Software

Requirements

Specification

# for

DocIndia: A Doctor Appointment System

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**TECHNOLOGIES TO BE USED:**

**HTML**

**CSS**

**BOOTSTRAP**

**JSON**

**ANGULAR JS**

**NODE JS**

**EXPRESS JS**

**MONGO DB**

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# Introduction

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS with purpose, scope, definitions, acronyms, abbreviations, references and overview of the SRS. The aim of this document is to gather and analyze and give an in-depth insight of the complete **DocIndia Healthcare software system** by defining the problem statement in detail. The detailed requirements of the **DocIndia Healthcare** are provided in this document.

## Purpose

If anybody is ill and wants to visit a doctor for checkup, he or she needs to visit the hospital and waits until the doctor is available. The patient also waits in a queue while getting appointment. If the doctor cancels the appointment for some emergency reasons then the patient is not able to know about the cancelation of the appointment unless or until he or she visits the hospital. As the mobile communication technology is developing rapidly, therefore, one can use the mobile’s applications to overcome such problems and inconvenience for the patients

The purpose of the document is to collect and analyze all assorted ideas that have come up to define the system, its requirements with respect to end-users. Also, we shall predict and sort out how we hope this system will be used in order to gain a better understanding of the project, outline concepts that may be developed later, and document ideas that are being considered, but may be discarded as the system develops.

In short, the purpose of this SRS document is to provide a detailed overview of our software product, its parameters and goals. This document describes the project's target audience, its user interface and software requirements. It defines how our clients, team and end-user see the system and its functionality.

## Scope

Primarily, the scope pertains to the Online Doctor Appointment System which features for making DocIndia Healthcare project live. It focuses on the search for best city doctors which allow for online appointments, question interactions and healthcare of patients.

It does not identify any specific method, nomenclature or tool for preparing an SRS.

## Definitions, Acronyms, and Abbreviations

## References

## Overview

The remaining sections of this document provide a general description, including characteristics of the users of this project ,the functional and data requirements as well as the data dictionary of the system.

# Overall Description

DocIndia makes the task of making an appointment from the doctor easy and reliable for the users. Website based online doctor appointment application “DocIndia” contains three modules.

One module is designed for the patient that contains a login screen. The patient has to register itself before logging in to the system. After logging in, the patient can select a doctor and can view the doctor details. The patient can request for an appointment on his/her preferred day/time. The selected day/time slot will be reserved and patient will receive the notification of the successfully added appointment. The patient can view the location of the doctor on address provided. In addition, the patient can contact to the doctor by making a call.

The second module is the admin module. The admin views all details of doctors and all appointments by the admin. The admin can add doctor, view patient’s details and doctor’s details and can view appointments also. All the doctors of the specific clinic are registered by the admin. Doctors can register themselves and can be added only if they are approved by the admin.

The third module is the doctor’s module. The doctor can input the time slots available for the appointment. The doctor also sends the examination results, diagnosis data and the prescription online to the patient reducing the paperwork as well as helps in easing maintaining the medical records of the patient.

# Specific Requirements

This subsection contains the requirements for the online healthcare.

**USERS:**

1. Admin

2. End Users

3. Doctor

**Functional Requirements:**

**R.1 General Requirements:**

R.1.1 Login

Description: User prompted for login and password.

Input: User gives the login and password. System does authentication.

Output: Details are verified from databases and respective main page is displayed.

R.1.2 Delete account:

Input: User selects Delete account.

Output: Account details are removed fom database and message is displayed.

R.1.3 Update Account

Input: User updates the details.

Output: New details are entered into the database.

R.1.5 Logout

Input: User Clicks on logout

Output: The user is logged out.

**R.2 Doctors**

R.2.1 Send Examination Results:

Description: If there are any X-Rays ,CT Scan, Bloodtest , Sonography etc. The doctor uploads it.

Input: File are uploaded in pdf format.

Output: Files are sent to respective patient.

R.2.2 Send Diagnosis data:

Description: The details of illness , its symptoms, medication is entered as per the doctor.

Input: The details are entered.

Output: The diagnosis data is received by the patient.

R.2.3 Send Prescriptions and medication:

Description: The Prescription of respective disease is written.

Input: Details entered into the database.

Output: The patient receives the doctors' prescription.

R.2.4 Answer user’s questions:

Description: Reply the questions of the users if desired.

Input: Answers entered into the database.

Output: The patient receives the doctors' answers and its displayed on the website.

