A Survey for an Interactive Cloud Based Healthcare System

Swati Sunil Patil[1], Prof. R.K.Dixit[2]

P.G Student, Department of CSE, WIT, Solapur University, Solapur, India[1]

Assistant Professor Department of CSE, WIT, Solapur University, Solapur, India[2]

ABSTRACT: Cloud computing is less considered as an emerging technology which helps to store the huge amount of data. Cloud computing provides resources and services offered through internet. Healthcare System is the organization of people, institution and resources that deliver health care services to meet the health needs of target population. The digital transformation of healthcare can help to simplify, unify and streamline existing processes across the patient journey from patient admission, in-house care and post discharge management .Now there are many healthcare systems which help in hospitals for patient's treatment but they cannot provide the interaction between the doctors. If there is a medical emergency due to some reasons like doctors are not available, so the patient moves from one place to another place. The aim of this system is to give all history related to the patient that is medical data and with the help of history of the medical data doctor can treat the patient in better way. Two-way audio, video, text chat in health cloud allows a care provider to do a visual assessment.

KEYWORDS: healthcare system, cloud based healthcare, medicine, medical data, health monitoring.

I.   INTRODUCTION

Now a day's healthcare industry is growing enormously due to the increase in elderly population and decline in birth rate. The healthcare becomes a big issue due to lack of availability of expert doctors and expert treatment. Due to this issue there is a need of health monitoring to preventive health monitoring service. Keeping in view so the scenario we are proposing a health care system which will be integrated with cloud computing[4].We have to check each consideration related to the health.

The healthcare system can be used to provide the good health to the people. It is also store the past history of the patient. In this healthcare system we use hybrid cloud .It is very important to handle this huge amount of data in cloud and extract the data with the help of verification that will be handled by using unique no [6][7][8].The patient data can be store with the help of MongoDB database.

In cloud computing the data is stored with the help of database server so that server may be sql server ,oracle In rural areas suppose there is an emergency then the patient can move from one place to other place for getting better treatment then there is a need of patients history for the new doctor to treat them in new way that all information can be available to the doctor with the help of this system [9][10].If there an emergency the patient's condition is very critical and due to some reason the doctors are not available then the patient can go to the another doctor. Another doctor can use the past history of that patient with the help of this system and they can treat in better way.

We provide a service text chat, audio, video services so the doctor can communicate to the other doctor for discuss the information related to the patient [11].For text chat we use here steganography technique[12][13][14].We also provide a audio, video services for communication .For audio and video services we use the algorithms. In this system it provides medicine information.

II.   LITERATURE REVIEW

Radu-Claudiu Chioreanu , MihaelaCrişan-Vida, LăcrămioaraStoicuTivadar,VasileStoicu-Tivadar[1]proposed health care services and the possibility of developing a hybrid cloud. They provided a private and public cloud services .In this paper they use the architecture which reduced the cost of hardware resources, less data center space. In short they conclude that Improves scalability with lower costs, allowing resources to be allocated only as needed.

Young SilLee[2]In this paper they can checked the medical needs of people. Because due to lack of money some people could not got the medical treatment. In this paper they have concluded that proposed healthcare solution to be applicable to provide secure and cost effective.

Rujuta Kambli1, Ravi Yadav2[3]In this paper they provided a system which stores the medical data with the help of Microsoft SQL server database. In this paper if the patients data is updated on the cloud and that will be accessed by the any hospital. They made system in such a way that it will used at Gram Panchayat, Primary Health Centre, Personal Computer.

Jubi Rana1,Abhijeet Bajpayee2[4] In this paper they have to check the overall survey that is increase in elderly population and decline in birth rate .In this paper they proposes a framework for secure HealthCare Systems based on big data analytics in mobile cloud computing environment.

Md. Irfan1, Sayeed Yasin2[6]In this paper it checks the security of medical dada and it also focused on personal health record there is no any requirement for placing data in public cloud.

Tatwadarshi P. Nagarhalli[11] In this paper they proposed a system that helps in text chat. Because in our system we use text chat system for communication so the doctor can communicate each other. It uses the steganography techniques.

