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Designing and implementing a Basic Hospital Emergency Services to reach the accidental places, patient data ownership, and use of telecommunication and information technologies in order to provide clinical health care at a distance

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Abstract: Hospital Emergency Services is a web portal which provides online medical services to everyone at their doorstep. The users living in metro or remote village can connect through Internet services. This web portal is more effective, quick in providing medical help especially to people in villages where very few doctors are present. This helps the patient's survival during emergency and to lead a healthy life. This web portal will also help in emergency services such as accident, heart attack and pregnancy.

By studying the current system of hospital emergency services, we have decided to design and implement basic Hospital Emergency Services to save patient's life, also to reach to accidental places, patient data ownership and use of telecommunication and information technologies in order to provide clinical health care at a distance and various other services.

I. INTRODUCTION

Basically the Emergency handling technique is designed to save a life of a Patient in emergency cases. Various Functions such as auto update of database for the system to meet future requirements. Doctor's schedule and treatment periods are managed for daily basis. Nurses are up to date with the data provided to them of all cases. Information about hospital products, specialty and affordability also provided to user. The software should allow bidirectional synchronous communication between the user and the data source in real time. The software should allow collection of vital signs and still images of the patient for visual inspection by experts.

Hospital Emergency Services is a web portal which provides online medical services to everyone at their doorstep. The users living in metro or remote village can connect through Internet services. This web portal is more effective, quick in providing medical help especially to people in villages where very few doctors are present. This helps the patient's survival during emergency and to lead a healthy life.

II. EXISTING SYSTEM

Current system offers the registration of users in order to track the health record of patient's. There are discussion forums which are helpful for discussing the any queries related to any disease. Patients are allowed to appoint the respective doctor for the treatment they needed. Registered patients can log-in to system and view the availability of doctors. The services provided by various hospitals are also included in the existing system.

In spite of all the features provided by this system, existing system failed to save the life of patient in emergency or critical conditions such as accident, heart attack and pregnancy.

So, we have decided to design the system which can show the current position of critically damaged patient to ambulance in order to provide the correct treatment to him/her.

Our plans to modify the current system:

We are going to find the location of nearby hospitals from the accidental place. For which we are using Google map's database and sql queries. We will be also providing the first aid treatment to that patient by the use of technology. Doctors can prescribe the various medicines and tablets. Patients can review and rate the hospitals services and doctors via his/her registered login. So, in this way we are going to build the efficient and reliable web application.

III. SYSTEM ARCHITECTURE

This software package can be readily used by non-programming personal avoiding human handled chance of error. This project is used by two types of users

- I. Health-care organizations
- II. Their consumers

In this system, Emergency Services in case of responsibility of a Third Person via quick adaptability of the system. Basically the third person can access our system through Internet and gets immediate best reliable service to save a Patient's life.

Central Database is created in terms of help needed for a third person to access the help through our website to get instant automated service from Hospitals nearby.

Healthcare organizations and patients can create their accounts, so that specific database such as patients health history, treatments, medicine which can be useful in future incidences where similar cases can be suggested with by a suitable treatment using previous treatment record.

In our system the patient can keep track of their day and medication by setting reminder for particular activity, and any improvement in health can be conveyed to health care organizations. Application can be upgraded according to consumer's and health management system's requirements with little changes.

