Software Requirement Specification for Hospital Management

1 Introduction

1.1 Purpose

The purpose of this document is to:

- Provide detailed description of Hospital Management Application for Android.
- Explain features and interfaces of the system.
- Explain functions and use cases of the system.

1.2 Scope

- The System developed will enable patients to book appointments with doctors.
- Searching doctors based on Specialty or Location.
- Doctor can write prescriptions directly through the app.
- Patients can view prescriptions.
- Doctors have a view called "Today's Schedule" through which they can view their appointments for that day and manage patients.
- Similarly Patients too have a view called "My Appointments" where they can view all the appointments which they have booked.

1.3 Overview

The document will provide information on

- Definitions and Terms used
- General Description of the System
- Characteristics of Users
- Functional and Non-Functional Requirements
- Interfaces Required

1.4 Definitions

Hospital

A Institute where a person gets treatment/'checkup by the Doctors

Doctor

A person who treats the patient

Patient

The person who needs the treatment

2 General Description

2.1 Product Description

- Hospital Management System is a computerized system for easy maintenance of Hospital operations.
- The system enables Doctor for easy access to patient records and history.

■ It operates on Google's operating system, Android, and requires a newer generation of Android phone which can run with an APK Level greater than 15.

2.2 User Characteristics

Any user of the System has following characteristics:

- Has no special training or education
- Has access to a computerized

2.3 Design and Implementation Constraints

2.3.1 Services Used

- Firebase Database
- Firebase Storage
- Google Maps
- SDWebImage

3 Specific Requirements

3.1 Functional Requirements

3.1.1 Doctor

3.1.1.1 Access patient record

- <u>Input</u>: Patient Identification
- <u>Process</u>: Query for information from database

3.1.1.2 Edit Patient Diagnosis

- <u>Input</u>: Patient Identification, Diagnosis details
- <u>Process</u>: Update values to the database

3.1.2 Patient

3.1.2.1 Search doctors based on Specialty or Location

- Input: Doctor Identification
- <u>Process</u>: Query for information from database

3.2 Non-Functional Requirements

The Hospital management System should have:

- Security
- Network connection
- **■** Efficiency

3.3 External Interfaces

3.3.1 Hardware Interfaces

■ iPhone which can run Android 4.2 or later

3.3.2 IDE Interfaces

■ Android Studio 2.2

3.3.3 Software Interfaces

- The system should have friendly and reliable Graphical User Interface.
- The system should also have program interfaces for all the functions of the system.

3.3.4 Communication Interfaces

The Communication Network must have:

- Fast and reliable network medium
- Secure protocols

3.4 Other Requirements

The System must have a fast and reliable Server, powerful enough to handle multiple requests.

The System must have a Database for storing:

- Doctor Details
- Patient Details

4 Conclusion

Thus, all the requirements of the Hospital Management System from Doctor to Patient are described.

5 Design

