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A Review Paper on Integrated Software Solution for Hospital Management

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Abstract - *Health care is one of the major areas in which Electro Medical Record (EMR) is the application which plays a major role in the market. An EMR is the digitalized version of paper based medical records. The EMR application is a complete and integrated hospital management software solution for hospitals, clinics, managed care plans, laboratories and diagnostic imaging centers. The main objective is to develop an EMR application and to test through automation framework w. The software assists in managing of the procedures in the hospital as well as in support functions and contributes to the service providers and health insurance providers have greater integration and simplification of processes and allows an effective control of all clinical workflows and administrative.*

Key Words: *Electronic Medical Record (EMR), Hospital management, Patient records, Medical information, cloud computing technology.*

1.INTRODUCTION

Earlier there were only personal Records which is like carrying the personal medical information about individuals. With personal records it used to be very hectic to carry all the information to which ever hospital we need to go for some treatment. The EMR application will have all the information about a department in a particular area so that everyone can access it. By this the red tape can be reduced in the same way comes the EMR application which will have the information of the whole hospital where the patient's records will be saved and also doctors information will be registered into it. This application helps patients in taking appointments of a particular doctor or any physician required and also for doctors it will be helpful in looking at the previous medications and recent visits to him. Even this EMR application helps in suggesting medication to the patient according to his allergic conditions and considering his previous usage of medication dose can also be known so that for doctor it will be very helpful and there cannot be any minor issues to take place.

1.1 Registering patient in the software

The users for the application can register as patients to store their medical data in the database. The doctors can view the patient's data of their specific department and issue prescriptions [1]. The application has been developed using a PHP framework. The database has been designed using MySQL DB and The XAMPP server has been used to connect front end and back end. The design of an application automated healthcare monitoring platform. along with the evaluation of a working prototype that collects ECG traces from the patient's smart phone that as a Fog gateway for securely sharing them to other authorized entities. This prototype will allow patients to share the information to their physicians in secured manner, monitor's the health status independently and notify the authorities in the emergency situations. The patient History will also be available for further analysis, towards identifying patterns that may improve medical diagnoses in the future [7].

2. The smart phone-based application

The author proposed a mobile application which enables patients to manage their health information and transmit the information to health care providers and there is booking feature for the patient to make a booking to a specific hospital and make a payment in advance and hospitals can use the patient medical information[2]. The Health care application for Android smartphones and IOS using Internet of Things (IoT). To find the availability of the particular group of blood and nearest Blood Bank Centre's based on the user's current location using GPS Tracker of the mobile. The Emergency message Notification will be sent to registered mobile number for the Polio Vaccine/Dose Reminder based on Child's Age [3]. The cloud computing based mobile application for health care service. The cloud computing based remote health care application. This application mainly consists of three parts: Portable medical devices, intelligent terminals like smart phones, cloud services platform. The Portable medical devices will transmit data to the intelligent terminal via wireless way [4]. The Monitoring software application in smart terminal responses for data and displays the data, stores the data, and uploads the measurement results to the cloud service platform. Cloud services platform is a special website which is developed using cloud servers, cloud storages and cloud technology, which is the core of the whole system of the application. The users can view and maintain their health record anytime and anywhere only need an Internet equipment like smart phones. Doctors can view their patient's health status

through the application. If necessary, the doctor can also push the diagnosis to patients and their families and friends smart phone, so that related people can get the diagnosis result at the first time.

3. Improving the efficiency of healthcare application

The healthcare application can be improved by making model of grouping adaptable healthcare services administration framework dependent on Cloud Computing technology. The model of planning adaptable healthcare services administration framework dependent on distributed computing. This framework has been enhanced and incorporates different divisions to create healthcare services framework. Health care management system based on the client side; simple healthcare cloud based android application for smart phones. To improves the security of the application the biometric based confirmation system is appropriate since it defeats the constraints of nominal crime and forget passwords in the regular nominal id secret key instrument utilized for giving security. It also has high correctness rate for secure information access and recovery. The framework proposed enhances cost administration and time [8].

4. CONCLUSIONS

Hence forth the development of the Health care application is in progress and the automation testing of the developed modules is done through the hybrid framework without the intervention of human. When this comes into usage it is mainly to reduce the human effort in retesting the application. Normally when an application is in developing stage it may be having many customizations according to the need of the application so always testing may consume lots of effort and time. Therefore, testing becomes easier with this framework. EMR application improves the work flow efficiency. Eliminates Medical Errors. Improves Patients Satisfaction. Improves Patient safety and Quality of care for patients. Standardize Patient care delivery. For the future of this application to shift this into cloud and into handy devices and make this as a responsive application.

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