HEALTH MANAGEMENT SYSTEM

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Abstract— Health Management System provides the benefits of medicine, superior patient care, strict cost control and vaccination. HMS is powerful, flexible, and easy to use and is designed and developed to deliver real conceivable benefits to our self. More importantly it is backed by reliable and dependable support. Health Management System is custom built to meet the specific requirement of the medicine, vaccination, location of health specialist. All the required modules and features have been particularly built to just fit in to your requirement. This package has been widely accepted by the clients in India and overseas. The project 'Health Management System' is based on the database, Android based and web based techniques. As there are many areas where we keep the records in database for which we are using MySQL software which is one of the best and the easiest database to keep our information. This project uses Java as the front-end software which is an Android based Programming and has connectivity with MySQL.

Keywords- Vaccination Reminder, Medicine Prescription, Expert's Dr's Location.

I. INTRODUCTION

Health Management System provides the benefits of medicine, superior patient care, strict cost control and vaccination. HMS is powerful, flexible, and easy to use and is designed and developed to deliver real conceivable benefits to our self. More importantly it is backed by reliable and dependable support.

Health Management System is custom built to meet the specific requirement of the medicine, vaccination, location of health specialist. All the required modules and features have been particularly built to just fit in to your requirement. Not stopping only to this but they are highly satisfied and appreciating. It covers all the information right from Medicine Prescription, Expert's Dr's location, Admin, Store, Vaccination details etc.

The project 'Health Management System' is based on the data base, Android based and web based techniques. As there are many areas where we keep the records in database for which we are using MySQL database which is one of the best and the easiest database to keep our information. This project has front-end as a Java having an Android based Programming and has connectivity with MySQL.

The project module starts with an authentication page where user is authenticated and allowed to enter in the system.
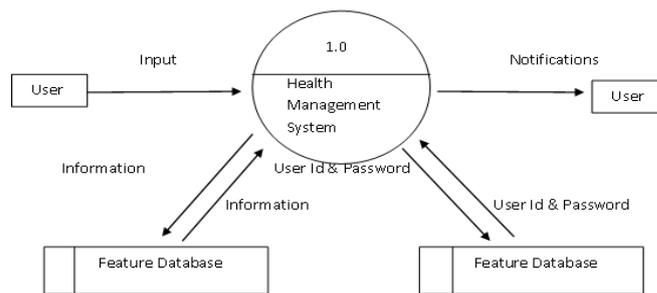
Fig: 1 Health Management systems

II LITERATURE SURVEY

2.1 Background of the project:

In our project mainly we used three modules for the purpose of health.

1) Medicine Prescription

2) Vaccination Reminder & Schedule

3) Expert's Dr's location

An objective of this project is to reduce a health related problems.

2.2 Domain of study:

2.2.1 Android: Android is an operating system for mobiles. It is an open source technology led by Google. The Android   operating system is used on, net books, tablet computers, Google TV, and other devices**.** Android runtime (ART) is the managed runtime used by applications and some system services on Android. ART and its predecessor Dalvik were originally created specifically for the Android project. ART as the runtime executes the Dalvik Executable format and Dex byte code specification. ART and Dalvik are compatible runtimes running Dex byte code, so apps developed for Dalvik should work when running with ART. However, some techniques that work on Dalvik do not work on ART. For information about the most important issues, see Verifying App Behavior on the Android Runtime (ART).

Features of Android: Android gives you a world-class platform for creating apps and games for Android users everywhere, as well as an open marketplace for distributing to them instantly.
1. Storage:-MYSQL is used for data storage purposes.
2. Notifications:-Vaccination reminder will be notified ion by the android app.
3. Java Support: - Dalvik is the process virtual machine (VM) in Google's Android operating system, which, specifically, executes applications written for Android. This makes Dalvik an integral part of the Android software stack, which is typically used on mobile devices such as mobile phones and tablet computers, as well as more recently on devices such as smart TVs and wearables.

2.2.2 Web Portal
A web portal is most often one specially-designed Web page at a website which brings information together from diverse sources in a uniform way. Web portals offer services such as e-mail, news, information from databases and even entertainment content.

The second part of our project is web-portal. In this web portal we are maintaining the database and transaction part of vaccination schedule module resp. This portal is useful to user for registration of vaccination.

2.3 Motivation of the project:

An objective of project is to reduce the health related problems.

2.4 Survey of the existing systems:

A. **A:** As founding director of the Meningitis Vaccine Project, Dr. Marc LaForce led the successful development, licensure, and introduction of MenAfriVac®, the first vaccine designed specifically for Africa. Marc directed the project from 2001 until his retirement in 2012.

B: Dr Larson: Just over a decade ago I went to Cambodia as part of a UNICEF delegation to support the launch of a new hepatitis B vaccination program me. At the time, endemic hepatitis B was a significant problem in the country. The good news is that hepatitis B vaccine is now fully integrated into the routine vaccine schedule and there is already clear evidence that the vaccine is having a pothe.

There are many HMS related apps like Medicine Information, Vaccination reminder. These apps help the people to get Medicine Information. This all has become possible only due to android apps which are now very well-known among people nowadays. But, till date we have seen many health related apps which helps the user i.e. people who wants to get Medicine information, vaccination reminder. So, in our project our main focus is on the vaccination Reminder and Schedule. We are going to design an app which will provide the facility that after fill up the registration form user can get the vaccination reminder notification according to the schedule, until user cannot give the feedback to the system; system again and again gives notification to the user. If in case user doesn't have an android mobile then we are made a web based application on vaccination reminder so just one time registration user can get vaccination reminder message.

