

Real Time Bus Tracking System

Nouman Khwaja¹, Saab Kadivala², Shaikh Mohammad Musharaf³, Prof. Vikas Baloda⁴

Students, Department of Information Technology^{1,2,3}

Assistant Professor, Department of Information Technology⁴

M.H. Saboo Siddik College of Engineering, Mumbai, Maharashtra, India

Abstract: In today's world where everything happens fast, public transportation systems are still slow and it's the need of the hour to make them efficient. A large number of people use public transportation like buses as it's inexpensive. But, buses arrive at their respective stations at random timings. Random timings sometimes cause commuters to wait longer than they expect. Waiting results in bad customer experience, which causes customers to drift away from the public transport to online cab-services. Therefore, to make the bus transport efficient there is a need for a smart system which can provide real time location information about the bus. Thus we are proposing a new system to solve the problem of random arrival timings of the bus. The system will manage all the data required to provide the real time location of the bus. We will be using technologies like GPS (Global Positioning System), Mapbox Map API, Android mobile application, Flutter framework and Internet are used for developing the solutions. Our system provides a mobile based application, which shows real time location of buses to remote users. This will improve the customer experience and encourage more people to use public transportation.

Keywords: GPS, Mapbox, Direction API, Geocoding API, Coordinates, Location, Real-Time, Bus Routes.

REFERENCES

- [1]. Suraj Phadatare¹, Prathamesh Kudtarkar, Jignesh Seth, Asst. Prof. Vaishali Yeole "Bus Monitoring System using Android Application", International Research Journal of Engineering and Technology (IRJET) , Volume: 06 Issue: 04 | Apr 2019
- [2]. M. S. Minu, Deepak Adithya K. N, "Real Time College Bus Monitoring and Notification System", International Research Journal of Engineering and Technology (IRJET) , Volume: 07 Issue: 04 | Sep 2018
- [3]. Manini Kumbhar, Meghana Survase, Pratibha Mastud, Avdhut Salunke, "Real Time Web Based Bus Tracking System", International Research Journal of Engineering and Technology (IRJET), Volume: 03 Issue: 02 | Feb 2016
- [4]. Akshay Sonawane, Ankeet Bhanushali, Kushal Gogri, Milind Khairnar, "Real Time Bus Tracking System", International Journal of Engineering Research & Technology (IJERT), Vol. 9 Issue 06, June-2020
- [5]. M. Rishabh Sai Madhur, K. Sreenivasa Priyatham, K. Charan Raj, K. Bipin Nandan, B. V. Sathish Kumar, "Smart Bus Tracking and Management System", Iconic Research and Engineering Journals (IRE), Volume 1 Issue 8 | Feb 2018
- [6]. Ajinkya Sarnobat, Sarthak Thakur, Pratik Tilekar, Rahul Rachamadugu, "A Mobile Application for Bus Tracking System", International Journal of Engineering Research & Technology (IJERT), Volume 3 Issue 1 | June 2016
- [7]. Mr. Pradip Suresh Mane, Prof. Vaishali Khairnar. "Analysis of Bus Tracking System Using Gps on Smartphones", IOSR Journal of Computer Engineering (IOSR-JCE), Volume 16, Issue 2 | Apr 2014
- [8]. Mr Joshua Samual, "Implementation of GPS Based Object Location and Route Tracking on Android Device", International Journal of Information System and Engineering, Volume 3 Nov 2015
- [9]. Juthuga Sri Jyothi Satya, Shaikh Anwar. "IOT Based Bus Tracking and Monitoring System Using GPS and Raspberry PI", International Journal of Creative Research Thoughts (IJCRT), Volume 6, Issue 2 | April 2018
- [10]. Dr. N. Dhanasekar, Chitra Valavan, S. Soundarya. "IOT Based Intelligent Bus Monitoring System", International Journal of Engineering Research & Technology (IJERT), Volume 7 Issue 11 2019