**Document:** System Requirement Specification Document

**Title**: System Requirement Speciation for Online Hospital Appointment System

**Team:**

Architect, Quality Assurance Team, System Analyst, Patient, Hospital.

**Objective (Purpose):**

The Online hospital Appointment System for Hospitals Web Application is intended to provide complete solution for Hospitals, patients as well as Doctors through a single Gateway using internet. It will enable hospitals to take online appointments, patients to browse through online portal and book appointment online without visiting the hospital physically.

Appointment Scheduler is a web-based software application developed in various other technologies. The project aims at managing daily appointments in hospitals. It is targeted for people such as doctors etc. who need to keep record of all daily meetings; this online web software helps in effective management of their time.

Online Appointment Scheduling System for Hospitals. The appointment scheduling process which is either dynamic or static can be viewed as burden in hospitals, which can be eliminated through an efficient online appointment scheduling system. The benefits of implementing this touch everyone involved in the scheduling process. Administrators and staff can conduct their tasks more efficiently and accurately.

**Scope:**

This System allows Hospitals to maintain their records of patients visited. Patients will be able to review appointment history and may able to cancel Appointment within 24 hours.

The System will be able to show all multispecialty hospitals in the city with all available doctors and doctors also can see the appointments booked by patients.

The high level of competition in the provision of health services requires not only the provision of high quality health care but also constant work with patients who are the main customers of health center

**Definitions:**

HOAS: Hospital Online Appointment System

Portal: Personalized Online Web Application

MIS: Management Information System

CRM: Customer Relation Management

Dashboard: Personalized information presented using BI techniques such grid, score card, graph

**Requirements:**

**Functional Requirements:**

Anyone can access the online appointment management system via the URL provided by the healthcare or medical facility or through a “Book Now” button in the website. Once the time and date are selected, the system confirms the bookings automatically and also records it within the system instantly without any intervention from the staff. The online appointment management system also comes with features like automated text and email message reminders, which is sent to the booked patients or individuals on the date booked before their scheduled time of booking. The flexibility of the online appointment management system in healthcare includes Scheduling a patient’s treatment, services, and appointments.

**PATIENTS:**

Any anonymous User will be able to access the website easily and can register themselves. Registered patients can view different doctors available in the city with their specialties.

* First user have to select the particular hospital, based on their requirement they will be able to choose the specialty of the doctor and then the particular doctor with whom the appointment is going to be scheduled.
* Registered patients can book and cancel their appointments as per their needs.
* While scheduling the appointments users will be asked to fill the appointment form in which they have to fill their personal information (such as: name, age, contact number ) and select date and time slot for the appointment which will be approved by the respective Doctor on the basis of the availability.
* Patients can pay appointment fees via online payment gateways or on visit to the hospital.
* Patients can provide their medical history.

**DOCTORS:**

* Doctors can login using their credentials and they will be able to accept or reject appointments request of patients on the basis of the availability.
* The whole information of appointments will be displayed on each and every doctor’s portal.
* If required doctor can reschedule patients appointment as per treatment.
* Doctors can also update their availability status on daily basis.

**ADMIN:**

* Admin will add all the information of all hospitals and respective doctors into the portal.
* Admin needs to login with username and password and in the admin home screen.
* Hospitals will be able to promote their facilities for patients by adding them to the portal. Admin will be able to approve or reject request for adding or removing doctors from hospitals.
* Admin will be able to maintain records of all the hospitals, available doctors and patients.
* Admin will be able to update information of all hospitals and registered doctor’s data.
* Admin can view the appointment and view feedback of users.
* Admin can able to control the whole system. He/she can add, delete, update and modify the system. Admin keeps the system up-to-date

**Non Functional Requirement:**

Constant phone calls that lower productivity: Patients, to make appointments and not come to a clinic personally, will be calling the clinic’s phone. That might cause quite a number of problems: There might be missed calls because the line would be occupied at that moment. That also signifies a loss of one customer. A receptionist can be occupied quite often by phone calls and being unable to attend patients in the lobby waiting. This means that, in order to have a proper service, at least two receptionists would be necessary which might be quite expensive for small clinics.

Less wastage of time: Due to appointment management systems, you can make sure that the whole working day is scheduled in such a way that you make the most of your time and that there is no time during the day that you will be idle or wasting time. This is a very good system for the time management of the whole company.

**Security:**

* Registered patients can book and cancel their appointments as per their needs.
* System will provide security with appropriate measures in order to protect patients data and prevent unauthorized access.
* Each doctor will be Able to access system through authentication process.
* Scheduled appointment will be visible to the respective doctors and respective patients only.
* No other patient can see the other patients appointment details.
* No other doctor can see or update other doctors appointment details.
* The payment gateway must be secured. So that no one can disturb the payment process and the details.
* System will automatically log off after some time due to inactiveness.
* Sensitive data will be always encrypted across communication.
* User proper firewall to protect servers from outside fishing, vulnerable attacks.
* System will provide access to the content , operations using Role based security

**Reliability**

* The system will backup business data on regular basis and recover in short time duration to keep system operational Continuous updates are maintained, continuous Administration is done to keep system operational.
* During peak hours system will maintain same user experience by managing load balancing.
* The system should available when requested service by users.
* The system should have a very low failure rate.

**Maintainability:**

* A Commercial database software will be used to maintain System data Persistence.
* The system should be able to be used on multiple platforms.
* The excess permissions for system data may only be changed by the systems data admin.
* The system must run error free while operating with a huge set of data.

**Usability:**

* The system should have informative error messages.
* The system should have a well formed graphical user interface.
* The system should be user friendly and have good response time.

**Safety:**

* The system should maintain a good backup. Data will be backed up periodically to ensure safety of data.
* All external communications between systems data server and clients must be encrypted.
* Portal will be always kept with latest anti virus software.
* Portal functionalities are protected from outside with proper firewall configuration.