**SOFTWARE REQUIREMENT SPECIFICATION**

**(SRS)**

1. **Introduction:**

This section gives a scope description and overview of everything included in document. Also, the purpose of this document is described.

**1.1 PURPOSE**

In this busy world, we don’t have the time to wait in infamously long hospital queues.

The problem is, queuing at the hospital is often managed manually by administrative staff, then take a token there and then wait to get appointment from doctor and the most frustrating thing - we went there by traveling a long distance and then we come to know the doctor is on leave or the doctor won't be able to accept appointments.

Medicos will help us overcome all these problems because now patients can search for treatment or medicines at home. This helps the patient because this will save time and money of the patient. It will target the lack of consultation due to high charges. It will help in checking daily health parameters by notifications.

It will work on the agenda that prevention is better than cure and suggest the right parameters and daily health routine check-ups so that we know about our internal wellness.

**1.2 SCOPE**

User Just needs to login into their specified interface where they can simply enter the disease and the algorithm of Medicos will suggest all the related symptoms, medicines, popular doctors, and hospitals that provide the facility of that particular treatment. Additionally, the software will suggest regular health check-ups through notifications and pop-ups whenever the software is used, a patient can just know the test or checks he/she needs to be done (on the basis of the algorithm of software as per most searched terms or diseases in the software).

The software will redirect the users to the most popular pharmacy shops or clinics nearby where they can buy the medicines as per their requirements. Also, it will suggest the best websites to buy the same (netmeds.com, 1mg, apollo, etc.)

**1.3 DEFINITIONS, ACRONYMS, ABBREVIATIONS:**

• OTP- One Time Password

• HTML- Hyper-Text Mark-up Language

• HTTP – Hyper-Text Transfer Protocol

• TCP/IP – Transmission control Protocol/ Internet Protocol

**1.4 REFERENCES:**

**1.5 OVERVIEW:**

This section will give the overview of the whole system. This section basically describes the software’s principal functions. The system will be explained in context to show how the system interacts with other systems and description of this section would cover the system interfaces, hardware and network interfaces, system memory demands and site-specific requirements. It will also describe the type of stakeholders that will use the system and what type of functionalities are available to them. At last, the description with limitations that affect the software’s development will be presented. These constraints might include hardware requirements, reliability plus security elements, auditing requirements etc.

**2. THE OVERALL DESCRIPTION**

**2.1 PRODUCT PERSPECTIVE**

The ‘Medicos’ is a web service to make all the health services like booking an appointment, getting prescriptions, buying medicines etc. available at one place.

The system involves three end users that is patient (who will receive the services), doctor (who will provide the healthcare services) and a medical assistant (who will assist and provide all the details and medicines to the patient). System can be used by anyone with an active web browser. It provides a portal to the costumer to find a suitable service provider.

The block diagram below shows the major external interfaces.

System Software

Interface

Database

Medicos

Interface

**2.1.1 USER INTERFACE**

User interface must be implemented using any tool or software package like java, html etc.

**2.1.2 HARDWARE INTERFACE**

Since the application may run over the internet, all the systems using this application may need to connect with internet and this will be a hardware interface, for example Modem, WAN, LAN, Ethernet, and cross cable.

**2.1.3 SOFTWARE INTERFACE**

Medicos shall access the media files available so that the patient can upload the pictures of his ailment. The software is on server so it requires support of scripting language like JavaScript, Java, PHP. Also to handle the large number of users and user’s related databases the software requires the help of database systems like MySQL, Firebase. The version of system’s software shall be compatible to the application to make it accessible.

**2.1.4 COMMUNICATION INTERFACE**

The ‘Medicos’ shall use the HTTP protocol for communication over the internet.

**2.2 PRODUCT FUNCTIONS**

The user must enter a valid username and password to login into the application. If the user is new to the application (i.e. first time users), then the user has to create a profile or register in order to store their data. If the user forgets the password, an OTP will be sent on the registered mobile number. The user can enter the sent OTP and they will be directed to a page where they can set a new password. An error message will be displayed if the user enters the wrong credentials or if they are not registered. As soon as the user logs-in to the application, system loads the required components and creates space on the local system. The application will require permission to send notifications and storage permission of the system. It will also require permission to access media files in case user wants to share any media file.

Then the patient can view, search and avail services(i.e. finding the doctor, booking appointment, chatting for treatment, placing order for medicines) on the basis of their requirements. Patient and Medical Assistant can discuss the requirements through the chat function and can confirm the appointment . After the payment and confirmation of appointment/medicines order, an E-receipt will be generated which the user can download for any future reference.

The patient then can chat with the doctor and take the prescription and even share the contact if needed.

Later, the patient can order medicines as per the prescriptions by placing an order to the assistant and get his medicines delivered at his doorstep.

**2.3 USER CHARACTERISTICS**

Patient must have the knowledge of smart phones and must be familiar with English language.

**2.4 CONSTRAINTS**

A full internet connection is a main constraint for the application. Since, an online chat option will also be provided to the users, it requires an internet connection for the application to function.

**3.5 SOFTWARE SYSTEM ATTRIBUTES**

System attribute requirements such as those for performance, security, modifiability, reliability and usability have a significant influence on the software architecture of a system. There are a number of quality attributes of software that can serve as requirements.

**3.5.1 SAFETY AND SECURITY CONSTRAINTS**

The system shall use a secured database.

The system shall be reliable to control the network security breaches.

The system shall not leave any cookies on the user’s mobile device.

The system shall automatically log out users after a period of inactivity.

**3.5.2 USABILITY**

Patient with basic smartphone knowledge can easily use the application.

**3.5.3 RELIABILITY**

The backup of the database is continuously maintained and updated to reflect the most recent changes made by the doctor and the medical assistant (i.e., updating their profile by adding their recent work and information) or patient (i.e., reviews and ratings given by patients).

**3.5.4 AVAILABILITY**

The system is available all the time to the patient as an android application. It will provide real time information about the doctors, their details and specialities.

**3.5.5 PORTABILITY**

“Medicos” is a portable app which allows the patient to find treatment and consult with specialist doctors by their respective systems. All the necessary data can be accessed by anyone with android based system.

**3.6 CHANGE MANAGEMENT PROCESS**

Additional requirements should be submitted to the email provided in the application. The doctor and the medical assistant then will come to a consensus on the additional requirements and the appropriate changes will be made.