III   PROPOSED SYSTEM

The application starts with a login page where user is authenticated and allowed to enter in the system. User then select option likes Medicine information, vaccination reminder and Region-wise specialist Doctor's location. The information is retrieval from database. Insert, Update, search, retrieve are done in database after each process.
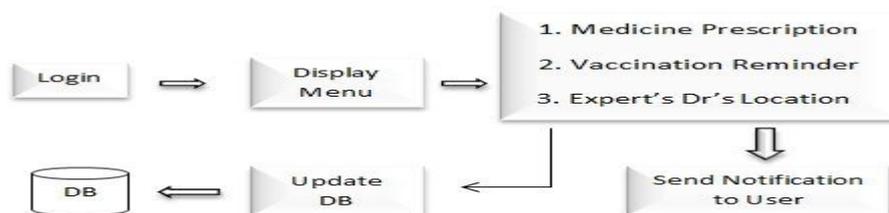

Fig: 2 Data Flow

IV.   ALGORITHM ANALYSIS

The application starts with a login page where user is authenticated and allowed to enter in the system. User then selects option like Medicine prescription, vaccination reminder and Region-wise Expert's Dr's location. The information is retrieval from database. Insert, Update, search, retrieve are done in database after each process.

 Proposed system falls under 'Divide and conquer' method. In Divide and Conquer strategy given problem is, Divided into smaller sub problems. These sub problems are not solve combinely independently. To produce final solution we collect all solutions of sub problems.
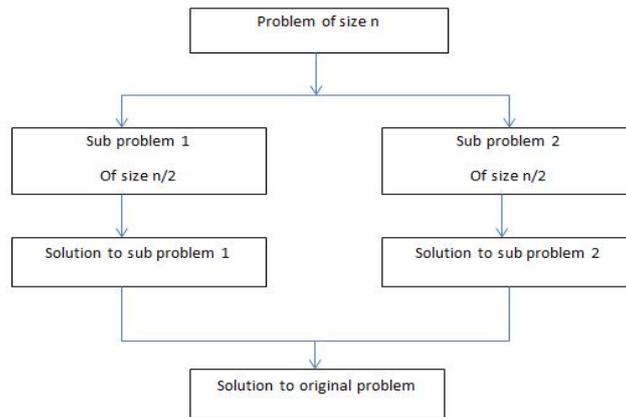

Fig: 4.1 Divide and conquer method

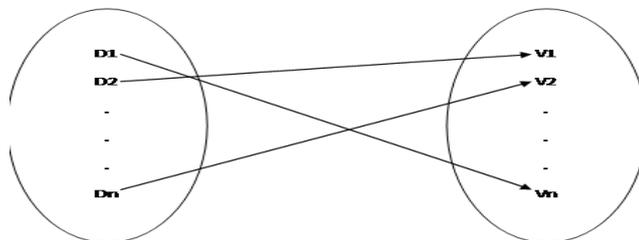## V. MATHEMATICAL MODULE

Mathematical Modeling and Algorithm

Fig. 5.1Functional Dependency of vaccination
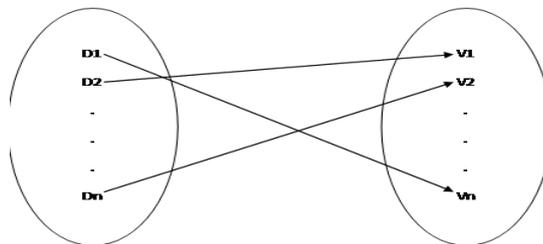

Fig 5.2: Medicine Information

Set

Vaccination= {polio, cholera, hepatitis…etc.}
Duration={4 days,8days,1 month,2 month,3 month…etc.}

Facility= {Notification, Message}, Medicine-Name= {Paracetamol, Aspirin…etc.}
Medicine-Power= {10, 20, 30…etc.}
Age-Limit= {less than 1 yr., less than2 yrs., less than3 yrs.…etc.}
Side-Effects= {nausea, chest-pain…etc.}, District= {Nasik, Ahmednagar…etc.}
Taluka= {Malegaon, Manmad…etc.}, Town/Village= {Malegaon, Satana…etc.}
Symptoms= {Fever, Headache…etc.}, Specialist= {Eye, Nose, Heart…etc.}
Where, V=Set of Vaccination name, D=Set of schedule, F=Set of facility provided.
M=Set of medicine name, P=set of Medicine power, A=Set of age-limit
S=Set of side effects, D1=Set of Districts, T=Set of Taluka's
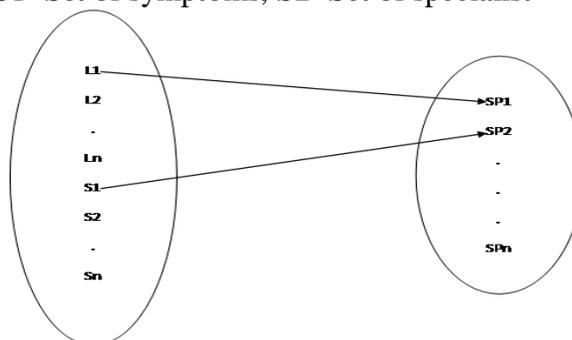V1=Set of Village/Town, S1=Set of symptoms, S2=Set of specialist

Fig 5.3: Specialist Location

Duration=2.5*(3.5^0.38) =4.024 months
Number of peoples recommended=Efforts/Duration=8.943/4.024=2.222= 2 persons
As the no. of persons is four accordingly duration will be reduced.
B.Lines of Code (LOC) based Estimation The average productivity for our product is 500 LOC/month.The labor rate estimated is per month Rs 1000-/
Therefore the cost per line of code is: Rs 6

CONCLUSION

Health Management System is very popular but it's become very complicated for remind us of Vaccination of children and for a new visitors it is difficult to find Dr's location. So, to overcome this problem proposed system develops to reduce the problems.

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