

Automated Health Tracking System

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ABSTRACT

Now a days, diseases are increasing day by day in youngsters and these are due to in taking of unhealthy food. There are many systems available in the market but still there is no such system which is able to tell what type of food should be taken by any person so that the body immune system becomes strong and will be able to defend the body from any disease to spread. Health care systems which are available are not smart enough to handle the queries of the customer or citizen on real time basis. There should be some health care system which is able to describe the food that should be given as an intake to a human body so that immune system will become strong and able to fight with diseases and along with this, many dangerous diseases will decrease in ratio like diabetes, Blood Pressure etc. The system will contain database which will also store the information of diet that has been in take by person and also an alarm system for telling about which food time is arrived. There should also be some technology by which user of such health system will also get his/her health report if followed accordingly. One more advancement can be done in the system in which person can fill up the details of diet and diseases he/she is suffering. Then system will make up the plan according to details given provided by the user to resolve problem and make person healthy.

Keywords: Diseases, Health Care, Immune System, Healthy diet

I. INTRODUCTION

Today, it is not only important that we monitor the health of the people who are sick but the ones who seem healthy. In this project we focus on the healthy section of the society that are prone to be sick. Today being healthy is the slowest rate at which a person can die. A mere concentration is always been given to those who are sick or have any major or minor disease but what about the people who are not ill. Just because a person is not sick doesn't mean he/she is healthy. A person can never predict his near future weather he will live more 10 years or 50, he cannot predict if he will suffer from diabetes or heart attack or any other disease, he can also not assure 100% if he will be healthy always. People sometimes state that they are healthy but they forget the fact that "Health is not simply the absence of sickness". A healthy person is completely free from illness or any injury but just for now, one can never say he won't get ill.

In order to increase the assurity of stable wellness in one's life there has to be some system which can predict whether the way a person is leading his life is correct or not. Mainstream medicine would be way different if they focused on prevention even half as much as they focused on intervention. [1] This is the basic idea behind making a system which not only deals with the life of unhealthy people but also of healthy people. This system checks the lifestyle of both healthy as well as an unhealthy person and then recommends accordingly the changes to adapt in the life style. When we talk about unhealthy people the main question arises is what the disease that has affected one's body is.

Disease is often construed as a medical condition associated with specific symptoms and signs. It may be caused by external factors such as pathogens, or it may be caused by internal dysfunctions particularly of the immune system such as an immunodeficiency, or a hypersensitivity including allergies and autoimmunity. [2] In humans, disease is often used more broadly to refer to any condition that causes pain, dysfunction,

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distress, social problems, or death to the person afflicted. In this broader sense, it sometimes includes injuries, disabilities, disorders, syndromes, infections, isolated symptoms and deviant behaviors. When we talk about the person who is suffering from any disease we try to identify what is the disease, what are the symptoms and how to treat it. Diseases can be acquired, acute, genetic, chronic, inherited, Idiopathic and many more. Today, more than 95% of all chronic disease is caused by food choice, toxic food ingredients, nutritional deficiencies and lack of physical exercise. What we intake makes the base of our immune system.[4] Defining an immune system states that the immune system is a host defense system comprising many biological structures and processes within an organism that protects against disease. In other words immune system of our body is the one that fights with the diseases caused by various factors. The more healthy one eats the stronger is the immune system. This is generally a protection mechanism. The job of the immune system is to protect our body from infections and diseases. [3] Healthy diet makes one's body immune.

The person suffering from any kind of disease generally knows what to eat and how to take precautions to maintain a proper immune system and this is done with the help of doctors and now a days mainly by many health care systems. But what about those who are not suffering any such kind and they face no need to see the doctor, for such people a smart health care system will be designed which will check their daily intakes and doings and then that system will help to strengthen the immune system more.

II. PROPOSED METHODOLOGY

The proposed framework will firstly generate unique user name and password for every user. If the entered details are correct at login frames then the user will enter all basic details like name, age, sex, address, etc. Once user is done with the basic detailing, further asked for any kind of disease user suffering from and then diverted toward the part of system where user will provide disease name, time period of disease, consulted doctor's details, medications undertaken up to now. Along with these details user will provide detailed daily routine which includes food consumption, water intake, sleeping hours, any energy pills etc. Users also have to provide habits like smoking, drinking, exercise etc. Depending upon the provided input, system will recommend best doctor to appoint accordingly along with the location, updated daily routine according to users age which will give information about how many calories are required, water intake, sleeping hours, energy pills etc. on weekly basis and will also recommend habits to increase in lifestyle i.e. In short habits to change and adapt.

According to user mentioned information, if user is unhealthy then system will recommend medicines to be taken and substitute of them in case of unavailability. But if user does not carry any kind of disease before then system will recommend updated daily routine according to users age which will give information about how many calories are required, water intake, sleeping hours, energy pills etc. on weekly basis and will also recommend habits to increase in lifestyle i.e. In short habits to change and adapt so as to maintain user health system to increase immune system to avoid diseases to attack easily.

This is how the recommended system would work making unhealthy people healthy and keeping healthy people healthy:

The recommended medications by the system will be generated on the basis of the analysis of the latest report that will be provided by the user. The medications will be updated as per the status of report generated. The system will also provide an additional feature in which any user will be able to ask any query related to disease or daily routine over FAQ and the recommended doctor as well as nutritionist will revert back within some time. The proposed system database will contain detailed information all doctors, nutritionists, test centers, medicines and habits according to the disease, etc.