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Description: Reply the questions of the users if desired.

Input: Answers entered into the database.

Output: The patient receives the doctors' answers and its displayed on the website.

R.2.5 Input timeslot:

Description: input the available slots(date,starttime,endtime) for the patient’s appointments .

Input: timeslots entered into the database.

Output: The patient can view the doctors' available appointment timing and its displayed on the website.

**R.3 End Users**

R.3.1 User Registration:

Input: User enters username, password, email id, Address, City, phone number, Gender.

Output: The details are added into database. Confirmation message is displayed

R.3.2 Search Doctors:

Description: User chooses doctors from various field, expertise and respective

city

Input: User Selects Doctor.

Output: The selected Doctor Profile is displayed.

R.3.3 Appointment scheduling:

R.3.3.1 Select appointment time:

Description: The user schedules an appointment from the available time slots.

Input: User selects a time.

Output: The confirmation message is displayed.

R.3.3.2 Download report:

Description: After the visit the patient receives report containing examination results, diagonsis data , prescription and medication details.

Input: The user downloads the report.

Output: The report is displayed.

R.3.3.3 E-billing:

Description: At the time of appointment, the user pays the appointment fee.

Input: The payment is done by user.

Output: The confirmation message is displayed.

R.3.4 Ask Doctors:

Description: User can post questions on healthcare. Questions are displayed publicly on the website.

Input: User sends a question.

Output: The user receives the answer on the website after any doctor replies it.

R.3.5 Post Review and Ratings:

Description: User can post review and ratings of a doctor on the doctor’s profile if they desire.

Input: User enters review and ratings of a doctor.

Output: The review and ratings are publicly displayed on the website.

R.3.6 Register as Doctor:

Description: User enter the details to register itself as a doctor for the website.

Input: The user enters the details for a doctor’s registration.

Output: The details are sent to admin for approval.

R.3.7 Set Reminder

Description: The user who booked an appointment with a doctor will be notified of their appointment 30 mins prior to the appointment.

Input: The reminder is set as the appointment is booked.

Output: The user is notified 30 mins prior to the appointment time .

**R.4 Admin**

R.4.1 Remove user:

Input: The admin removes the user account from database.

Output: The confirmation message is displayed.

R.4.2 Remove doctors:  
 Input: The admin removes the doctor account from database.

Output: The confirmation message is displayed.

R.4.3 Approve doctors:

Description: The admin checks for the details of doctor ,verifies facts and approves the addition of a new doctor to the website. A new record is added to database and displayed on website.

Input: The admin approves the doctor’s details .

Output: The confirmation message is displayed

R.4.4 Statistics

Input: Checks activity on website

Output: The statistics is displayed.

R.4.5 Remove review and ratings:

Description: Admin can remove absurd reviews that threaten the dignity of the website.

Input: Admin removes the review and ratings.

Output: The review and rating is deleted from the database.

**NON FUCTIONAL REQUIREMENTS**

**N.1 Responsive design.**

The patients are mobile, so should the website be.

Step out from the desktop-only realm and make resource a number one go-to companion regardless of device, browser or platform.

**N.2 Content management system** – to allow easy content updates and edits.

Website has a user-friendly content management system

**N.3 High performance:**

Ensuring a seamless connection between the backend and frontend.

While withstanding heavy data loads, resource will display content quickly and accurately

# 4 Data Dictionary

name: healthcare

1. **patient**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sr.no | Field Name | Data Type | Width | Required | Unique | PK/FK | Referenced Table | Description |
| 1. | patient\_id | int | 05 | Yes | Yes | PK |  | Auto Generate |
| 2. | username | varchar | 256 | yes | Yes |  |  |  |
| 3. | password | varchar | 256 | yes | No |  |  |  |
| 4. | name | varchar | 256 | Yes | No |  |  |  |
| 5. | DOB | Date | 256 | Yes | No |  |  |  |
| 6. | city | varchar | 256 | Yes | No |  |  |  |
| 7. | email | varchar | 256 | Yes | No |  |  |  |
| 8. | mobile\_no | Int | 10 | Yes | No |  |  |  |

1. **appointment**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sr.no | Field Name | Data Type | Width | Required | Unique | PK/FK | Referenced Table | Description |
| 1. | appo\_id | Int | 5 | Yes | Yes | PK |  |  |
|  |  |  |  |  |  |  |  |  |
| 2. | doc\_id | Int | 5 | Yes | No | FK | Doctor |  |
| 3. | p\_id | Int | 5 | Yes | No | FK | Patient |  |
| 4. | status | varchar | 256 | Yes | No |  |  |  |
| 6. | date | date | 10 | Yes | No |  |  |  |
| 7. | Time\_slot | time | 10 | Yes | No |  |  |  |
| 8. | fees | int | 10 | Yes | No |  |  |  |

