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## Smart Healthcare System

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**Abstract**—If you're feeling under the weather but aren't sure what it could be, whether you need to seek immediate medical attention or not. So, to get to know about such symptoms our team had come up with an idea that will provide a website using php named as SMART HEALTHCARE SYSTEM. In this system a symptoms checker is displayed where the patient can identify the disease by pointing the parts where the pain is occurring. Using computerised algorithms, the symptoms will then give a range of conditions that might fit the problems a patient is experiencing. Patient can also select the hospital/ doctor of their choice and can fix an appointment without visiting the hospitals and can cancel/update appointment. Doctors can also view the list of patients. So, this website makes easy to analyze the disease using symptoms checker, where the patient have not to visit hospital for minor disease and online appointment makes the utmost convenience and saves time.

**Keywords**— Symptom Checker, Healthcare, Appointment Scheduling, Disease, Doctor-Patient Communication

### I. INTRODUCTION

Smart Health care management system is a web application developed patient's data effectively and find diseases. the main aim of developing "SMART HEALTH CARE SYSTEM" is to person will click the part of his body where he is having trouble and he will get information about it and best doctors for a particular diseases request for appointment. System which is user friendly simple, fast, and cost – effective. website is designed in such a way that it can be easily used and navigated around. All the diseases are mentioned under specific headings and make the website easily usable. The project Smart Health care management system includes registration of patients, storing their details into the system and matching symptoms and find diseases. Person will click the part of his body where he is having trouble and he will get information about it.

### II. RESEARCH

Before working on our project we went through some of the existing application and research papers that claim to provided similar functionality. We reviewed existing applications in detail:

*An online medical evaluation and treatment System:* In this includes a patient interface, a physician interface and diagnostic tools to gather and Sort information Sent from the patient and automatically generate candidate diagnoses. These systems, however, Suffer from many disadvantages that have limited their utility from the perspective of a patient, a physician (or other qualified caregiver) and also a healthcare management organization.

*Doctor Patient Data Sharing Using Android Chat Application:* The objective of this paper is to build a system where patient can communicate and share his data with doctor without knowing mobile number of doctor. First based on specialization of doctor, patient send request to particular doctor from list of doctor. If doctor accept patient request then they can communicate and share data with each other.

*Doctor Patient Communication System – Android Application:* (DPCS) is an Android app which sets up online communication between a doctor and a patient. This app is helpful to patients to ask questions and state their concerns to doctors regarding their health condition. This app will facilitate the patients to interact with doctors without making any physical appointments, but the patients are restricted to only one message per day before receiving a reply. If the patient gets a response from the corresponding doctor, the patient is allowed to send another message. In addition using this app, the patient can make an appointment to meet the doctor in clinic/hospital.

*M-Health Application Interface Design For Symptom Checking:* Mobile users would be able to communicate with doctors or other health care providers and receive information appropriate for their condition.

Immediate information could be received, and users could be directed to the nearest available medical provider, if appropriate. While a mobile application is not a substitute for a medical diagnosis, sufficient patient information can be gathered to appropriately triage or prepare for the patient's later appointment or further medical care, if needed.

### III. PROPOSED SYSTEM

In our project Smart Healthcare System is propose to open the website and will provide a patient registration form and register your details.

