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RESEARCH ARTICLE

A SECURE AND CONFIDENTIALITY STRATEGIC COMPUTING ORGANIZATION FOR MOBILE-HEALTHCARE EMERGENCY

¹Abarna Devi P, ²Praveena.V

¹Dept. of Computer Science, SRM University, India

²Dept. of Computer Science, SRM University, India

¹ abarnadevia@gmail.com

² praveena_ganesan@yahoo.com

ABSTRACT: *With the advancement of mobile phones especially smart phones and the Wi-Fi connected systems, mobile Healthcare (m-Healthcare) makes the better utilization of health monitoring programs, which are attracted often. We propose a secure and confidentiality strategic computing organization (SCSCO) for m-HealthCare emergency. With this approach, smart phone plays computing power of energy and the way to gather and process personal health information (PHI) on m-Healthcare emergency. We implemented an efficient privacy access in SCSCO's framework, in this project, we propose the key generation to generate a session id between the client and server to transfer medical data for our needs and also proposed k-nearest algorithm. We also propose to get the data using hardware device. Integrate the emergency evacuation plan to generate the appropriate data to the service center. We implemented decryption method of AES-algorithm for effective results. In addition, performance evaluation via SCSCO's effectiveness for providing high-reliable-PHI process and minimizing the privacy during m-Healthcare emergency.*

Keywords: *Smart phones, Wi-Fi, m-Healthcare, process personal health information*

I. INTRODUCTION

Today technology has driving into the path of users' needs to fulfill most of them in a simple and easy way. Nowadays smart phone also playing their role to make the life simple, easier and better. Advancement in medical health care by smart phones makes easy way to find our daily needs solutions as well.

Healthcare and the medical marketing infrastructure plays a vital role in this technology and makes use of smart phones can reach the market as possible. Monitoring the healthcare is not possible if we are in an outside premise which makes tense to the users and it can also be guided and governance by the healthcare smart networks.

As many things in this today’s world, it is very much easy to concern these resources. Apart from the technology, health care emergency system doing their best jobs to humans to cover all aspects of medical needs through this smart world technology equipment’s, as well as by the best place to get the medical operations too.

Many things happens with new advancement but not able alive still in certain periods, in case of smart world technology everything is happens with certain things may made, which is useful to others. Medical health care is now become to concentrate on to cure and rectify in the initial level of treatment.

II. LITERATURE SURVEY

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We summarize the healthcare system as two categories: 1) health mentoring system which is designed for monitoring physical vital signs of patients like blood glucose level, ECG and blood pressure; 2) health support system which is designed to facilitate the people’s daily activities like taking medicine timely and completely, exercise and taking healthy food.

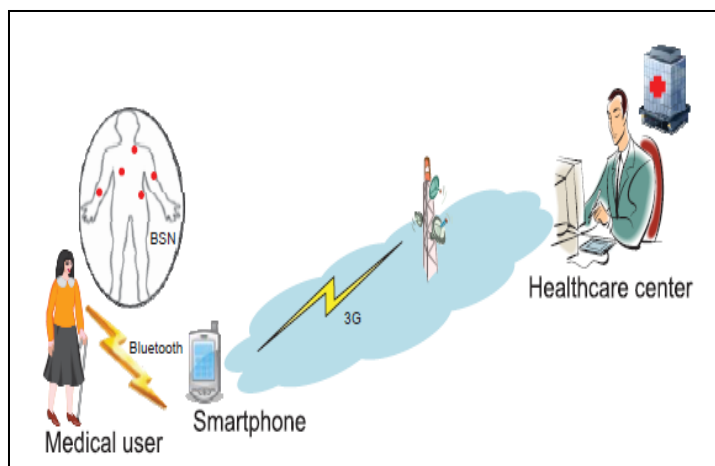


Figure 1. Pervasive health monitoring in m-healthcare system

III. HEALTH MONITORING SYSTEM

Agreement Protocol for key generation: This module uses to generate a session id between the client and server. This key used in specified time only. These keys used to connect a client to server. This key is unique also. Based on the key can communicate a client to server. (i.e.) Client can send a medical data to Server with help of the session key.

Using reliable broadcast methodology, we propose a simple agreement protocol for this. Node addition and removal operations are commutative in nature [3]; an interested node will send such a proposal to all the nodes and nodes who agree with the proposal continue with echo messages from a reliable broadcast [4]. It receives ready messages as $n - t - f$ and a node adding the proposal into its modification queue. Like other proactive protocols, assuming that the $n-t-f$ nodes finish with the same set of proposals.

A mobile architecture for diabetes management: Using mobiles with a multi-access service for the management of diabetic patients was proposed in [5] and shown in Figure 3, which was designed to collect data, either manually or automatically from the blood glucose meter; to monitor blood glucose levels; to suggest insulin dose adjustment when needed; to deliver monitoring data to a health care center.

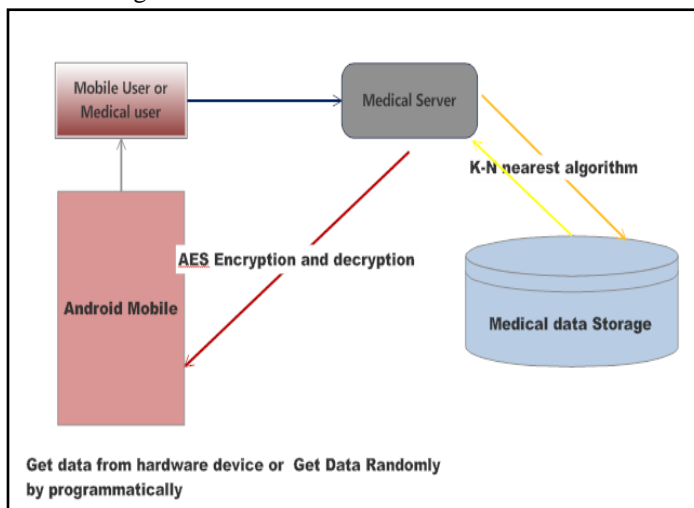


Figure 2. System architecture

Client Application on mobile: This module uses to client side in android mobile. This application used to collect a data such as (BP, sugar, Heartbeat..Etc.) from a Hardware Device after that client will send a collected data to server side (i.e.) Hospital.

