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WebMD Disease Prediction System

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Abstract

Globally, several cases go undiagnosed due to poor healthcare support in remote areas. In this context, a centralized system is needed for efficacious monitoring and analysis of the medical records. A web-predicated patient diagnostic system is a central platform to store the medical history and soothsay the possible disease predicated on the current symptoms experienced by a patient to ascertain more expeditious and precise diagnosis.

The proposed WebMD Disease prediction system is equipped with a recommendation scheme to recommend the type of tests predicated on the subsisting symptoms of the patient, so that compulsory precautions can be taken. A centralized database ascertains that the medical data is preserved and there is transparency in the system.

Keywords: Disease prediction, Healthcare, Web

Introduction

Organization of the medical data is always a challenging task for betterment of modern healthcare system. It is conspicuous that mostly the medical data is exclusive only for the healthcare organizations which is only practised by hospitals.

Today numerous medical facilities introduce some kind of mute's database to manage their convivial indemnification or patient information.

These database commonly engender an abundance of information which can be in distinctive organization like numbers, content, diagrams and pictures yet woefully, this database that contains opulent data is once in a while

utilized for clinical cull making.

The paper includes:

–Disease prediction: This system provide us the facility of predicting the disease based on the symptoms given by the patient and also provides primary treatments before consulting to the doctor.

–Consulting doctors: Patients can consult the specialized doctors if they need some extra

treatment

– Web-based interactive platform: The research also presents an interactive platform integrated with the disease prediction system along.

Motivation

A major challenge facing healthcare organizations (hospitals, medical centers) is the provision of quality accommodations at affordable costs. Quality accommodation implicatively insinuates diagnosing patients correctly and administering treatments that are efficacious. Poor clinical decisions can lead to disastrous consequences which are consequently unacceptable. Hospitals must withal minimize the cost of clinical tests. They can achieve these results by employing felicitous computer-predicated information and decision support systems.

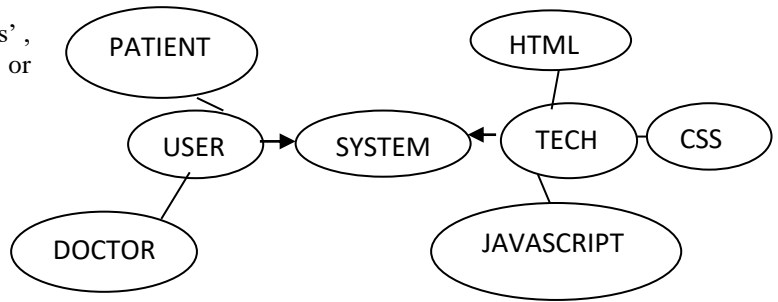
Most hospitals today employ some scarcely hospital information systems to manage their healthcare or patient data. These systems typically engender immensely colossal amounts of data which take the form of numbers, text, charts and images. Infelicitously, these data are infrequently utilized to support clinical decision making. There is a wealth of obnubilated information in these data that is largely untapped. This raises a consequential question: “How can we turn data into serviceable information that can enable healthcare practitioners to make keenly intellectualive clinical decisions?” This is the main motivation for this research.

Literature Survey

This project is easy and readily available and it eases the manual task that additionally helps in extracting the information (data) directly from the electronic records. There are many inputs that will be taken from patient and accordingly the system will give better results. So this system can help patients know their disease more accurately. Inputs like age, gender are also given. This project consists of sections like Health A-Z, Drugs and Supplements, Living Healthy, Family and Pregnancy, News and Experts for various activities or services. All diseases, all medicines, all ways of living healthy whether its in terms of food or lifestyle, all about pregnancy and family care, all latest news and about

experts can be found on this website and services taken as per needs.

There is also provision for getting in touch with doctors', that can be done on the basis of speciality, condition or procedure; for correct medical support.



