

A Comprehensive Review of Automated Railway Ticketing System

KN Jayathunga, N Wedasinghe

Department of Information Systems, Faculty of Computing, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

Abstract. Travelling has become tiresome and difficult in this period. Starting from the discovery of the steam engine, until now with numerous advancements, the most picked mode of traveling for many within any country is the train. Unfortunately, the challenges faced in this mode are numerous and are getting piled up day by day. To overcome these challenges and issues, a well-organized automated ticketing system is one of the necessary means to resolve the prevailing issues in a train traveling. Looking at the history, railways issued tickets in paper with all details written by hand and issued with a money exchange requirement. With the use of computers and printers came the printed version of tickets. But still, there is a rush at the counters for tickets. This paper represents a review drawn from a survey conducted regarding a solution to be brought to the ticketing system of the Railway. This paper is written by surveying to get some feedback to thereby decide on implementing a smart and automated railway ticketing system that uses IoT devices. As expected, according to the survey, the majority of the participants bias to the side of implementing a smart ticketing system which they expect to be a smart solution for the current mess in our country. With the survey results came the need for a smart ticketing system and through the proposed system will have an RFID system and tags to make ticket purchase smart and reliable. With the help of this developed database system in our country, the floured results from the survey are satisfied with low cost which is much secured than the prevailing ticketing system. This system provides facility and flexibility to book and retain the ticket very simply following a few steps and can be implemented easily in Sri Lanka.

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