III.   PROPOSED SYSTEM

In this we are develop a system which is interactive from both side such as patient and doctors. If there is an emergency if patient move from one place to other then there is a need of getting past history of the patient. With the help of this system the doctor can get past history and treat in better way. In this system if doctor can communicate with the previous doctor then it provide the audio, video, text chat facility, so the doctor can get all information related to the patient. In this system there is medicine data server which provides the medicine related data, so the patient can get all information of the medicine.
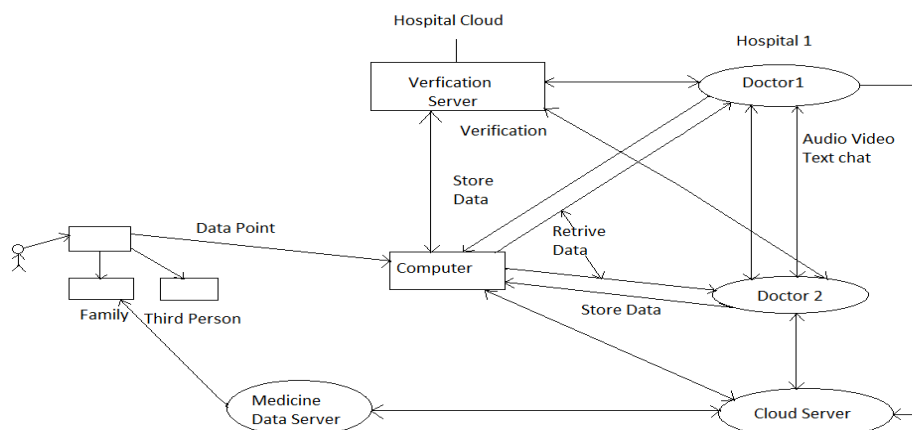

Fig. Proposed System Architecture

IV.   CONCLUSION

Each and every sector the world is undergoing a measurable change due to the influence of IT field and In this to maintain a medical information is very important .In cloud we can kept huge data and also we retrieve data from cloud. With the help of previous history we can get all information related to the patients and treatment is done in better way. The cloud is best possible solution for getting scalable flexible and cost effective data. With the help of healthcare systems the cloud can hold huge amount of patient data and that will be used by medical field to save the life of people.

REFERENCES

[1] Radu-ClaudiuChioreanu, MihaelaCrişan-Vida, LăcrămioaraStoicu-Tivadar,VasileStoicu-Tivadar" Implementing and securing a hybrid cloud for a healthcare information system" IEEE 978-1-4799-7267-8/14/$31.00 ©2014

[2] Young Sil Lee "Hybrid cloud service based Healthcare Solutions" 29th International Conference on Advanced Information Networking and Applications Workshops 2015 978-1-4799-1775-4/15 $31.00 © 2015 IEEE

[3]Rujuta Kambli1, Ravi Yadav2''Secure Healthcare for Patients Using Cloud Computing'' International Journal of Science and Research (IJSR)Volume 5 Issue 4, April 2016

[4] JubiRanaAbhijeetBajpayee "Healthcare Monitoring and Alerting System Using Cloud Computing"International Journal on Recent and Innovation Trends in Computing and Communication Vol: 3 Issue: 2 IJRITCC | February 2015.

[5] Lu Liu*,JingchaoSun,Jianqiang Li*" A Privacy Enhanced Search Approach forCloud-Based Medical Data Sharing" 2015 IEEE International Conference on Smart City/SocialCom/SustainCom together with DataCom 2015 and SC2 2015978-1-5090-1893-2/15 $31.00 © 2015 IEEEDOI 10.1109/SmartCity.2015.2051032

[6] Md.Irfan1,Sayeed Yasin2" Securing Medical Records in Cloud Computing" International Journal of Modern Engineering Research (IJMER) www.ijmer.com Vol. 3, Issue. 5, Sep - Oct. 2013 pp-2695-2697 ISSN: 2249-6645

[7]TamalKantiChakraborty, Anil Dhami, Prakhar Bansal and Tripti Singh" Enhanced Public Auditability & Secure DataStorage in Cloud Computingl" IEEE 978-1-4673-4529-3/12/$31.00_c 2012 IEEE

[8] Sultan Aldossary1,William Allen2" Data Security, Privacy, Availability and Integrity in
Cloud Computing: Issues and Current Solutions" *(IJACSA) International Journal ofAdvanced Computer Science and Applications,Vol. 7, No. 4, 2016*

[9] ChiagunyeTochukwu, Igbajar Abraham and IloSomtoochukwu" Cloud Based Health Care Information System for Rural Clinics in Nigeria" International Journal of Electrical Electronics & Computer Science Engineering Volume 2, Issue 6 (December, 2015)

[10] Maya Louk1, Hyotaek Lim2" Security System for Healthcare Data in Cloud Computing" International Journal of Security and Its Applications Vol.8, No.3 (2014).

[11Tatwadarshi P. Nagarhalli" A New Approach to SMS Text Steganography using Emoticons"*International Journal of Computer Applications (0975 – 8887) National Conference on Role of Engineers in Nation Building 2014*

[12]Tatwadarshi P. Nagarhalli 1"A New Approach to Text SteganographyUsing Adjectives"International Journal of Innovative Research in Science,Engineering and Technology*(An ISO 3297: 2007 Certified Organization)*Vol. 4, Issue 5, May 2015

[13]JasleenKour,DeepankarVerma" Steganography Techniques –A Review Paper" *International Journal of Emerging Research in Management &TechnologyMay 2014*

[14]VidhyaSaraswathi,Mrs.SumathyKingslin" Different Approaches to Text Steganography: A Comparison" *International Journal of Emerging Research in Management &Technology Nov 2014*