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HEALTH BRIDGE WEBSITE

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ABSTRACT

The aim of Project **Health-Bridge** is to make the interaction of patients and doctors seamless, convenient and more organized. This platform is built keeping in mind the problems and hassles one has to face while using any medical facility via hospitals. Here's what we provide for patients:

  1) Doctor appointment booking

  2) Lab test booking

  3) Online prescription & medical history database

  4) Generic drugs to brand name converter & recommendation system

  5) Ambulance on demand service

  6) Disease prediction services

For doctors, we provide the following services:

  1) Appointment management system

  2) Online prescription creation system

  3) View medical history and previous appointments of patient

1. INTRODUCTION

    Doctors giving prescriptions to patient it's a common matter, but our proposed system is different from common aspects. Doctor will suggest generic names of medicines and the patient will get the prescription list by patient id. From the list it will show the current medicine type with price. We hope that will be effective for the medical report system, patients can get medicine by their own choice.

A service to connect patients and doctors. Patients can book appointments and can get themselves checked online and get prescribed. We also inbuilt features such as :

    a) **Disease Prediction:** Prediction of Breast Cancer Pneumonia from X-Ray Scans also patients can know the health status of the heart too.

  b) **General Names and Medicines**: Making brand names and medicines available to the patients by providing them a generic name of the medicines. Which are far cheaper and easily available .

  c) **Book Appointment**: Patients can book and appointment with a specific doctor and can get prescribed afterwards.

Here's what we provide for patients:

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b) Lab test booking

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d) d - Prioritized lab results for disease infected patients

Predictions: We used Tensor flow to train a CNN which predicts Pneumonia (from chest-x rays) and Breast Cancer (from cell images) with accuracy of 97% and 92% respectively.

Ambulance on Demand: A MERN Web App in which patients can make requests to the ambulance person in real time and depending upon the patient's location, the nearby ambulance will respond to the patients' request**.**

2. EASE OF USE

MOTIVATION

Health and well-being for all people and communities. Health Bridge works with partners and communities worldwide to improve health and reduce health inequities through research, policy and action.

Health Bridge is an envisioned system that encourages the use of Personal Health Records (PHRs) by providing interoperable assistive tools to help low-socioeconomic families manage their health. Although there are many PHRs available today, not many people use them because it is unclear what the motivations for continued use are. Low socioeconomic individuals could benefit from PHRs because they could efficiently share health information with the multitude of healthcare professionals they see. In our previous research, we found that low socioeconomic caregivers receive a lot of health promotion literature, but are unsure how to apply the information to their own culturally influenced lives. Hea lth Bridge will provide families a way to input their health issues and then they will be provided with the doctor which will solve their issue . Provide them with all the medical assistance needed. Also be able to receive personalized feedback on what they are consuming and how they can integrate their needs by providing the prescription given to them and get the required generic medicine required.

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3. PROBLEM STATEMENT AND OBJECTIVE

The health problem is the gap between an acceptable or desirable health status and the current status.At least half of the world's population cannot obtain essential health services, according to a new report from the World Bank and WHO. And each year, large numbers of households are being pushed into poverty because they must pay for health care out of their own pockets.

Currently, 800 million people spend at least 10 percent of their household budgets on health expenses for themselves, a sick child or other family member. For almost 100 million people these expenses are high enough to push them into extreme poverty, forcing them to survive on just $1.90 or less a day. The findings, released today in Tracking Universal Health Coverage: 2017 Global Monitoring Report, have been simultaneously published in Lancet Global Health.

"It is completely unacceptable that half the world still lacks coverage for the most essential health services," said Dr Tedros Adhanom Ghebreyesus, Director-General of WHO. "And it is unnecessary. A solution exists: universal health coverage (UHC) allows everyone to obtain the health services they need, when and where they need them, without facing financial hardship."

"The report makes clear that if we are serious – not just about better health outcomes, but also about ending poverty – we must urgently scale up our efforts on universal health coverage," said World Bank Group President Dr. Jim Yong Kim. "Investments in health, and more generally investments in

people, are critical to build human capital and enable sustainable and inclusive economic growth. But the system is broken: we need a fundamental shift in the way we mobilize resources for health and human capital, especially at the country level. We are working on many fronts to help countries spend more and more effectively on people, and increase their progress towards universal health coverage."

There is some good news: The report shows that the 21st century has seen an increase in the number of people able to obtain some key health services, such as immunization and family planning, as well as antiretroviral treatment for HIV and insecticide-treated bed nets to prevent malaria. In addition, fewer people are now being tipped into extreme poverty than at the turn of the century. Our objective is to provide proper health care with re required prescription which makes it easy to provide the required assistance to the people below poverty line . It provides them will the generic medicines which helps to save money at the same time as they are getting treated.