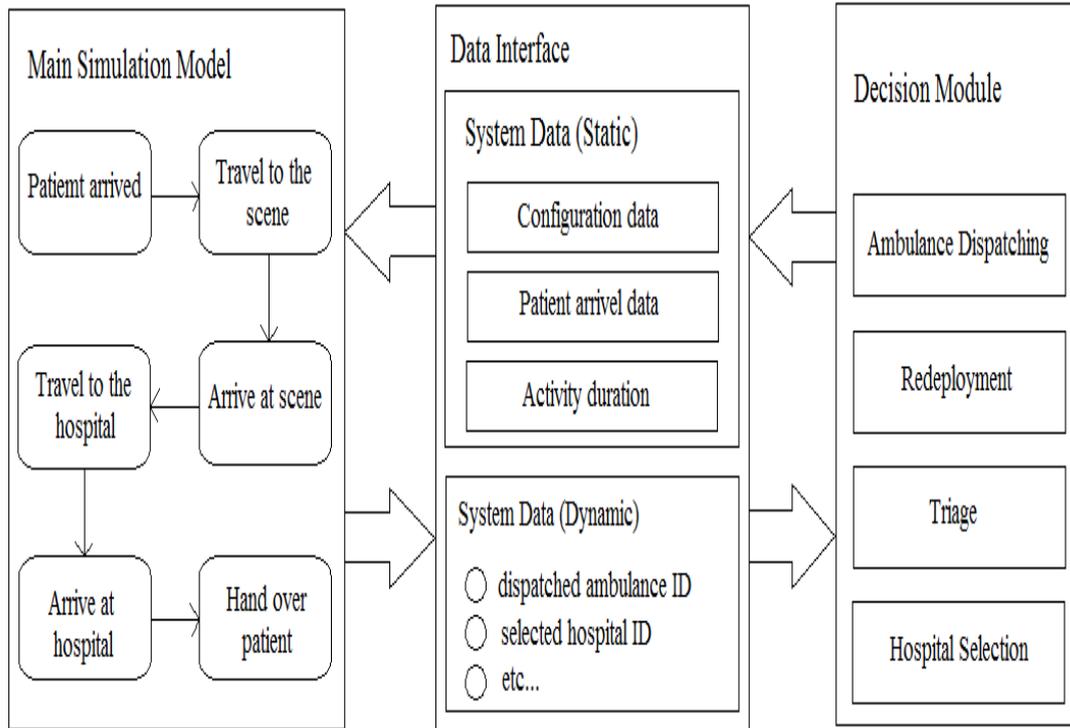


Fig No:1 System Architecture

IV. SYSTEM FLOW DIAGRAM

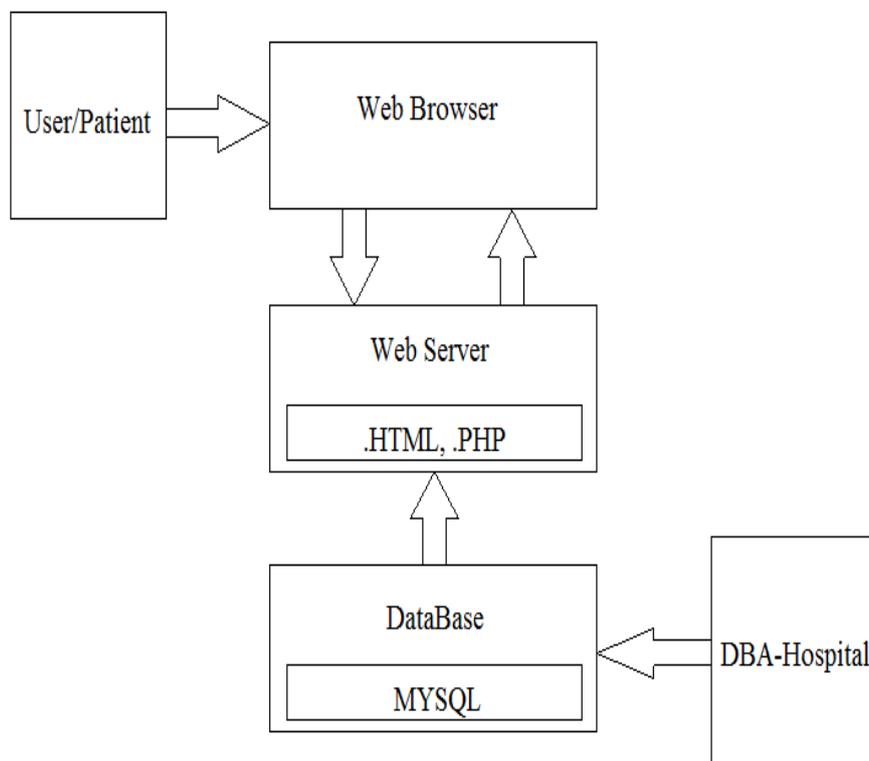


Fig No:2 Flow Diagram

V. SOFTWARE REQUIREMENTS

MySQL has been used to store patient’s health record and manage databases of whole hospital services. HTML, PHP (hypertext preprocessor) used to design the web-pages. Asynchronous calls to databases are handled using Ajax. Various client-side initiated events are handled by using J query.

VI. HARDWARE REQUIREMENTS

Mobile phone having web browser with internet connection (E.g. Chrome, UC, Opera etc.)

VII. LIMITATIONS

Here the user should be well equipped with internet services to browse our system website. We are also assuming that the hospital will allow the accidental and critical cases.

VIII. CONCLUSION

Operating an Emergency Services system involves many operational and planning decisions and the quality of those decisions the level of service of an emergency services system. This project considers many drawbacks and solution to many different services mainly an emergency service. The Aim of the project is achieved using many different aspects of Technology and Algorithms to make the system function. The emergency medical communications system will be the most widely utilized, coordinated, and sophisticated emergency communications systems within the area it serves with the integrated system we have made.

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