

## Challenging Issues of the Railway Ticketing System of Sri Lanka

JASV Jayasuriya<sup>1#</sup>, RPS Kathriarachchi<sup>1</sup> and DU Vidanagama<sup>1</sup>

<sup>1</sup>*Department of Information Technology, Faculty of Computing,  
General Sir John Kotelawala Defence University, Sri Lanka*

#36-it-0044@kdu.ac.lk

This system is formulated to overcome the significant flaws in the present system and the consequences of traveller ticket buying and seat reservations, which frequently lead to mistakes and many issues. In Sri Lanka, the Railway system mainly uses traditional methods, and ticketing and seat reservation processes are the same. In the modern technical world, traditional systems are getting converted to computerized systems to achieve convenient and efficient methods. However, Sri Lankan train passengers regularly face different kinds of issues. Therefore, people tend to use their private vehicles for transportation. Encouraging people to use public transport is a better way to solve the abovementioned issues. But public transport should be properly developed to make the journey comfortable for every passenger. This is one of the purposes of this research. The Sri Lankan railway's existing ticketing and seat reservation system happens on a manual method. Therefore, passengers face a lot of issues such as waiting in long queues, no proper way to make a seat reservation by themselves, waiting for a long time to make a reservation, and other issues. This research identifies those issues by using two methods. Firstly, using observations to detect issues by visiting some train stations. The second method is an online survey. After detecting the issues, research moves to the analysis part to identify the system features that reduce passengers' issues. The main purpose is to identify the system features and functions of Smart Ticketing and Seat Reservation systems for the Sri Lankan Railway. Using this application, people can prevent their issues because system features can reduce the passengers' issues.

**Keywords:** *smart reservation, e-ticketing, train ticketing, e-transportation*