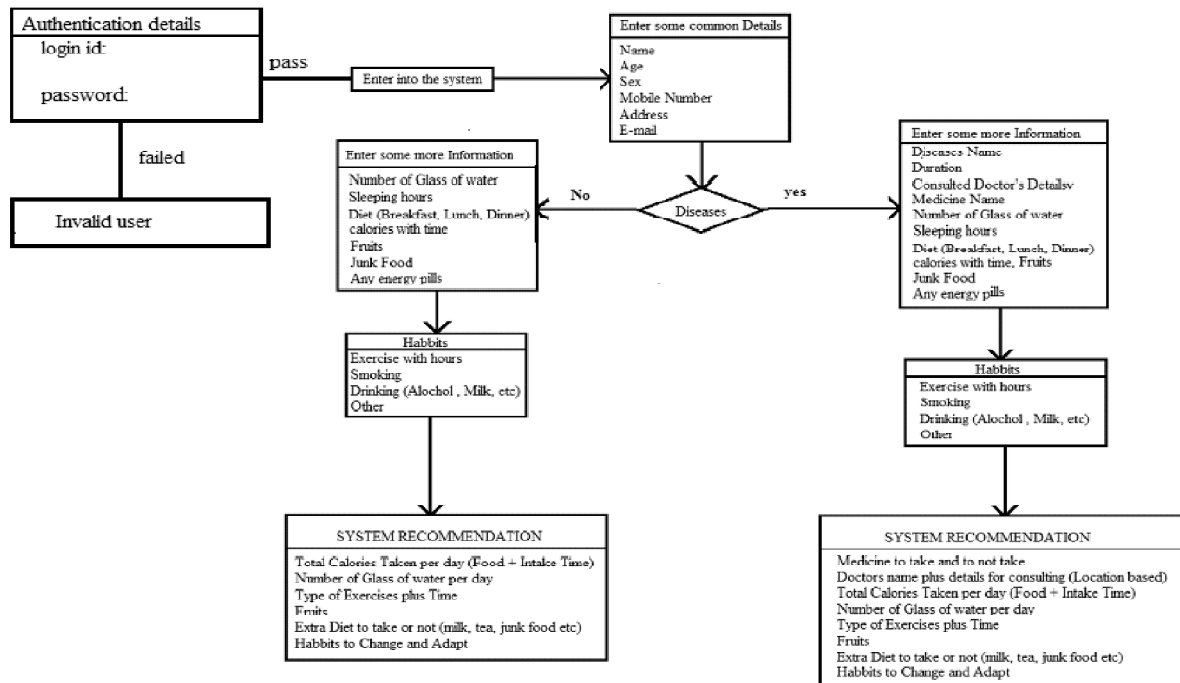


Figure 1: Flow of Proposed System

III. STAKEHOLDERS

Investors: This recommended system will be more helpful and useful for doctors, patients and normal users. Keeping live track of 100s and 1000s patients is the most crucial job to do like what the patient is suffering from what medicine is he taking, what he eats, how much he drinks, which exercise he does, all these minute details are stored and recommended by the smart health system which makes ease for a doctor to work upon.

Secondly talking about users who are healthy, it is very helpful to get a guide who asks you to adapt your life according to the changes needed on each and every step. This helps to remain perfectly healthy.

IV. COMPARISON

Proposed system is more advantageous as all existing systems deal only with unhealthy person which the major drawback of the current recommended health system. The current health systems corresponds with only those, who are suffering from any kind of disease but it does not recommend to people who are healthy. Secondly, existing system does not suggest what a person should do as the system just states that the person is suffering from a particular disease must visit this particular doctor or must use this particular medications but does not suggest any substitute if the recommended one is not available. The system also does not recommend to change any food habits or recommend any kind of exercise. And existing system unable to recommend how to bring change in daily life for wellbeing and could not predict initial stage of any disease whether a person has been affected or not. It works only after a person is diagnosed as ill but the proposed system would overlay these drawbacks.

V. CONCLUSION

Proposed system deal with both unhealthy and healthy user as examining the life style and keeping each and every stat in mind to let a healthy person remain healthy is a tough task to perform will be done by proposed system. Secondly, month to month health analysis on each and every step whether the person is responding correctly to its recommendations. It does the comparison of the health stats to offer conclusions.

It also includes prior warning for health checkups and reminders, feature to directly report health stats to the doctor with suggestions, the system not only suggests medicines to the sufferer but also suggests the substitution of that particular medicine if it is not available and along with the medicine it will also suggest any particular exercise for that point of time to recover easily, the system suggests proper food habits as such what kind of food to eat and in what amount it should be eaten . The food is recommended depending on the age of the person and the status of the person and smoking and high blood pressure, which both have effective interventions, are responsible for the largest number of deaths. Other dietary, lifestyle, and metabolic risk factors for chronic diseases also cause a substantial number of deaths. Many individuals chose poor lifestyle habits with the expectation that there will be medicine available to treat their illness. There needs to be more focus on preventative care. And this preventive care is being recommended by this system.

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