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**System’s requirements**

**1. Introduction**

This document is a Software Requirements Specification (ERS) for the application “OdontoApp”. The content has been created through the collaboration of the members mentioned. This specification has been structured inspired by the guidelines given by the standard "IEEE Recommended Practice for Software Requirements Specification ANSI/IEEE 830 1998".

**1.1. Purpose**

The objective of carrying out the specification is to clearly and precisely define all the functionalities and restrictions of the system to be built. The document is addressed to the system development team. This document will be reviewed by the developer user group and a record of document versions will be kept on the Git-hub platform, until it is approved by the group involved. Once approved, it will serve as a basis for the development team to build the new system.

**1.2. Scope**

OdontoApp is a platform that facilitates dental services to customers by automating various processes, with the following benefits:

- A clinical history that contains necessary medical information that assists both the dentist and the patient.

- Quick and efficient appointment scheduling.

- Price lists for each available service.

- A guarantee of user information protection and security through a username and password system.

However, the current limitations of the system are:

- It does not accept credit card payments, only in-person payments.

- It does not have access to mobile or web platforms.

**1.3. Definitions, Acronyms, and Abbreviations**

**1.4. References**

**1.5. Overview**

**2. Overall Description**

**2.1. Product Perspective**

The system will have access to a clinical history that will make available the information of each patient who has access and has registered in the application, in order to execute certain actions. The system is not related to a larger product, it is completely independent.

**2.2. Product Functions**

In general terms, the application will manage patient information in the following way: through the management of schedules for medical attention, displaying availability according to the presented schedules, ensuring proper functionality. The pricing assignment will be linked to the service the patient requires, and the corresponding price list will be shown. The application will include a billing system, which will be linked to the pricing assignment function. Then, through the information that details the patient's medical status, the respective registration will be proceeded for the attention at the time of the consultation.

**2.3. User Characteristics**

The version will include a user-friendly and easy-to-understand interface for the patient, demonstrating the interrelation that will be part of the care with everyday use in such a way that it will not generate problems for familiarizing oneself with the application. The interface will be intuitive and friendly to the patient.

**2.4. Constraints**

* The system will not have a mobile application or web platform.
* Credit card payments will not be accepted.
* The system will only be developed in Java.
* The development process will involve the use of GitHub.
* Basic object-oriented programming, and command line management.

**2.5. Assumptions and Dependencies**

**2.5.1 Assumptions**

The functionality of the application is expected under the presumption that the requirements mentioned in this document will not be drastically altered since the goals and impact of the application could be directly affected. In the event that changes are required, the OdontoApp development team will agree on any necessary modifications to the system.

**2.5.2 Dependencies**

The application will function autonomously since there is no observed dependence on external applications and/or systems. The system will correspond between the client and the application, and therefore the effectiveness of the system will be directly related to the connections between the devices and the devices on which the application is used.

**3. Specific Requirements**

**3.0.1. Functional Requirements**

**3.0.1.1. User register**

**FR1**. The system will allow the user to register by console, creating a username and password (in that order).

**FR2.** The system must allow any combination of characters when the user is asked to enter, with the exception of numerical data, in the case of doing so, an error message will be indicated by the console and it will be allowed to try again.

**FR3.** The system will use a system of security pins with a maximum of 6 digits for the password, in the event that the user writes non-numeric characters, it will show an error on the console and ask him to try again.

**FR4.** If the usernames and passwords have already been previously registered, the system will indicate the respective message indicating that you try a different one.  
**3.0.1.2. User login**

**FR5.** The system will allow the user to log in through the console, entering their already created username and password. If the user is not registered (because it will be the first data to request), it will be displayed on the console informing that this user does not exist and to try again.

**FR6.**The system will show the console if the password is wrong and try again.

**3.0.1.3. Registro de información médica y necesaria**

**FR7.** The system will allow you to enter congenital diseases by console (only characters), if you enter numerical data, the system will show that you enter only characters and will allow you to try again.

**FR8.** The system will allow the blood type to be entered by entering a number that refers to the blood type, the same information that will be displayed on the console such that:

**1.** “A+”

**2.** “O+”

**3.** “B+”

**4.** “AB+”

**5.** “A-”

**6.** “O-”

**7.** “B-”

**8.** “AB-”

If the user enters a number that is not in this list or characters, the respective error will be displayed on the console and they should try again.

**FR9.** The system will allow you to enter the age, only positive numerical data, if you enter characters or negative numbers, the respective error will be displayed on the console and try again.

**FR10.** The system will allow you to enter full names and surnames, therefore, it does not admit numeric data, if you do, an error will be displayed on the console and try again.

**FR11.** The system will allow you to enter the date of birth, first indicating that you enter the year on the console, then the month, and finally the day. For all this data, only positive numeric data is allowed, entering negatives or characters will display an error on the console and try again.

**FR12.** The system will allow you to enter the cell phone number, where only positive numerical data is allowed, if you enter negatives or characters, an error will be displayed on the console and try again.

**FR13.** The system will allow the user's address to be entered, where any type of data is allowed.

**3.0.1.4. Medical appointment scheduling:**

**FR14.**

**3.0.2. Development Requirements**

The life cycle chosen for the implementation of OdontoApp is the evolutionary prototype so that changes can be made in the future.

**3.0.3. Software Requirements**

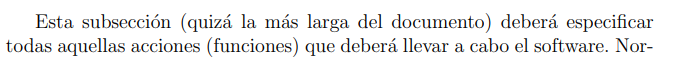
At the moment, it will not be limited to specific software to use the application.

**3.0.4. Performance Requirements**

The number of patients for whom the application will serve simultaneously is 20 patients with an approximate response time of 30 seconds.

**3.1. External Interfaces**

**3.2. Functions**

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**3.3. Performance Requirements**

**3.4. Logical Database Requirements**

**3.5. Design Constraints**

**3.6. Software System Quality Attributes**

**3.7. Object Oriented Models**

**4. Appendices**

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