product perspective

MedicByte is a product of software focused on solving the problems that users present when generating medical appointments in a traditional way, the software will have options for the user to schedule a new medical appointment on a date available by the system, in addition to be able to select a specific specialty. Also in the graphical interface you will have a menu for the

administrator of the hospital or medical center where the product is used, in this menu you will have the options to schedule appointments in advance to show them to the user will also be able to manage these meditative appointments in such a way that you will have the option to edit, delete, or change the date.

9. SPECIFIC REQUIREMENTS

9.1. Functional Requirements

- The program will incorporate a login for both an administrator and a patient.
- The program must incorporate a register of new users/patients and where their data will be stored in a Gson file.
- The program should have a different menu for both administrator and patients with the following specifications:

Menu Administrator.

1. Menu to generate medical appointments for patients.
2. Menu to view assigned medical appointments
3. Menu to register new doctors to increase medical appointments in different specialties.
4. Menu to accept or delete medical appointments chosen by a patient.

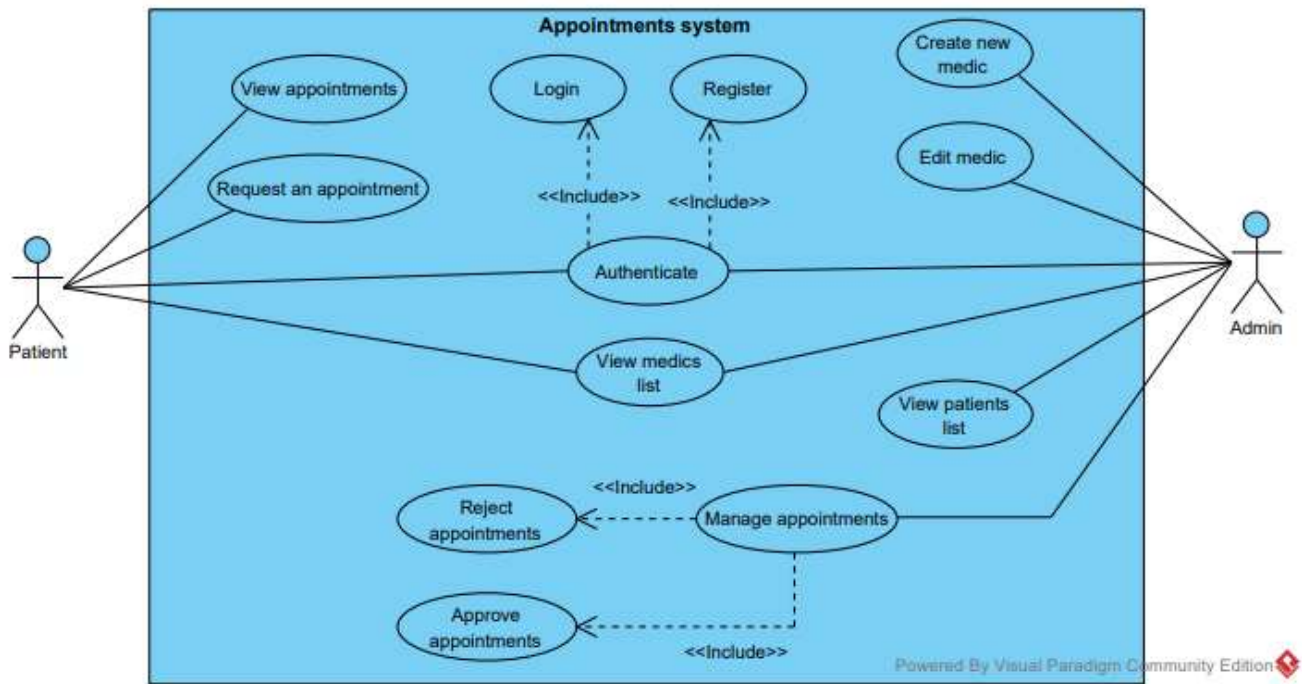
Users Menu

1. Menu to select appointments generated by the administrator.
2. Menu to view the appointments chosen by the patient.
3. The program must save all the data generated in the application in Mongo DB Data Base.

9.2. Non-Functional Requirements

- The system must have properly structured user manuals.
- The system must be able to operate properly with normal number of users with concurrent sessions.
- Only the administrator will have the necessary permissions to make changes to the application
- The system will not reveal to its operator's other personal data of users other than names and reference numbers.
- Software testing will be managed with a software testing management tool.
- Medical data systems: The new system and its data maintenance procedures must comply with medical data protection laws and regulations.
- A user-friendly design
- The software must be portable. Therefore, moving from one operating system to another does not create a problem

10. DIAGRAMS USE CASE



11. PERSONNEL INVOLVED

Name	Andrés Jacome
Role	Project manager
Professional category	Software engineer student
Responsibilities	Supervisor and Advanced Programmer
Contact information	ksprwhite@gmail.com
Approval	Yes

Name	Junior jurado
Role	Inspector

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Professional category	Software engineer student
Responsibilities	Code Inspector and system functionality
Contact information	stalinjuniorbrayan@gmail.com
Approval	Yes

Name	Michael Cobacango
Role	Inspector
Professional category	Software engineer student
Responsibilities	Verification of compliance with proposed requirements
Contact information	michaelpm63@gmail.com
Approval	Yes

Name	Adrián Iza
Role	Notary
Professional category	Software engineer student
Responsibilities	Keep a record of errors presented in the program
Contact information	Bryanadrian38@hotmail.com
Approval	Yes

Name	Johnny Loachamin
Role	Notary
Professional category	Software engineer student
Responsibilities	Analyze present errors
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Aprobación	Yes
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