**ABSTRACT**

Indian Railway is world’s largest human transport system, is currently dealing with a lot of problems, such as availability of confirming seat if available during immediate cancellation The Railway Reservation System makes it easier for customers to find out whether trains are available between two destinations, book and cancel tickets, find out the status of their reservations, and more.

The objective of this proposed system is to design and develop a webpage for public in order to book tickets by looking at the available seats. After booking the train tickets the passengers will get the confirmation QR code via SMS or Mail.

The tools required for the implementation of this project are Python IDLE and IBM Cloud Services which includes IBM Watson IoT Platform, Node-RED Service, Cloudant DB.

This work proposes the new Seat Allocation system considering the advantage of QR code image that contains information about ticket and passenger info in form of 2D. Moreover, authentication seat allocation checking by ticket collector is done using another android app for ticket collector who verifies QR code information with the database and reduces the burden of ticket collector. This work helps to make the journey of the passengers more convenient in Indian Railway.