PIMPRI CHINCHWAD EDUCATIONTRUST'S

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CERTIFICATE

This is certify that the PBL report entitled

"Patient Information Record System"

submitted by

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have successfully completed the PBL entitled "Patient Information Record System" in the fulfilment of S. E. (Computer Engineering) and this work has been carried out in my presence.

Date :

Place :

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ACKNOWLEDGEMENT

It gives me great pleasure to present PBL on “Patient Information Record System”. In preparing this report number of hands helped me directly and indirectly. There- fore, it becomes my duty to express my gratitude towards them.

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in Computer Engineering Department, for helping me and giving me proper guidance. I will fail in my duty if I won’t acknowledge a great sense of gratitude to the Head of Department Dr. Archana Chaugule and the entire staff members in for their cooperation.

I am also thankful to my family for their whole hearted blessings are always for me support and constant encouragement towards the fulfillment of the work. I wish to record the help extended to be my friends in all possible ways and active support and constant encouragement.

Place : Ravet, Pune

Date :

Abstract

The medical records must appropriately have all of the patients' medical history. Healthcare professionals should always find a way to maintain the physiological parameters that can be referenced when the need arises as it can be used for several purposes. This study on patient's database management system is design to transform the existing way of searching, sorting, keeping and accessing patient medical information into electronic medical record thereby eliminating the traditional system. Existing platforms have been critically examined and hence a computer system which uses platforms like cloud can allow a secure way to store data. The computer-based platforms produce patient's records that enhances medical practitioners to constantly monitor their patients daily in and out of the hospital. The research looks for a more reliable and efficient scheme via computer technology to process patient health record ensuring proficient outcome that is cost effective, save time and speed-up treatment.

Introduction

The Patient Information Record System: A new modern way to store patient's data in your system. It replaces the old way of recording patient's information in simple hard-drive to a more secure way. This technique helps to reduce the risk of data getting misplaced as. Whereas the data can also be accessed by the multiple devices This study on patient's database management system is design to transform the existing way of searching, sorting, keeping and accessing patient medical information (files) into a secure electronic medical record by using concepts like cloud computing. Existing platforms have been critically examined and hence a computer system by cloud computing can allow a secure way to store data. The computerbased platform produces patient's records that enhances medical practitioner's to constantly monitor their patients daily in and out of the hospital.

Problem Statement

The Patient Information Record System is about being a new way to store patient's data onto a secure cloud platform. It replaces the existing ways of recording patient's information into a system hard drive to platform where large data can be stored and handled efficiently and accessed through multiple devices.

Motivation

Storing all the data in a single PC at the reception can have many flaws, like the hard drive can get damaged or the system can stop functioning due to some errors. Hence once the data get trapped inside the PC it can create a big problem to retrieve it back.

So now with this system, as data is stored on a cloud platform one can access it more efficiently with just few clicks, reducing efforts and saving time of user. Whereas multiple access makes it easy to fetch data on different devices.

Objectives

To store data of patients digitally on a secured cloud platform in a well-organized manner instead of storing it into a simple hard-drive.

To reduce time and efforts of user to access the data in a more efficient way and through multiple devices.

Rendering safe and secure way for storing patient information and prevent data getting misplaced.

Literature Survey

No	Author Name	Topic Name	Algorithm/ Technique used	Output	Year
1	F. D. Anton S. Anton	A Patient Data Management System for Medical Services and Training Year: 2018	when the patient is received in the hospital at the reception an operator is using the web interface in order to create a patient file which contains the personal data of the patient and an identification number of the patient, then, depending on the affection and the type of the intervention for what the patient is hospitalized, a new clinical observation sheet will be created and associated with the patient and the physician which will address the problem.	This paper presents an electronic system which uses cloud services in order to manage the patient clinical observation sheet, also the system aid the physician to add his observations to the observation sheet by recording these observations into mp3 files which are then sent in cloud for storage and processing. The files are processed by a Speech to Text cloud service which allows that the observation to be printed for the next visit of the physician.	2013

2	Sawaneh Ing Ibrahim Kamara Albert Koroma Joshua.	A Computerized Patient's Database Management System Year: 2018	System will make uses Microsoft visual basic 6.0 as an end point and dome other office application package suits. Homepage:A Medical application is designed known as CUPID consisting the Patient Form, Physician Form, Staff Form and Exit as the home page. Patient Registration: Use to view the detail of each patent Physician Form : use to view the details of each physician work in the clinic.	The proposed system is design for medical professionals to monitor patient's medical details (diagnosis, prescription, admission, discharged etc.). It eliminate the problems faced by the old system and improve on the efficiency of patient record management system that is cost effective, less time consuming and renders accuracy and privacy as only authorized users can gain access to the records as opposed by the old system.	2013

