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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. 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 IOT based project Hospital ReceptionSystem includes registration of patients, storing their details into the system . The need for proper management of health sector leads to the creation of an electronic means of keeping records, administrating discharge, querying of data and also good accountability. Hospital Management System can manage multiple users of the system and can have the track of right assigned to them.

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

I. 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/Admin 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.

II. PROBLEM STATEMENT

In an era where mankind is facing pandemic like covid-19 technology has become an inevitable part of our life and time has become as precious as it was ever it becomes crucial to use technology in the most optimized way possible. It is very important to maintain efficient software to handle information of a hospital. These application provides a way to record this information and to access this in a simple way.

2.1 Existing System:

The existing System provides basic functionality needed to be handled in a hospital management environment. There is no intelligence of a software in such cases. In the existing system all the patient details, Doctor availability details and medicines prescribed by the doctor is maintained by the receptionist. If a patient has to be admitted, we need to check the availability of that particular doctor which consumes a lot of time if done manually. Also there is no proper search technique to check persons information. It is very difficult task to

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maintain all the details regarding the patient as far as existing system is considered. There are also many loop holes when we look at the security of the systems.

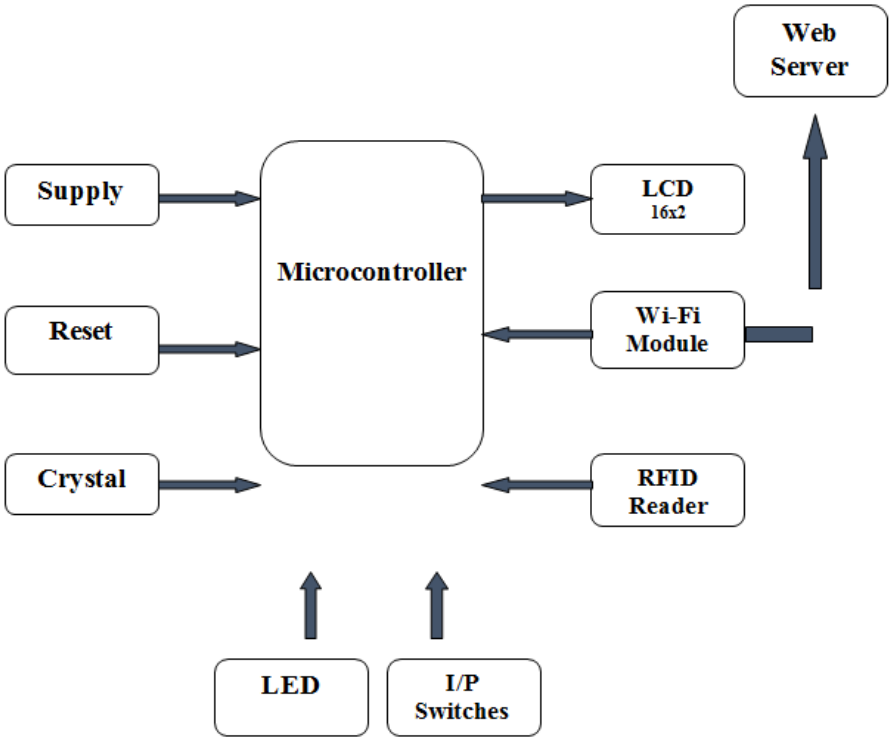
2.2 Proposed System:

In our proposed system, we are going to provide solutions to all the above mentioned problems. The System includes a web application accompanied by a microcontroller based hardware model. The web application serves patients with following facilities Online appointment booking, Online records regarding medical history of patients, Availability of data online regarding prescription of patients.

The Hardware part of the system is responsible for appointment booking using cards having RFID tags for the patients paying in-person visits or the patients with no internet access. Our system ensures retention of patient's data and its security. It reduces time which conventionalsystem would have consumed.

III. METHODOLOGY

An Overview of proposed system is shown in the following block diagram (fig 1) below. The proposed system has both Hardware Implementation and Software Implementation. The Hardware part of the system is responsible for appointment booking using cards having RFID tags for the patients paying in-person visits or the patients with no internet access. Our system ensures retention of patient's data and its security. It reduces time which conventional system would have consumed. The Software Part of the system basically consists of web application accompanied by a microcontroller based hardware model. The web application serves patients with facilities like Online appointment booking, Online records regarding medical history of patients, availability of data online regarding prescription of patients.



Fig(1). Block Diagram Of Hospital Management System

IV. MODELING AND ANALYSIS

Model The Project's architecture is depicted in the below flowchart . The Following flowchart describes the whole process of Hospital Appointment System. At the initial stage, the patient can itself register to the website of the appointment system. Then one can login to the website by created username and password. The categories of system users are Doctors, Patient and Admin, where each of them are provided with different roles.