Proposed Methodology

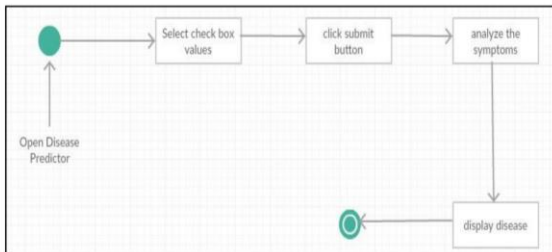


Fig - 1: State Diagram

The proposed solution covers Web application development. The web application is for the user to interact with the system and predict the disease based on the given symptom.

It also provides primary treatment according to that disease and also the user can interact with the doctor for him or her treatment.

There are several menus where user gets to know about the treatment, how to consult with the doctor, which diet to follow and latest news about healthcare.

The web application is developed for the module so that the utilizer can interact with the platform.

The disease prognostication system engender the output by taking the symptoms from the utilizer without engendering an incipient request.

The web application offers the following functionalities:

-Prognosticating the disease predicated on symptoms - avails people soothsaying their diseases by culling the symptoms from the list given on the platform.

-An informative section cognate to rudimental health - provides a structure to get health cognate guidance.

-List of medicines-To give information on the medicines available.

-Gravidity-To make cognizant of mother's and child's health and how it can be amended.

-News- It shows the latest updates on health and cognate issues.

The platform is a front-end. User gives input to it which is evaluated to give the results. The user basically types the symptoms experienced and then presses on 'Submit'.

Accordingly, the closest diseases are shown as output.

The corresponding images for entering symptoms and Disease found are shown below:-

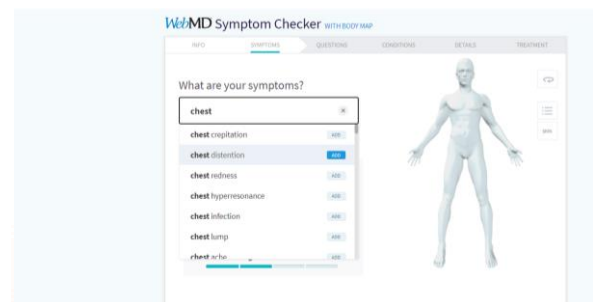


Fig: Entering Symptoms

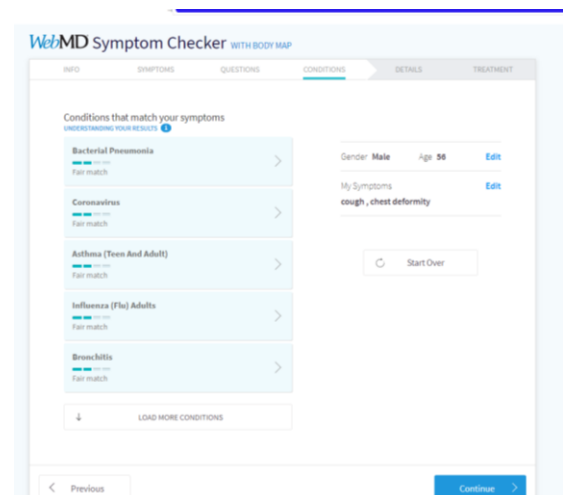


Fig: Possible Diseases Found

Benefits

Disease presage has the potential to benefit stakeholders such as the regime and health identification companies. It can identify patients in peril of disease or health conditions. Clinicians can then take felicitous measures to evade or minimize the peril and in turn, provide quality of care and evade potential hospital admissions. Due to the recent advancement of implements and techniques for data analytics, disease risk prognostication can leverage sizably voluminous magnitudes of semantic information, such as demographics, clinical diagnosis and quantifications, health departments, laboratory results, prescriptions and care utilisation. In this regard, electronic health data can be a potential cull for developing disease prognostication models.

Conclusion and Future Work

As a future enhancement we withal look forward to executing multilingual summarization and multi document summarization. The files which we give as input may withal contain native languages, hence health records can be amassed from sundry components of the world and can be facilely summarized utilizing multilingual summarization. As of now the paper proceeds with ecumenical language (English). This project limpidly defines the disease presage utilizing highly personalised training data sets and withal some of the cognate tasks like fine-tuning appointments.

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