

Hospital Appointment System

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Abstract

The Hospital management system project work focuses on the management of appointments. The main reason for focusing on this work method is that we must continuously learn and develop to keep up with societal developments. Crowd management, Elimination of heaps of files, digitalization of existing system being the main areas of focus.

Keywords: *Hospital Management, Doctor, Quantitative Study, Project Work.*

INTRODUCTION

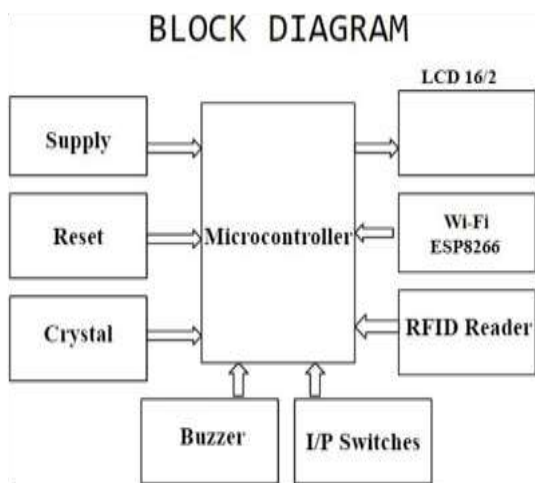
World Health Organization has defined hospital as an integral part of social and medical organization that provides the complete curative and preventive health care and treatment to people. Hospitals are the focal points of education for the health professionals and clinical research necessary for advancement of medicine. Thus, the hospital is one of the most complexes of all administrative organization. Our project Hospital Appointment System includes registration of patients, booking an appointment online and storing their details into the system.

Our software has the facility to give a unique ID for every patient and it stores the detail of every patient and staff automatically. User can search availability of doctor and the details of a patient using ID. Doctors/Admins will be having the authority to accept or decline the appointment based on their schedule.

Our website can be visited by every other user. Every user will be able to create username and password. The data of that very patient will be stored on his/her account on website. The interface is very user-friendly. The data will be well

protected for personal use and the data processing will be very fast. Project develops an automated system that is stores patient's information and will be used by administration. This was an attempt to eliminate the problem of inappropriate data keeping, inaccurate reports, time wastage in storing. Various operational works that are done in hospital include: recording information about the patients, keeping information about various diseases and medicines available to cure them.

All these work done in most hospitals on paper. The need for proper management of health sector leads to the creation of an electronic means of keeping records, administrating discharge, querying of data, prescription helper and also good accountability.



Block Diagram of Hospital Management System

DESCRIPTION

Data Transmission to the Website:

Hardware

1. Microcontroller Atmel AT89C51
2. 16x2 LCD display
3. RFID Reader
4. Crystal Oscillator
5. ESP8266 Wi-Fi Module
6. RESPACK-8
7. Buzzer

The patient will have to scan the card, provided with RFID Tag the unique number on the card will be read by RFID reader. The data collected to the microcontroller will be passed to the server through the Wi-Fi module ESP8266. At the time of appointment the particular patient's information will be displayed on LCD accompanied by buzzing sound of buzzer which will give alert to next patient. The appointment details will be updated on web-app accordingly.

Online Appointment Booking

Our website provides facility to book appointments online. The doctor/admin will be able to add prescription for that particular patient. Both patient and doctor will be able to see the prescription. Our website also gives facility to store history of patient as well. Doctors/admin will be

the one having authorities related updating in prescription and history. Besides, patient will be able to take a print of the prescription slip.

In-Person Visits

Despite internet being so popular rural India sometimes fall behind as far as technology is considered. So keeping this fact in mind, for the people who don't have internet access cards with RFID tags come into the picture. Our System provides patients with cards having RFID tags on it. With the help of these cards patients who will be visiting the clinic will be able to book appointment by simply scanning those cards. Their data will be updated on the website with the help of Wi-Fi Module. Thus, our system has tried its best to serve each and every individual irrespective of digital literacy or internet access.

CONCLUSION

The Hospital Management System is developed using Microcontroller and deployed it using Django framework. The system has reached a steady state where all bugs have been eliminated. The system is operated at a high level of efficiency. This System will provide an efficient way to deal with patients by saving their time and managing the crowd.

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