Disease Diagnosis-K nearest neighbor: K-Nearest-Neighbour (KNN) is one of the most widely used data mining techniques in pattern recognition and classification problems [6]. Recently Paris et al. examined single classifiers and combining different classifiers through voting and showed that voting outperformed other single classifiers [7]. This paper investigates applying KNN in the diagnosis of heart disease on the benchmark dataset to allow comparisons with other data mining techniques used on the same dataset

This module is used to find a Disease and giving a solution to patient based on the disease.

Solutions are,

1. What are the foods eat.
2. What are the tablets eat. ..Etc.

Critical Analysis: This module use to find a patient status based on the send a data through android mobile. While monitoring a patient data if incase data may be critical then server will send emergency to patient. If incase data may not be critical then will send advice details to patient.

AES-Encryptions: This module use to store a data securely in server side after that server views that data i.e. (decrypted data). Fig.2 describes the process of AES. Then, server sends data to client with encryption format after patient view data i.e. (decrypted data) by Key.

Advantages:

- Shift from a clinically-oriented and the centralized healthcare system to a patient-oriented, distributed healthcare system.
- Reduce healthcare expenses through more effective use of medical and clinical matters.

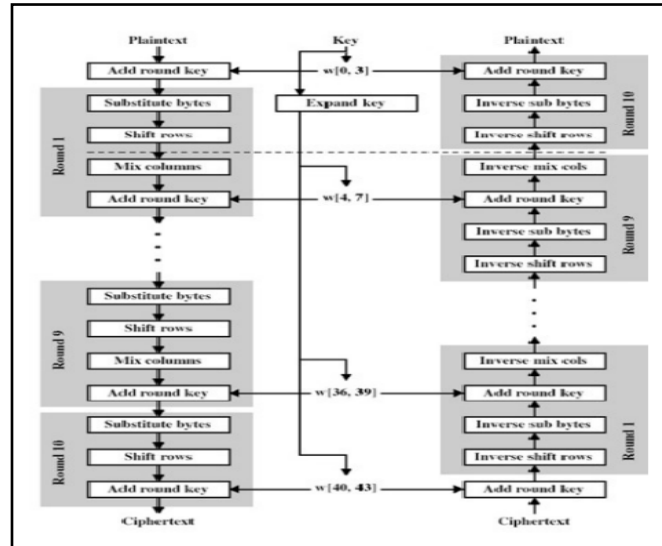


Figure 3. Overall process

IV. CONCLUSION

In this paper, we have proposed a securable computing framework for health care emergency. In our future work, we intend to carry to exploit the security issues of PPSPC follow the protocol. In our future work, we propose the user health information to the concern service center gets the inappropriate or unwanted data's if the atmosphere or surrounding may cause it. This causes unwanted emergency needs provided to the user. We work on collecting the user information along with room / surrounding weather temperature and report to the service center. Our future work on analyze the outside temperature will provide better needs to the user and the service center.

REFERENCES

1. H. Almuallim and T.G. Dietterich (1992), Algorithms for Identifying Relevant Features.
2. H. Almuallim and T.G. Dietterich (1994), Learning Boolean Concepts in the Presence of Many Irrelevant Features.
3. A. Arauzo-Azofra, J.M. Benitez, and J.L. Castro (2004), A Feature Set Measure Based on Relief.
4. L.D. Baker and A.K. McCallum (1998), Distributional Clustering of Words for Text Classification.
5. R. Battiti (1994), Using Mutual Information for Selecting Features in Supervised Neural Net Learning.
6. D.A. Bell and H. Wang (2000), A Formalism for Relevance and Its Application in Feature Subset Selection.
7. "Reliable Broadcast in a Hybrid Model with Byzantine Faults, Crashes, and Recoveries," by M. Backes.
8. R. Butterworth, G. Piatetsky-Shapiro, and D.A. Simovici (2005), On Feature Selection through Clustering.
9. C. Cardie (1993), Using Decision Trees to Improve Case-Based Learning.

10. I. H. M. Paris, "Improving Academic Performance Prediction using Voting Technique in Data Mining".

BIOGRAPHY



Author 1: P.Abarnadevi, received B.E., Information Technology degree from Annamalai University, Annamalai Nagar, Tamil Nadu, India, in 2010, and doing M.Tech., Computer Science and Engineering in SRM University, Chennai, Tamil Nadu, India. Her areas of interest in research are Mobile Computing and Cloud Computing.



Author 2: V.Praveena, received B.E., EIE from Easwari Engineering College, Madras University, Tamil Nadu, India, in 2002, and received M.Tech., VLSI from BIHER University, in 2006 and doing Assistant Professor (O.G.) of Computer Science & Engineering in Department of Computer Science and Engineering, Ramapuram Campus, SRM University. Her Research Interests Networking, Digital Communication & Embedded system, Low power VLSI Optimization. Her academic experience as Lecturer, Department of Electronics and Communication Engineering, Sri Muthukumaran Institute of Technology, Chennai from 2006 to 2010, and Communication Engineering, Sri Muthukumaran Institute of Technology, Chennai from 2006 to 2010, and Other Professional Experiences are Member in Indian Science Congress Association, Certified Internal Auditor ISO 9001:2000.