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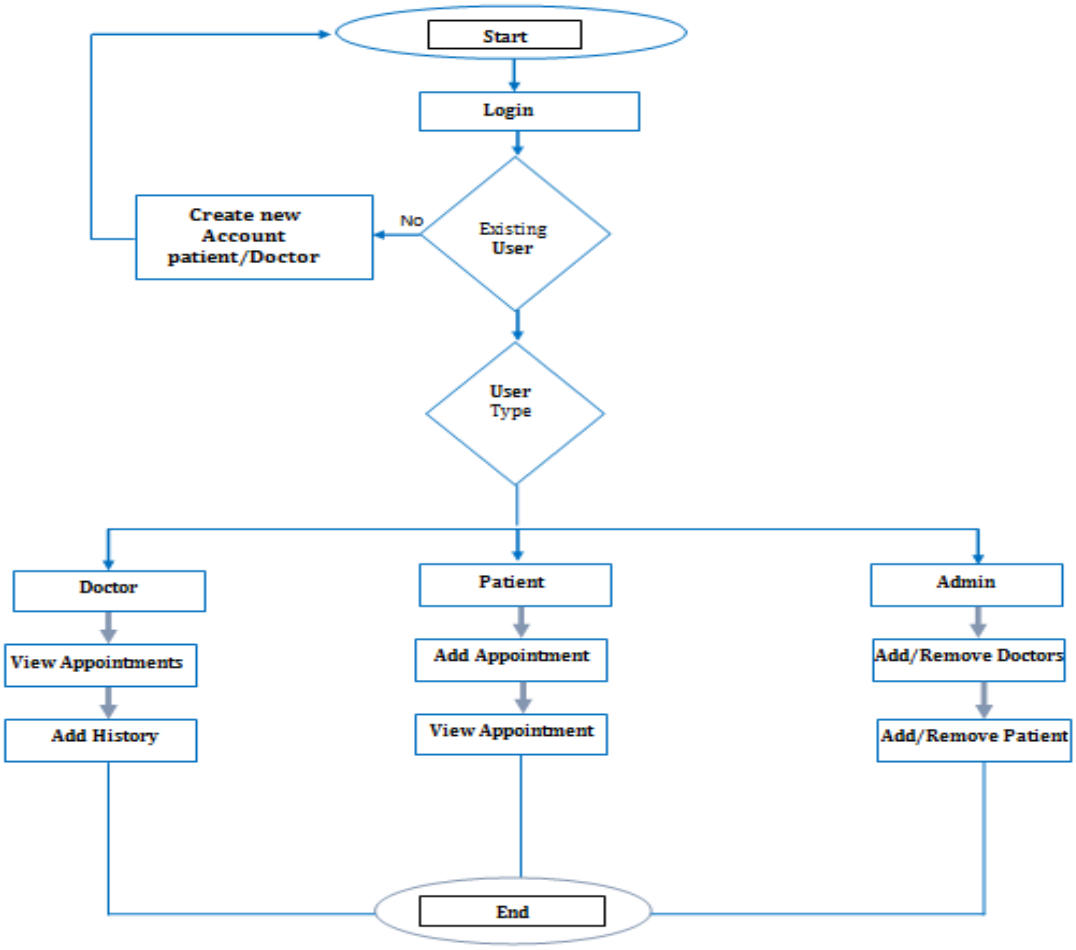
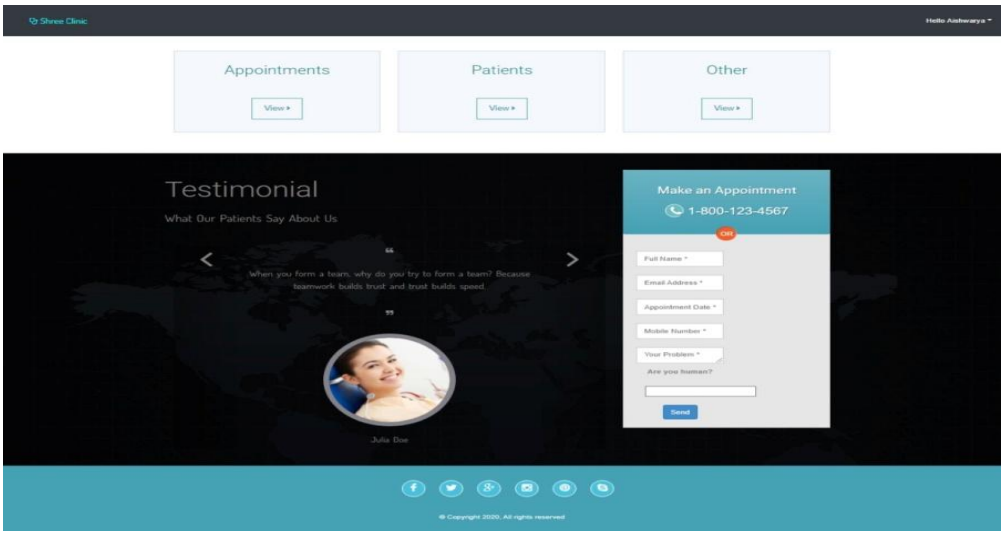


Fig(2). Flowchart Of Hospital Appointment System

V. RESULTS AND DISCUSSION

The Hospital Appointment system is a user friendly system where any on the individual is comfortable to working process. The Django Framework is used for the web integration. Django is a Python-based web framework that allows you to quickly create efficient web applications. It is also called batteries included framework because Django provides built-in features for everything including Django Admin Interface, default database – SQLlite3, etc..

The Below image shows the Result of our system.



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VI. CONCLUSION

We have designed Hospital Appointment System with web-application playing major role. It digitalizes the conventional appointment system eliminating heaps of files. It stores the patient's data online ensuring security of the same The patient's information is available for doctors at fingertips. It decreases the time period increasing efficiency of the whole system.

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