

# Online Train Ticket Reservation System

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## Abstract

Railway is one of the most important means of transportation, and plays a vital role in the transport industry. With such a huge customer base, purchasing train tickets has been a very prominent problem. Railway E-Ticketing systems have been developed with the acceleration of technology but, they are not economically viable as mobile applications. After considering the above facts, “Sri Lankan Railway (SLR)” has been developed as a mobile application for making online reservations and accessing relevant information across different locations via are Internet.

In SLR Application, user should create an account as first time and then can make a reservation by adding the train details. As soon as the payment is done, reference number is generated on the application. While this is convenient for most people, it has made things particularly easier for people residing in remote areas. It is much easier than standing in long queues. So they can book tickets with a tap and they can check available train for required date and time, which seats are already booked in relevant compartment and which are the seats available for booking. They can graphically see those details.

The system has a separate application called checker application (SLRCS) for validation of ticket. Since Checking application it saves a huge work of the ticket checkers for validation of tickets by moving from manual ticket checking process to digital ticket checking process. This is done by just scanning with their own android mobile to validate the ticket. Using this application, Railway department’s employees can log on to checkers account and the system verifies the ticket reservation by comparing generated reference number. Further the android and cloud based technologies have been used for the development process of the both applications.

The SLR application was a success in developing an online mobile ticket booking which could satisfy the current problems of passengers who reserve tickets. The testing process has been successfully done by reviewing users in different backgrounds.

An application for managing server side can be proposed to further enhancement for the project. In order to manage the database as the admin, it can provide a dashboard. In current application, the database updates manually. Need to focus on a way of letting it to be updated automatically. And a payment gateway should have to apply for the implementation stage.

The developed SLR application will contribute for a positive impact in the business economy in Sri Lanka. Hopefully, it will be beneficial for all the users who travel in trains and it will make their lives easier.

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