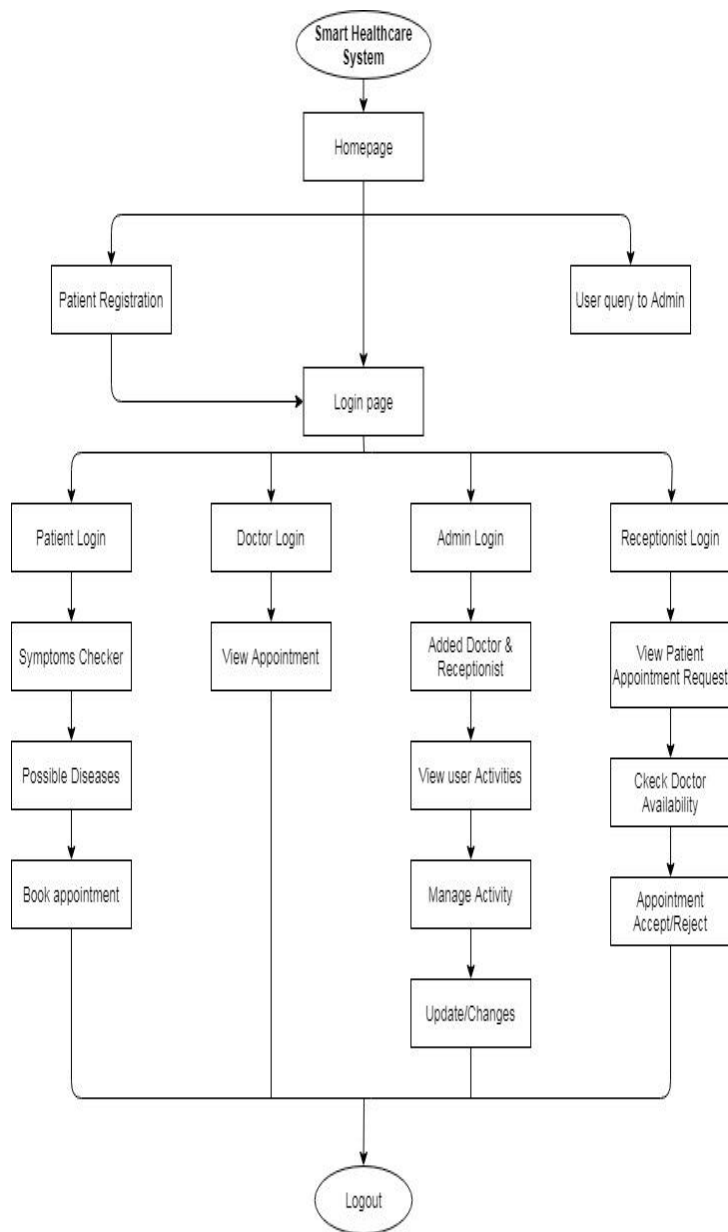
A Patient having any illness in his body can open the website. The Website will display a symptoms chacker on the screen, will display list of symptoms and Patient can select the symptoms and automatically it will display the disease name based on the symptoms. If Patient want to make an appointment , will find nearest hospital based on disease otherwise it will display a list of best doctors. A Patient can make an online appointment of selected hospital and doctor. Patient online appointment request will be send to receptionist and receptionist will accept or reject patient appointment based on time and doctor conformation. Doctor also can view patient appointment. If the user is Admin ,Admin can add Doctor and Receptionist and manage user on website , Admin can update or make changes on website dates. The admin would be able to use the Website for managing the details of the patients and the doctors instead of using the website.

### IV. HARDWARE AND SOFTWARE

	Hardware Requirements	Software Requirements
Developer Requirements	Processor : intel core i3 Laptop RAM (64) Hard disk capacity of 40GB	Subline text(html, Css, php, bootstrap) Server – xampp My SQL Web-Browser
User Requirements	Laptop or phone	Internet connection Browser website

### V. FLOW

The following flow charts depicts the flow of the whole system:



**Fig: System Flow**



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#### VI. WEBSITE

In our project is Smart Healthcare System. It is a website.

Any user open the website the screen is display Homepage. Homepage containing different options like Patient registration, Login, User Query.

*Admin can add Doctor and Receptionist.*

If user is a Patient first use will have to register your details in website, after the patient will use username and password to log in. After the login display symptoms checker, It page will design select the symptoms where having trouble.

After selecting symptoms will automatically display the possible disease name based on the symptoms.

Depending on the type of disease the screen will display a list of hospital and doctor, after selecting doctor or hospital book an appointment.

Doctor and Receptionist login with Admin provided userid and password.

Receptionist login will accept or reject patient appointment based on time and doctor conformation.

Doctor can view list of appointment

#### VII. RESULTS

With this all activities patients can select the symptoms through body map , where the possible disease will be displayed by matching those symptoms and can also ask for query to the doctors and can get the solution in result. patient can select their appointment time and date as per their choice. So, this website makes easy to have conversation with doctor for small symptoms without visiting hospitals which saves time, can identify the problems using body map and online appointment makes the utmost convenience and saves time.

#### VIII. CONCLUSION

This is a web based application where the patient can identify his/her disease through a symptoms checker and get to know about the disease by combining its symptoms. it also overcomes the issue of managing and booking appointments according to the user's choice or demands. Here the user can select good doctors by viewing their details. Hence this project offers an effective solution where users can view select the preferred date and time. This system also allows users to cancel their booking anytime. Receptionist can easily manage their appointment process and monitor the flow of patients to the doctor And with this application the time can be saved to both doctor and patient. It reduces the extra paperwork, delay in timing.

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