

The proposed model also finds out the medical staff who gives wrong treatment as quickest possible time from central access log. So it will make the medical staff more responsive to their patient and reduce the scope of wrong treatment. Though the proposed model is developed for global architecture for a medical system of a country, but it can be implanted for a medical system of any organization within a small domain. Finally, our proposed model gives environment-friendly platform in health sector for any country.

ACKNOWLEDGMENT

The authors gracefully acknowledge the support from Bangladesh Bank and Institute of Information and Communication Technology (IICT) of Bangladesh University of Engineering & Technology (BUET).

REFERENCES

- [1] M. K. Sharma, "e-governance applications in public healthcare for rural areas of uttarakhand," Computer society of India communication, India, vol. 35, issue 7, pp. 8-10, October 2011.
- [2] M. R. Patra and R. K. Das, "SORIG: A Service-Oriented Framework for Rural Information Grid – An Implementation Viewpoint," in Proc. of the 1st international conference on Theory & practice of Electronic Governance, Macao, China, pp. 49-52, December, 2007.
- [3] A. Srivastava, N. Agarwal and R. Agarwal, "Authenticating Indian E-Health System Through 'Aadhaar' A Unique Identification," International Journal of Scientific & Engineering Research, vol. 4, issue 6, June 2013.
- [4] M-M. Bouamrane and F. S. Mair, "An Overview of Electronic Health Systems Development & Integration in Scotland," in Proc. of the 1st international workshop on managing interoperability and complexity in health systems, Glasgow, Scotland, pp. 59-62, October 2011.
- [5] A. B. R. Kumar and M. Padmavathamma, "Secure E- Health Care Model," IOSR Journal of Computer Engineering, Vol. 5, issue 6, pp. 21-24, Sep-Oct 2012.
- [6] A. Boonyarattaphan, Y. Bai and S. Chung, "A Security Framework for e-Health Service Authentication and e-Health Data Transmission," in 9th International Symposium on Communications and Information Technology, Icheon, South Korea, pp. 1213-1218, September 2009.
- [7] K-H. Yeh, N. W. Lo, T-C. Wu, T-C. Yang and H-T. Liaw, "Analysis of an eHealth Care System with Smart Card based Authentication," in 2012 Seventh Asia Joint Conference on Information Security, Tokyo, Japan, pp. 59-61, August 2012.
- [8] A. Georgoulas, A. Giakoumaki and D. Koutsouris, "A Multilayered Architecture for the Development of Smart Card-based Healthcare Applications," in Proc. of the 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Cancun, Mexico, pp. 1378-1381, September 2003.
- [9] G. Kardas and E. T. Tunali, "Design and implementation of a smart card based healthcare information system," in Computer Methods and Programs in Biomedicine, vol. 81, issue 1, pp. 66-78, January 2006.
- [10] http://www.nxp.com/documents/data_sheet/MF1S503x.pdf
- [11] <http://www.acs.com.hk/en/products/3/acr122u-usb-nfc-reader/>
- [12] <http://www.visual-paradigm.com>
- [13] <http://www.zend.com/>

BIOGRAPHY

Mohammad Tauhidul Alam is currently Maintenance Engineer of Bangladesh Bank (Central Bank of Bangladesh), Dhaka, Bangladesh and ex-lecturer of Computer Science & Engineering Department at BGC Trust University, Chittagong, Bangladesh. Mr. Alam earned B.Sc. in Computer Science & Engineering from Chittagong University of Engineering and Technology (CUET), Bangladesh and Masters in Information & Communication Technology from Institute of Information & Communication Technology (IICT), Bangladesh University of Engineering & Technology (BUET), Bangladesh. He has published journal and conference papers. Mr. Alam has done research projects with University of Chittagong and IICT (BUET). His research interests include digitalization of health sector using ICT, Telemedicine, Information Security, Data Analysis, optimization, interoperability. He is a member of Institute of Engineers Bangladesh (IEB) and Bangladesh Computer Society (BCS).

Dr. Md. Liakot Ali is currently Professor and Director of Institute of Information & Communication Technology (IICT) at Bangladesh University of Engineering & Technology (BUET), Dhaka, Bangladesh. Mr. Ali received his B.Sc. degree in Electrical and Electronic Engineering from Bangladesh University of Engineering and Technology (BUET) in 1993, M.Sc. in Electrical, Electronic and Systems Engineering from Universiti Kebangsaan Malaysia (UKM) in 1998 and Ph.D in Electronic Engineering from Universiti Putra Malaysia (UPM) in 2001. He served as a R & D Engineer in few reputed national companies of Malaysia and also as Lecturer in Universiti Putra Malaysia. He has published journal and conference papers. His research interests include advanced electronic system design, IC design & testing and ICT application in health sector. He is fellow of Bangladesh Computer Society (BCS) and member of Institute of Engineers Bangladesh (IEB).