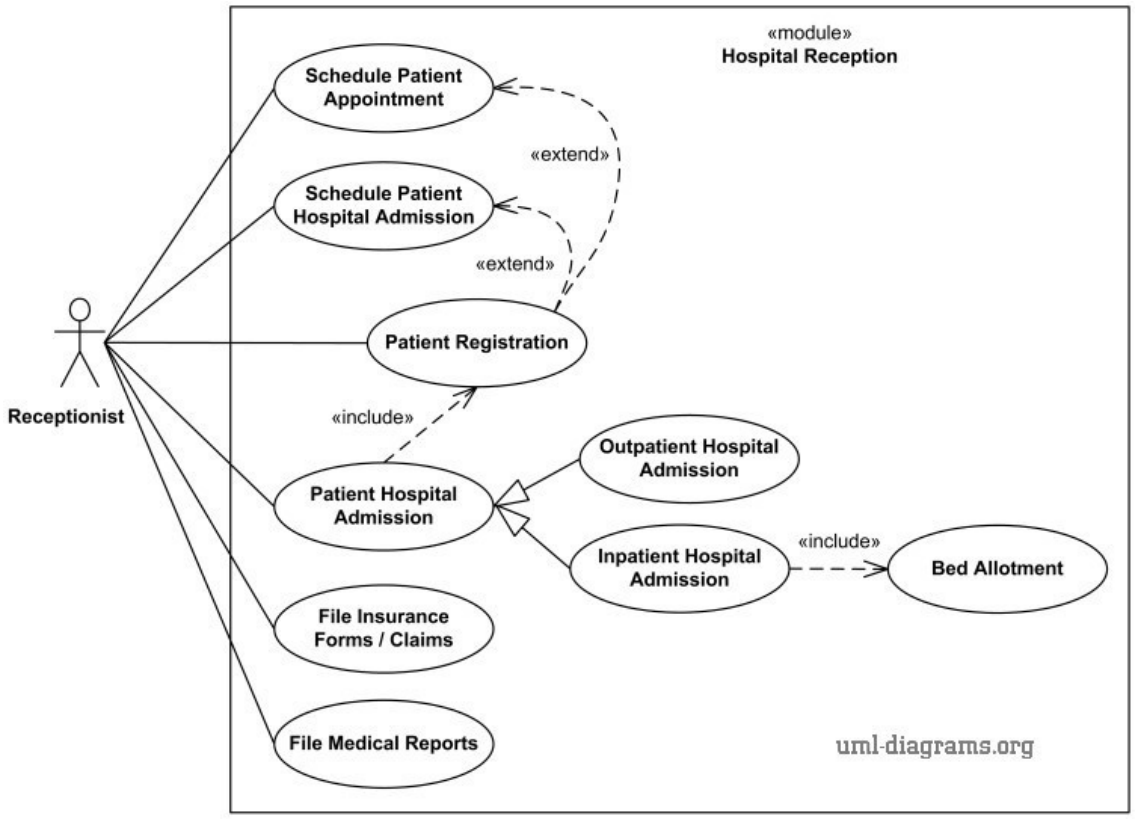
3	O.O. Lawal, B.O. Afeni, J. O. Meba wondu	Development of Hospital Information Management Systems Year: 2016	The Hospital Information Management System for Renewal clinic will be a 3-tier application architecture. The presentation will be handled by packages such as the HTML, CSS, JavaScript. The application logic will be handled by PHP hypertext pre-processor (PHP) while the database is MYSQL database software. The server will be located directly inside the ICT office for proper monitoring and maintenance operations. The diagram below shows the pictorial overview of the proposed system.	The system verify and validate all user input. The user gets appropriate notification in case of any error in the course of the use of the system. The system captured patient's details which is used to create an account with the physician. The system generates the Patient Identity (ID) and also the Reference ID automatically and identifies inpatients and outpatients which is made possible by a checkbox.	2014

