**CONCLUSION**

The proposed solution aims to design children safety system that tracks the school buses and provides relevant information to the parents via a mobile application and authorities via a web portal. The attendance information of students is done using QR Scan and the data is collected which is viewed by the school authorities. Based on the attendance, guardians are informed about their children through alerts about the status of the bus.

Other important features have been added to the system which allows route optimization by providing the conductors with the fastest and a more secured path. In addition, delay prediction is also implemented in the system using different classification models which makes scheduling the buses more convenient. Comparison was done on four models and it was found that Random Forest worked the best with the system giving error of 11.6%. Moreover, the system provides with utmost details to guardians about anomalies, and the arrival and departure of the children.

Thus, the system is user friendly to use for the bus staff as well as parents. The number of additional security features added gives it an edge over previous such systems. It also facilitates interaction between school and guardians in a more efficient way resulting in greater security.