

**DISEASE PREDICTION
HEALTHCARE RECOMMENDATION SYSTEM USING DATAMINING**

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Abstract— In today's era, it might have happened so many times that you or someone of yours needs doctors assistance immediately, but they are not available to reach it on time due to some reason. The Smart Healthcare Recommendation system is an end user support and online consultation project. Here we propose a system through an intelligent disease system online. The system is fed with various symptoms and the disease/illness associated with those systems. The system allows user to share their symptoms. It then processes users symptoms to check for various disease that could be associated with it. Here we use some intelligent data mining techniques to guess the most accurate disease that allows users to get instant guidance on their health issues that could be associated with patient's symptoms. If the system is not able to provide suitable results, it informs the user about the type of disease or disorder it feels user's symptoms are associated with. If users symptoms do not exactly match any disease in our database, it shows the diseases user could probably have judging by his/her symptoms. It also recommends medicines for disease predicted to the user depending upon symptoms received. The system also provides details about medical stores surrounding current location of the user, which may help user to get medicines as soon as possible in emergency.

Keywords— Android Studio, Google Map API, SQLite, Xampp Server

Introduction

There might be a situation in which you are feeling uneasy or you are suffering from aches or high fever and at times it happens that professional medical services are not present or available for that given moment or location. In this kind of scenario Smart Healthcare Recommendation system can be used to give you the aid required. Based on the symptoms provided by you the system searches for the best remedy and effective medicine for the same with the help of data mining tools and techniques. The system also provides with an additional feature of providing you with the location of the nearby medical centers and chemist or clinic with the help of Google maps. Working in the healthcare sector is one of the toughest environments for project managers. Working on healthcare project includes 24 X 7 environment, working with passionate healthcare professionals, needing full proof backup for everything and working in a highly regulated environment. Healthcare projects have their own unique sets of needs and challenges including privacy concern and regularity constrains. Learn how to effectively manage these challenges on healthcare projects large and small in this course with project management. It also gives over specific approaches to setting project goals, scheduling task approaches, managing stakeholders and mitigating the risk and challenges that are common to the medical field. It also proposes some specific challenges to bring the concept to life and offers some solution so you can compare your approach with the recommendation.

OBJECTIVES

- To make an analysis on the recent diseases or infections that may be caused due to climate change.
- To implement Google map API to track location of the user in case of emergency to find medical aid.
- To monitor users's location and enable them to share their location with their contacts so that they can be located easily in a distress situation.
- Providing a handy and free application to users so that it can use them whenever in a distress condition.

1.EXISTING SYSTEM

As a part of our study for the concerned topic, we carried out a research on some of the papers and applications existing that offer the similar kind of services. The aim is to observe the working of different systems and to see how various functionalities if brought together can work better and/or how to improve the applications to overcome the loopholes. A paper on the related system emphasized on the development of a system that can provide the location search for finding the medical aid centres. But this tends to mostly depend on whether there are medical centres nearby so that it could be reached fast enough. Another application emphasized on the medical-aid at the doorstep details and various other provisions for emergency cases which is a good deal but it would not prove good in a situation if the user is at a far distance.

PROBLEMS WITH EXISTING SYSTEM:

- People can send bogus notifications due to the absence of authentication module.
- There should always be an active internet connection.
- There might be diseases whose symptoms may not be shown in the system and may need a professionals help instead.
- The location service may locate you to aid centre which is far away from your location and which is difficult to reach in a short interval of time .

PROPOSED SYSTEM

The proposed system overcomes the limitations or uncovered points which could enhance the efficiency or user-friendly nature/Promptness that a healthcare system requires. This app will have a user interface more understandable and less complex.. It takes the email and number of the user so as to have appropriate and authenticated users. The proposed system will have a blend of the various features from different apps already working towards healthcare, because the mix of those features will eventually turn out to be a better and efficient solution for the problem, which otherwise, the features in individual apps were lacking in some way or the other.

II.WORKING

ABOUT TECHNOLOGY

GOOGLE MAP API:

After the success of reverse-engineered mashups such as chicagocrime.org and housingmaps.com, Google launched the Google Maps API in June 2005 to allow developers to integrate Google Maps into their websites. It is a free service, and currently does not contain ads, but Google states in their terms of use that they reserve the right to display ads in the future. By using the Google Maps API, it is possible to embed Google Maps site into an external website, on to which site specific data can be overlaid. The Google Maps API is free for commercial use, provided that the site on which it is being used is publicly accessible and does not charge for access, and is not generating more than 25,000 map accesses a day. Sites that do not meet these requirements can purchase the Google Maps API for Business.

XAMPP SERVER:

XAMPP is a free and open source cross web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP server, MariaDB database, and interpreters for scripts written in PHP and Perl programming languages. It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing and deployment purposes. Everything needed to set up a web server – server application (Apache), database (MariaDB), and scripting language (PHP) – is included in an extractable file. XAMPP is also cross-platform, which means it works equally well on Linux, Mac and Windows. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server extremely easy as well.

SQLite DATABASE:

SQLite is an open source SQL database that stores data to a text file on a device. Android comes in with built in SQLite database implementation. SQLite supports all the relational database features. In order to access this database, you don't need to establish any kind of connections for it like JDBC, ODBC etc. The Android SQLite Database requires very little memory (around 250kb), which is available on all android devices. Every device has an inbuilt support for SQLite database, which is automatically managed on android right from its creation, execution to querying up process. SQLite is considerably, the lighter version of SQL database, where most of the SQL commands don't run on SQLite database. Once SQLite is in place, it is important to ensure that a feature or command is available in SQLite; only then can it be executed.

FUTURE ASPECTS

The proposed system will be used by patients in any kind of distress situation. Our System focuses on the health of the user or patient by providing assistance in any uncomfortable situation. Whenever the user wants to identify what health issues they are having they just need to follow the simple steps as it would be guided to them. With the help of providing the location of the nearest medical store or centre or clinic, it will be easier for the user to reach the medical aid and start the effective treatment for the same .

With the help of this system one can easily get health guidance even in the most hostile areas without worrying about the cause of the health issue or disease and also the remedy for the same.

CONCLUSION

In this synopsis, we firstly understood the need for developing the application regarding the Healthcare. The role of the mobile application for health was also studied. The synopsis also explains the objectives and the scope of the project to develop a health care application. Then, we carried out a literature survey on the research papers of the similar existing system to study the features and identified some of the drawbacks of such systems that must be taken care while developing our application. The synopsis then defines the problem statement of the project and also explains its applicability. The synopsis then describes the functional and non-functional requirements and also which technology to be used for the project. Then we made a study on different methodologies to develop the project which includes Waterfall model which makes much easier to develop the project rapidly and effectively. Then the synopsis includes Use Case and also include a Timeline chart for the project.

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