Methodology and proposed system

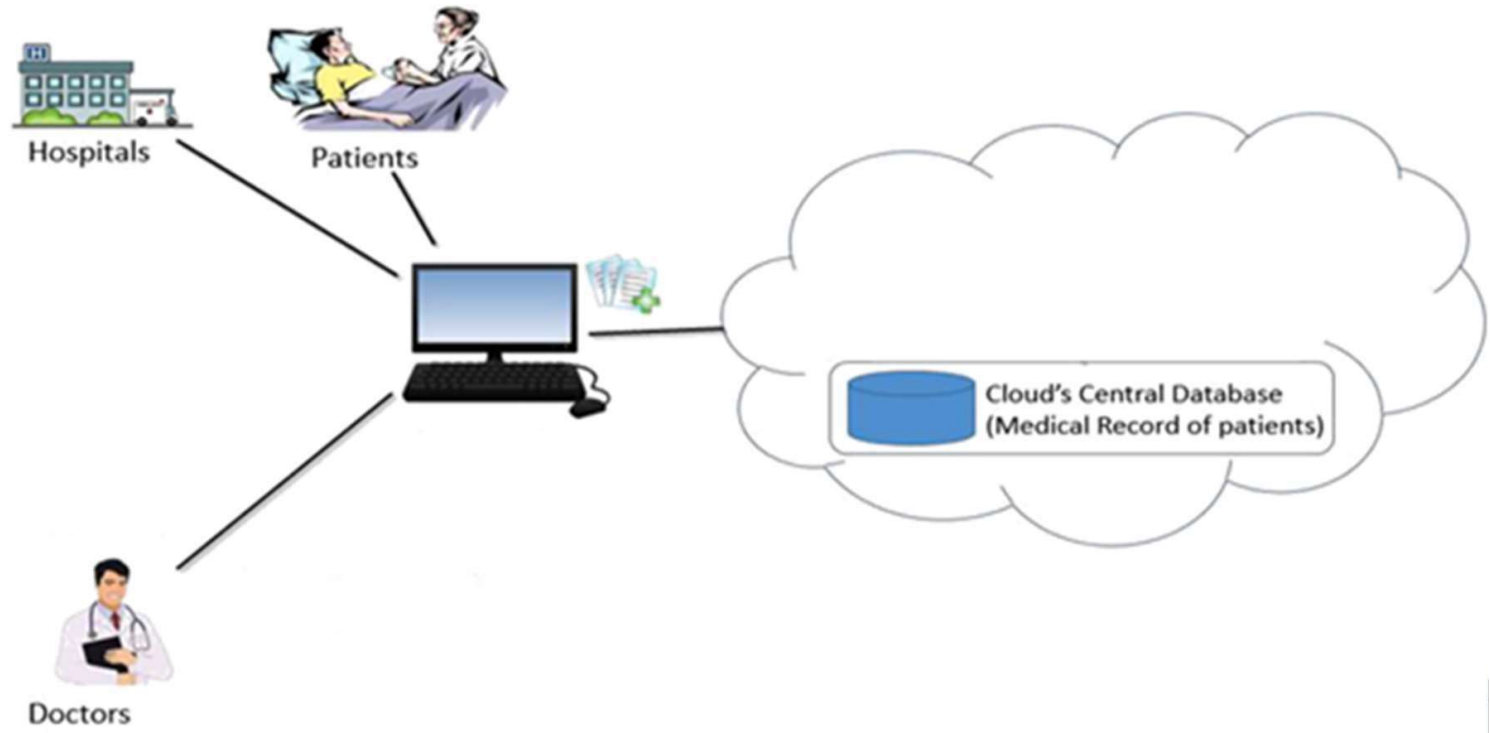
Software and hardware requirements :

- Any digital having active internet connection and browser to access websites

UML Diagram (Use case diagram) :



Proposed System :



Contents of the proposed system :

1. User interface :

The part of website that the user interacts with directly is termed the user interface. It is also referred to as the 'client side' or 'frontend' of the applications. It includes everything that users experience directly. Text colours and styles, images, graphs and tables, buttons, colours, and navigation menu. HTML, CSS, and JavaScript are the languages used for Front End development . The structure, design, behavior, and contents of everything seen o browser screens when websites, web applications, or mobile apps are opened up, is implemented by front end developers . Responsiveness and performance are two main objectives of the front end. The developer must ensure that the site is responsive i.e. it appears correctly on devices of all sizes no part of the website should behave abnormally

irrespective of the size of the screen. In the proposed system, the frontend is built by using HTML, CSS and JavaScript.

2. Backend :

Backend is the server -side of the website. It stores and arranges data, and also make sure everything on the client-side of the website works fine. It is the part of the website that you cannot see and interact with. It is the portion of the software that doesn't come in contact with the users. The parts and characteristics developed by backend designers are indirectly assessed by users through a front-end application. Activities, like writing APIs, creating libraries, and working with system components without user interface or even systems of scientific programming, are also included in the backend.

In the proposed system, the database us is Google Firebase's Realtime database. The recipe accepting is done by post request. Data will be fetched by using APIs.

Results :

- The doctors can access data from any device with just having login id and password.
- All the data is stored on cloud, so no need to worry about losing data.

Challenges Faced :

- To find the best cloud storage as there are many available in the market.

Conclusion :

Using a secure platform like cloud to store the information of patients.

Through this data can be accessed easily and even on multiple devices.

Where there is low risk of losing data

Future Scope :

This system when implemented at hospitals, helps the staff to handle the data more efficiently. Even it can even be modified for schools to store student's data or by any other organization to store data of the people they want. As we use one secure cloud platform to store all data, multiple devices can access the data.

References :

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[4] O. O. Lawal, B. O. Afeni, J. O. Mebawondu, "Development of Hospital Information Management Systems", 2016 International Journal of Advanced Engineering, Management and Science Vol-2, Issue-10, Oct- 2016