1. **doctor**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sr. No | Field name | Data Type | Width | Required | Unique | PK/FK | Reference table | Description |
| 1 | doc\_id | int | 5 | yes | Yes | PK |  | Auto generate |
| 2 | username | varchar | 256 | yes | Yes |  |  |  |
| 3 | password | varchar | 256 | yes | No |  |  |  |
| 4 | name | varchar | 256 | Yes | No |  |  |  |
| 5 | mobile\_no | Int | 10 | Yes | No |  |  |  |
| 6 | email | varchar | 256 | Yes | No |  |  |  |
| 7 | DOB | Date | 10 | Yes | No |  |  |  |
| 8 | address | Varchar | 256 | Yes | No |  |  |  |
| 9 | Clinic\_location | varchar | 256 | Yes | No |  |  |  |
| 10 | city | varchar | 256 | Yes | No |  |  |  |
| 11 | speciality | varchar | 256 | Yes | No |  |  |  |
| 12 | Qualifications | varchar | 256 | Yes | No |  |  | The pdf of certificates,graduation degree. |
| 13 | experience\_years | int | 5 | Yes | No |  |  |  |
| 14 | degree\_possesed | Varchar | 256 | No | No |  |  |  |
| 15 | photo | Varchar | 256 | No | No |  |  |  |
| 16 | achievements | varchar | 256 | No | No |  |  |  |

**Test\_report**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sr. No | Field name | Data Type | Width | Required | Unique | PK/FK | Reference table | Description |
| 1. | test\_id | int | 5 | Yes | Yes | PK | Patient |  |
| 2. | patient\_id | Int | 5 | Yes | No | FK | Doctor |  |
| 3. | doc\_id | Int | 5 | Yes | No | FK |  |  |
| 4. | date | Date | 10 | Yes | No |  |  |  |
| 5. | delivery | Varchar | 256 | Yes | No |  |  |  |
| 6. | cost | Int | 10 | Yes | No |  |  |  |
| 7. | decription | Varchar | 256 | Yes | No |  |  |  |
| 8. | Test\_duration | time | 10 | Yes | No |  |  |  |

**medicine\_report**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sr. No | Field name | Data Type | Width | Required | Unique | PK/FK | Reference table | Description |
| 1. | Med\_id | int | 5 | Yes | Yes | PK | Patient |  |
| 2. | Patient\_id | int | 5 | Yes | No | FK | Doctor |  |
| 3. | Date | date | 10 | Yes | No |  |  |  |
| 4. | Medicines | Varchar | 256 | Yes | No |  |  |  |
| 5. | Cost | Int | 10 | Yes | No |  |  |  |
| 6. | Doc\_id | int | 5 | Yes | No | FK |  |  |

**Prescription\_report**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sr. No | Field name | Data Type | Width | Required | Unique | PK/FK | Reference table | Description |
| 1. | Pres\_id | Int | 5 | Yes | Yes | PK | appointment |  |
| 2. | Appo\_id | Int | 5 | Yes | No | FK |  |  |
| 3. | Doc\_name | Varchar | 256 | Yes | No |  |  |  |
| 4. | date | Date | 10 | Yes | No |  |  |  |
| 5. | Patient\_id | int | 5 | Yes | No |  |  |  |

**Doctor\_schedule\_report**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sr. No | Field name | Data Type | Width | Required | Unique | PK/FK | Reference table | Description |
| 1. | Ds\_id | Int | 5 | Yes | Yes | PK | Doctor |  |
| 2. | Day | Varchar | 256 | Yes | No |  |  |  |
| 3. | Timeslot | Time | 10 | Yes | No |  |  |  |
| 4. | Doc\_id | Int | 5 | Yes | No | FK |  |  |

**Doctor\_fees\_report**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sr. No | Field name | Data Type | Width | Required | Unique | PK/FK | Reference table | Description |
| 1. | Df\_id | Int | 5 | Yes | Yes | PK | Doctor |  |
| 2. | Doc\_id | Int | 5 | Yes | No | FK |  |  |
| 3. | Fees | Int | 10 | Yes | No |  |  |  |