Automated Bus e-Ticketing Service

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Abstract*: Nowadays public transport systems like metro are well advanced. The need to improve passenger safety, convenience and performance of existing public transport is increasing the demand for intelligent transportation systems in the market. The paper- based ticketing system for collecting bus fares has been considered the source of major financial losses in India. It is difficult to assure every passenger to buy a ticket. A paper ticket becomes useless for passengers upon reaching the destination. The number of untold tickets per day is very high. In the era of technology, India should focus on developing an automated system to collect bus fares. Therefore, this paper proposes an automated card operated system using RFID and GPS for bus travel in India.*

Keywords: Bus e-Ticketing

REFERENCES

[1]. Dr. Vinit Kotak, "RFID-based bus ticketing system using android and GTFS", International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE) Vol. 5, Issue 3, March 2016.

[2]. V. Apsara, "RFID based bus ticketing system for Public Transport System (PTS)", International Journal of Industrial Electronics and Electrical Engineering (IJIEEE) Vol. 4, Issue 5, May 2016.

[3]. Mr. Mohammad Osman , "Enhancement of Public Transportation services using wireless technologies like Zigbee, RFID ,GSM and GPS" ,International Journal of Engineering Trends and Technology (IJETT) Vol. 6, No. 7 ,December 2013.

[4]. T. Manikandan, "Conductor less bus ticketing system using RFID and accident information through GPS and GSM", International Journal of Innovative Science, Engineering and Technology (IJISET), Vol. 2, Issue 9, September 2015.

[5]. Paul Hamilton, "Intelligent agent based RFID system for demand bus Scheduling and T International Journal of Future Computer and Communication (IJFCC), Vol. 2, No. 5, October 2013.

[6]. Dr. Bos Jos, "RFID based bus ticketing system", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), Vol. 4, Issue 4, April 2015. [7]. Christian Oberli, "Performance Evaluation of UHF RFID technologies for real time passenger recognition in PTS", IEEE Transactions on Intelligent Transportation System, Vol. 11, Issue 3, September 2010.

[8]. Prof. K. T. Patil, "RFID Based Ticketing System For Local Trains", International Journal of Computer Science and Information Technologies (IJCSIT), Vol. 6, Issue 3, 2015.

[9]. Ana Aguiar, "Personal Navigator for a public transport system using RFID ticketing". [10]. Arul Das, "GPS Based Automated Public Transport Fare Collection Systems Based On Distance Travelled By Passenger Using Smart Card.

[11] Vinod Bharat et al. "Study of Detection of Various types of Cancers by using Deep Learning: A Survey", International Journal of Advanced Trends in Computer Science and Engineering, 2019, Volume 8 Issue 4,pp 1228-1233

[12] Vinod Bharat et al. "A review paper on data mining techniques", International Journal of Engineering Science and Computing (IJESC), 2016, Volume 6 Issue 5, pp 6268-6271.

[13] V Bharat, S Shubham, D Jagdish, P Amol and K Renuka, "Smart water management system in cities", 2017 International Conference on Big Data Analytics and Computational Intelligence (ICBDAC), 2017, March.

[14] Vinod Bharat, Sandeep Mali, KishorSawant and NileshThombare. Article: A Survey on Public Batch Auditing Protocol for Data Security. IJCA Proceedings on National Conference on Advances in Computing NCAC 2015(7):39-42, December 2015