**SYNOPSIS**

**Report on**

**E-Hospital**

**by**

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**ABSTRACT**

**Background:** The increasing number of patient visits in primary healthcare centers causes long duration of queue in a registration counter. To solve this problem, we have created an online registration system in each health service provider. The e-health is expected to give a positive impact on reducing the queue traffic at the registration counter.

**Aim:** This study identified whether the online registration system or e-health which has been implemented for primary healthcare centers in successful or not.

**Method:** This study was a literature review which collected articles from Google Scholar databases published from 2015 until 2019. Fourteen articles were collected, but only 6 articles were discussed because of their relevant topics.

**Results:** The review shows that e-health can simplify the process of patient registration and reduce patients’ waiting time for health service delivery. The success indicators of e-health program include its well-established system, effective information system, and excellent service for community. Obstacles found in the e-health implementation involve lack of thorough socialization of e-health. In turn, the community prefers a manual registration to e-health.

**Conclusion:** The e-health service in primary healthcare centers in gives a positive effect on giving a fast and easy process in the registration procedure. However, there may be some obstacles in implementing e-health due to lack of socialization.

**Keywords :** queue, e-health, queuing time, primary healthcare centers.

Our project **E-Hospital** includes registration of patients, storing their details into the system, and also booking their appointments with doctors.

Our software has the facility to give a unique id for every patient and stores the details of every patient and the staff automatically. User can search availability of a doctor and the details of a patient using the id. The Hospital Management

System can be entered using a username and password. It is accessible either by an administrator or receptionist. Only they can add data into the database. The data can be retrieved easily. The interface is very user-friendly. The data are well protected for personal use and makes the data processing very fast.

It is having mainly two modules. One is at Administration Level and other one is of user i.e. of patients and doctors. The Application maintains authentication in order to access the application. Administrator task includes managing doctors information, patient’s information. To achieve this aim a database was designed one for the patient and other for the doctors which the admin can access. The complaints which are given by user will be referred by authorities.

The Patient modules include checking appointments, prescription. User can also pay doctor’s Fee online.

**TABLE OF CONTENTS**

Page Number

1. Introduction --
2. Literature Review --
3. Project / Research Objective --
4. Research Methodology --
5. Project / Research Outcome --
6. Proposed Time Duration --

References --

**INTRODUCTION**

###### PURPOSE:-

This software will help the company to be more efficient in registration of their patients and manage appointments, records of patients. It enables doctors and admin to view and modify appointments schedules if required. The purpose of this project is to computerize all details regarding patient details and hospital details.

###### SCOPE:-

The system will be used as the application that serves hospitals, clinic, dispensaries or other health institutions. The intention of the system is to increase the number of patients that can be treated and managed properly.

If the hospital management system is file based, management of the hospital has to put much effort on securing the files. They can be easily damaged by fire, insects and natural disasters. Also could be misplaced by losing data and information.

###### DEFINITIONS, ACRONYMS, and ABBREVIATIONS

1. **Cardiologist** - treats heart disease.
2. **Pediatrician** - treats infants, toddlers, children and teenagers.
3. **Plastic Surgeon** - restores, reconstructs, corrects or improves in the shape and appearance of damaged body structures, especially the face.
4. **Psychiatrist** - treats patients with mental and emotional disorders.
5. Ophthalmologist - treats eye defects, injuries, and diseases
6. **ENT**- Ear, Nose and Throat Specialist.

* **SRS**: Software Requirement Specification.
* **DFD:** Data Flow Diagram.
* **ENT**- Ear, Nose and Throat Specialist.
* **BG** - Blood group
  + **Appt –** Appointment.
  + **Sign up -** Creating New User.
  + **Log in -** Logging in Existing User.
  + **PhNo** - Mobile number.
  + **Addr** – Address.
  + **Expr** – Experience.

**LITERATURE REVIEW**

**PROJECT OBJECTIVE**

**Overview**

Our application contains two modules – the admin module and the user module. Our application will not only help the admin to preview the monthly and/or yearly data but it will also allow them to edit, add or update records. The software will also help the admin to monitor the transactions made by the patients and generate confirmations for the same. The admin will be able to manage and update information about doctors.

The user module can be accessed by both the doctors and the patients. The doctor can confirm and/or cancel appointments. The doctors can even add prescriptions for their patients using our application. The patients will be able to apply for the appointment and make transaction for the same, and can even cancel appointments with the doctors. They can track details about the previous transactions made by them.

**Advantages**

* The system automates the manual procedure of managing hospital activities.
* Doctors can view their patients treatment records and details easily.
* It even generates an instant bill.
* The system is convenient and flexible to be used.
* It saves their time, efforts, money and resources.

##### Disadvantages

* Requires large database.
* The admin has to manually keep updating the information by entering the details in the system.
* Need Internet connectivity 24\*7.

**RESEARCH METHODOLOGY**

A good system is seen from some characteristics, for instance being flexible, easy to utilize, systematic, functional, simple, and efficient for using resources. Based on the implementation of e-health service in recent years, the e-health has fulfilled good characteristics of information system. In terms of flexibility, the e-health service uses database programs, including SQL Server and Java Application.

This present study was a literature review discussing e-health. E-health is still a new innovation in health sector, thus articles that discuss e-health are limited.

**Leadership**

Leadership influences the implementation of a program since leaders have a great authority and responsibility for the program. Leadership quality plays an important role in program success. The implementation of e-health involves some experts of information and communication technology who have good leadership skills. Those experts are in charge to monitor if there are some troubles in the internet network.

**Planning**

Planning is the first stage in implementing a program. It ensures monitoring and schedule at every step which helps us to identify our goals clearly.

**Technology**

Technology is the basic asset for digital era. In implementing e-health, technology has been proved to have a good quality because it is designed with database DB2 SQL Server and Java Application which are categorized as the best database program for companies and organization.

**PROJECT OUTCOME**

###### PERFORMANCE REQUIREMENTS

* **Response time**- The system will give responses within 1 second after checking the patient information and other information.
* **Capacity**-The system must support 1000 people at a time.
* **User interface**- User interface screen will response within 5 seconds.

###### SAFETY REQUIREMENTS

If there is extensive damage to a wide portion of the database due to some failure, such as a disk crash, the recovery method restores a past copy of the database that was backed up to archival storage and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed up log, up to the time of failure.

All the administrative and data entry operators have unique logins so system can understand who is login in to system right now no intruders (person without permmission) allowed except system administrative nobody cannot change record and valuable data.

###### SECURITY REQUIREMENTS

1. Want take the responsibility of failures due to hardware malfunctioning.
2. Warranty period of maintaining the software would be one year.
3. Additional payments will be analyzed and charged for further maintenance.
4. If any error occur due to a user’s improper use. Warranty will not be allocated to it.
5. No money back returns for the software.