LITERATURE SURVEY

SRNO	YEAR	PAPER TITLE	LEARNING
1.	Oct 2018	A Literature Review on Health Information Seeking behavior on The Web: A Health Consumer and Health Professional Perspective	The idea in the paper is an website that serves the user to create the Today, as the developing of hardware of an healthy relationship with doctors. Interest in the internet as a communication tool for health related information is growing rapidly
2.	Nov 2018	Trust between patients and health websites	This paper designed and implemented a system prototype using modern technologies to offer cost-effective services.

4. LIMITATIONS OF EXISTING/SIMILAR SYSTEM

· **It enables 24/7 online presence**: It offers convenience as they can access the information they require at the comfort of their home. This helps patients during the time of emergency as well.

· **It helps in relevant information exchange**: An effective website design, along with all the relevant and important information will be of great help for your patients. The simplest, as well as the informative website, acts as an easy way of communication between the medical center and the information seeker

· **Cost Effective:** As well as simply displaying all the necessary information, you can also educate your online users about the latest diagnosing techniques. You can also incorporate information about the latest machines that your organization holds for better patient care.

· **Expand Your Reach**: Another advantage of having an easy to navigate healthcare website is that it reaches the information seekers beyond the geographical frontiers.

· **Patient Insights**: Analytic tools are also very crucial for your organization. It allows you to chalk out and identify who are your typical information seekers and how did they find you. It helps you to know what the visitors like and adapt your organization to maximize the reach.

· It allows smooth customer service online: Before the popularity of websites, people used to stand in long queue to book their appointments. They were also asked to wait for quite a long time to get the necessary information about the medical center or the doctor's availability.

HARDWARE AND SOFTWARE REQUIREMENTS

Hardware Requirements:

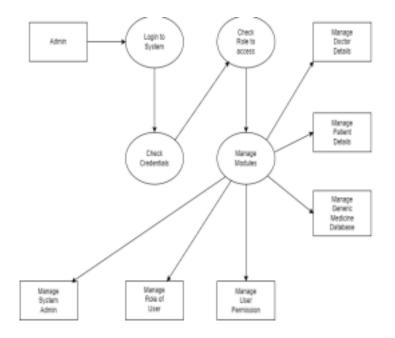· The Laptop with RAM-8GB Operating system- Windows (64 bit)

Software Requirements:

1) Java Script

2) Mango DB

3) React

4) Node Js

5) Tensor Flow

6) Flask.

Our designed website used popular and most secured web framework django[1]. Also used HTML, CSS and bootstrap for designing the site.

PROPOSED SYSTEM

· Architecture and Framework:

5. CONCLUSION

Generic medicine gets a unanimous thumbs-up! This application will give the new proposed system of prescription. Generic medicine is just an alternative that patients can use for branded medicines. Everyone needs to be well informed and concerned about the quality of care. *Everyone* means patients and their families, consumer agents and advocates, health professionals, administrators of health plans and facilities, purchasers of healthcare services, and policymakers at all levels. The messages to these audiences are 1) that the quality of care can be measured and improved and 2) that quality of care should not be ignored in pursuit of cost control. Reinforcing these messages means making sure that quality of care stays on the health care-delivery agenda, with clear identification of the risks and opportunities that are posed by the changes in health care in the United States. It also means describing how health plans, health care organizations, and clinicians should be accountable to patients and society and, conversely, how individuals can take appropriate responsibility for their own health.

FUTURE SCOPE

This project is basically updating the manual chemist inventory system to an automated inventory system so that organizations can manage their records in an efficient and organized form.

Figures and Tables

TABLE I.

SR.NO	FIGURES TITLE
1	Client manifest (json):
2	Ambulance on demand (Mongoose):
3	ML python app:
4	Server of doctor page (json):
5	Front end user interface(homepage):
6	Prescribed medicines (Search list):
7	Book Appointment Page:
8	Profile Page of the user:

1) CLIENT MANIFEST(JSON):-

2) AMBULANCE ON DEMAND(MONGOOSE)

3) ML APP

4) SERVER FOR DOCTOR PAGE (json):

5) *FRONT-END USER INTERFACE(homepage):*

6) *PRESCRIBED MEDICINES(Search list):*

7) *BOOK APPOINTMENT PAGE :*

8) PROFILE PAGE OF USER:

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