



AYURVEDA UPACHARA-AN ANDROID APP

Nagashree M Annigeri

M. Tech (CSE)

Department of Computer Science & Engineering
Ramaiah Institute of Technology, Bangalore, India

Pramod Sunagar

Assistant Professor

Department of Computer Science & Engineering
Ramaiah Institute of Technology Bangalore, India

Abstract: Ayurveda or Ayurvedic Medicine is a system of traditional medicine native to Indians and is a form of alternative medicine. Ayurveda makes the use of plants based medicine and treatments. Ayurvedic therapy is taken by controlling food habits, taking necessary foods for curing the disease and controlling daily life style. Ayurvedic Remedies are now widely accepted throughout the world. Most of the ingredients of any Ayurvedic Cure can be found in home easily. So, cures are not much costly and can be done easily. These cures have minimum possibilities of side effects except in some cases of allergies. So, it can be considered safe medicines. Our app provides you with some easy cures of most common diseases in real life. One can save money by curing himself using this app.

Keywords: Ayurvedic, medicine, home remedies, treatment and cure.

I. INTRODUCTION

Ayurveda, the science of life or longevity is the holistic alternative science from India and it is more than 5000 years old. It is believed to be the oldest healing science in existence, forming the foundation for all others. The methods used to find this knowledge of herbs, foods; yoga, life style, and surgery are fascinating and varied. These revelations were transcribed from oral tradition into written form, interspersed with aspects of mortal life and spirituality.

Ayurveda was organized into its own compact system of health and considered a branch of Atharva Veda. In the 10,572 hymns of the Rig Veda, there are discussions about the three constitutions (doshas): air (Vayu), fire (Pitta), and water (Kapha). The hymns provide information about organ transplants, artificial limbs, and the use of herbs to heal diseases of the mind and body, and to foster longevity. In the Atharva Veda 5,977 hymns contain discussions of anatomy, physiology, and surgery.

The proposed mobile application helps people to prepare home and Ayurvedic remedies for health-related issues. It also avoids other harmful and side effect of the English medicines. Ayurveda or Ayurvedic Medicine is a system of traditional medicine native to Indians and is a form of alternative medicine. Ayurveda makes the use of plants based medicine and treatments. Ayurvedic therapy is taken by controlling food habits, taking necessary foods for curing the disease and controlling daily life style. Ayurvedic Remedies are now widely accepted throughout the world. Most of the ingredients of any Ayurvedic Cure can be found in home easily. So, cures are not much costly and can be done easily. These cures have minimum possibilities of side effects except in some cases of allergies. So, it can be considered safe medicines. Our app provides you with some easy cures of most common diseases in real life. One can save money by curing himself using this app.

Designing an Ayurvedic remedy system to serve the people in a better way is an important key behind motivating this project. This would help the patients to search for the remedies easily. Ayurveda Remedy System is software developed which is used to serve the people in a better way. Here patient search for remedies which can be prepared at home and can get well soon. The present system has the facility to view all remedies for a health related issue. Our app provides the room for

finding simple home based and Ayurveda related remedies for commonly occurring health issues like cold, cough etc.

Our proposed system has several advantages

- User friendly interface
- Search facility
- Quick view of the health issues and remedies.
- Displaying web results for related issues
- Displaying YouTube videos for preparing home remedies
- Sending SOS message to near and dear ones during emergency.

II. RELATED WORKS

Sarawut Bussadee [1] proposed a mobile application for health monitoring-Inside Me-which can help users to become more aware of their health. This application aims to track user's workout activities and monitor and analyze user's health condition. It also gives some instructions and suggestions to the user for maintaining and improving his or her health. Moreover, it provides an assessment of the risk that the user may have one of these two diseases: coronary disease and diabetes. Input data are collected from several sources such as questionnaire, medical check-up record, and wearable device. The risk assessment is carried out by machine learning algorithms.

Sultan H. Almotiri [2] describes the mobile health (m-health) system in the context of Internet of Things (IoT). This application describes the fundamental characteristics of m-health devices such as compactness, IP connectivity, low-power consumption and security. It discusses acquisition of mobile health data via medical gadgets and wearable's and application of this data in monitoring various health conditions such as blood sugar level, ECG, blood-pressure, asthma, etc. Security is very critical for IoT based m-health system. It addresses the issues of confidentiality, privacy, and security in the context of secure m-health system. There are several measures listed to protect the information of patients and m-health system. The m-health system will benefit the patients in many ways such as quick diagnosis, remote monitoring and home rehabilitation. Overall m-health system will significantly reduces healthcare cost and unnecessary hospitalizations.

Arvinder Pal Singh Gagneja [3] proposes mHealth for proper implementation of Healthcare systems. Globally, mobile health (mHealth) technology could present incredible advantages to the general public, comprising of improved health care system, with less errors, reduced cost, and enhanced patient and healthcare systems commitment. To let mobile health apps and devices be safe and effective it should be regulated that it is designed, and developed properly. Then it should be implemented correctly by using the right algorithms. Once in the market it should be maintained and updated as per the changing needs. Most of all this technology should be used properly so that it poses no risks to patients.

M. Alloghani [4] presents a mobile health application intended to increase the awareness levels of parents and children about the obesity risks and help them to sustain balanced and healthy eating lifestyle. The proposed mobile application is an educational tool for the evaluation of interventions to prevent obesity risk levels. The application is based on the Internet-of-Things approach, which allows tracking food intake, remote capturing and constant monitoring of children data with interactive feedback displayed on the mobile application.

