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SMART HOSPITAL MANAGEMENT SYSTEM

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ABSTRACT

For last couple of year emerging technologies had changed our life drastically, especially with advances in smart mobile and faster and cheaper internet. As a result of research & development activities we have various kinds of sensors like Digital Bio sensing Surface, ECG (Electrocardiogram) to gather information, smarter equipment like Tablets, any Smart Phone Apps to process and present them; with these we have robust ways of communication to interconnect all these system to provide complete new user experience. Currently various hospitals are using computerized information system known as HIS (Hospital Information System). But with changing technologies there is scope for delivering smarter information system to deliver enhanced administration, superior patient care, and streamlined operations and improve profitability. The study is focus on analyzing current information system, finding key areas for improvement, identifying newer technologies to fit requirement.

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I. INTRODUCTION

Now a day's Health Care Organizations of all sizes faces a critical need to manage and integrate clinical, financial and operational information. In the current regulatory and economic environment, hospitals must focus their efforts on performance initiatives that are essential in the short term and that will also remain critical for long-term success. By delivering the right information to the right person at the right time, any enterprise will be able to improve the delivery of the healthcare Services and make processes more efficient. This is what transforming Information into intelligence. To Change Hospital Management system into Smart Hospital Management System needs to take help from various smart devices which are present now and coming in future. These various devices will help Organization with seamless flow of data between disparate systems and business units so that the enterprise at both macroscopic and microscopic levels can deliver better care and enhanced satisfaction to patients, care providers and also the attendants. This system is used in any Hospital. These various devices will help Organization with seamless flow of data between disparate systems and business units so that the enterprise at both macroscopic and microscopic levels can deliver better care and enhanced satisfaction to patients, care providers and also the attendants. Data streams will be processed and analyzed by framework and Apache. The real time queue is used internally by apache. Processing items are internally generated and processed by regretting two modules.

II. EQUATIONS

MATHEMATICAL Module

• Let W be the whole system which consists

Input = P, A, D.

1. Let P is the set of number of Patients.

U= P1, P2. . . .Pn.

2. D is the set of Doctors. D= D1, D2,. . . ,Dn
3. A is the set of admin P=A1,A2,. . . ,An.

III. CIRCUIT DIAGRAM

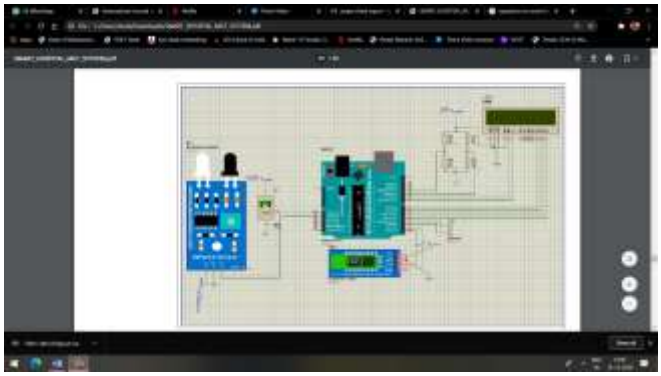

Fig 1. Circuit diagram

IV. CONCULSION

This system presents an approach of automatic system. System is capable of measuring saline level, body temperature, and heartbeats automatically and it is very helpful for doctors and patients.

With advances in digital medical equipments, wireless sensors it is possible to gather data timely and precisely. It is possible to create centralized system connecting each device in hospital further this system can be connected with smart phones/tablets thus enabling more monitoring and control of operations even from remote location. Process of automation can be enhancing with reduced redundancy with help of centralized interconnected system

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