Mehdia Ajana El Khaddar [5] highlights some snapshots of current uses and future trends of various wireless communications in the healthcare domains, addresses their applications for e-health, states the challenges faced in a ubiquitous healthcare environment equipped with different wireless technologies, and how the resulting issues might be addressed by developing a framework that provides a flexible and convenient medical monitoring, consultation, and healthcare.

III. IMPLEMENTATION

The application is designed in Android and it can be installed on any device which supports Android. The user needs to install and register to the system. The registered user needs to enter the username and password only once. The Ayurveda App is designed with latest Android Studio IDE. The application uses SQLite database to store the details. SQLite is a lightweight database used to store the data.

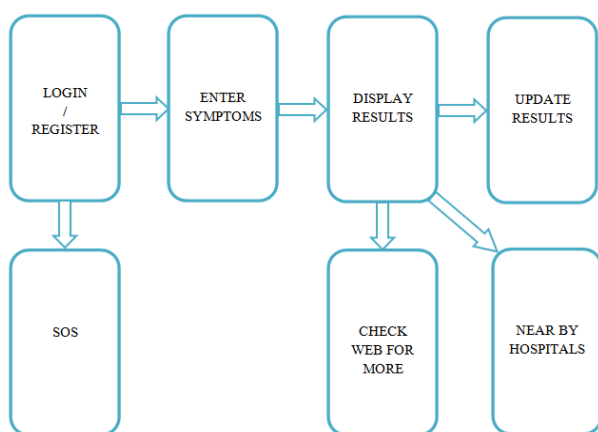


Fig 1: Block Diagram of Ayurveda App

IV. TESTING AND COMPARISON

The following modules are designed for the application.

a) Login: The user needs to register to the system. Basic information to be entered is the name, age, address and mobile

number. User also needs to provide 2-3 alternate numbers of friends and family in case of any emergency.

b) Input Symptoms: The user will enter the symptoms related to health and check for remedies. The module will search the SQLite database for any related results. If there are multiple results which suggest home remedies, the results are displayed as ListView. There will be multiple links on the results page which will provide a link to internet results for the same remedies. The user will decide if the search results needs to be stored in the SQLite database or not.

c) Web Results: This module will display the web search results and also YouTube links to preparing the home remedies. The Web results can be stored in the database for future reference.

d) Emergency: In case of any emergency the application will be able to send the SOS message to the stored phone numbers of the friends and family along with the GPS location of the user. This will enable the concerned persons to reach out to the application user who might be in distress.

e) Nearby Hospitals: The user can also search for the nearby hospital in the locality with a click of a button. The search result will display the nearby hospitals with an option to call the hospital and book an appointment.

V. RESULTS

The Ayurveda application was created using Android Studio 2.4. The system uses Android classes namely Implicit & Explicit Intents, Geocoder for Location Bases Services, SQLite and Telephony Manager Class. Implicit & Explicit intents are used to call the built in applications to send and receive the data. Geocoder class is used for fetching the current location of the mobile or the user. The result will be Latitude and Longitude of the location. SQLite database will help to store and retrieve the symptoms stored in the database. Telephony Manger class will be responsible for sending the SOS message to the family and friends.

VI. CONCLUSION

The application is designed for using the Ayurvedic remedies for the simple diseases like cold, cough, fever, headache etc. Due to raising medical bills in metro cities, this easy to use mobile app will help in cutting those costs to some extent. This application is used for small diseases. For major diseases it will be better to consult the doctors before going for any medicines.

VII. SCOPE & FUTURE WORKS

The application can be enhanced for daily monitoring of the user's health. The android phones come with sensors which can predict the heart rate, blood pressure, sugar and cholesterol. Depending on the conditions the application can advise the user to go for a checkup.

VIII. REFERENCES

- [1] Bussadee, S., Suwannatiria, S., Chonrawut, A., Thamwiwatthana, E., & Pasupa, K. (2016). Inside Me: A proposal for healthcare mobile application. 2016 Fifth ICT International Student Project Conference (ICT-ISPC). doi:10.1109/ict-ispc.2016.7519242

- [2] Almotiri, S. H., Khan, M. A., & Alghamdi, M. A. (2016). Mobile Health (m-Health) System in the Context of IoT. 2016 IEEE 4th International Conference on Future Internet of Things
- [3] Almotiri, S. H., Khan, M. A., & Alghamdi, M. A. (2016). Mobile Health (m-Health) System in the Context of IoT. 2016 IEEE 4th International Conference on Future Internet of Things and Cloud Workshops (FiCloudW). doi:10.1109/w-ficloud.2016.24.
- [4] Silva, B. M., Lopes, I. M., Rodrigues, J. J., & Ray, P. (2011). SapoFitness: A mobile health application for dietary evaluation. 2011 IEEE 13th International Conference on e-Health Networking, Applications and Services. doi:10.1109/health.2011.6026782
- [5] M. Alloghani, A. Hussain, D. Al-Jumeily, P. Fergus, O. Abuelma'atti and H. Hamden, "A mobile health monitoring application for obesity management and control using the internet-of-things," 2016 Sixth International Conference on Digital Information Processing and Communications (ICDIPC), Beirut, 2016, pp. 19-24.
- [6] M. A. El Khaddar, H. Harroud, M. Boulmalf, M. Elkoutbi and A. Habbani, "Emerging wireless technologies in e-health trends, challenges, and framework design issues," 2012 International Conference on Multimedia Computing and Systems, Tangier, 2012, pp. 440-445.