IOT Based Smart Parking with Android Application for Pre-booking Parking

Prof. Bhagyashri S. Chaudhari[1], Sakshi G Pangare[2], Sai H Yadav[3], Sneha N Chavan[4]

Professor, Department of Computer Science and Engineering1

Students, Department of Computer Science and Engineering2,3,4

Navsahyadri Education Society's Group of Institutions, Polytechnic, Pune, Maharashtra, India

Abstract*: Now-a-days, vehicle parking has become a major problem in urban areas with the shortage of parking spaces. it is very difficult and frustrating to find a parking space in most metropolitan areas, especially during the rush hours to solve this problem. The paper entitled smart parking system using android application, the major motivation of this paper is to reduce the traffic congestion in roads, multistorey buildings and malls due to unavailability of parking spaces. The proposed application provides an easy way for reservation of parking slot. In this application user can view various parking areas and also view whether space is available or not. If the booking space is available then he can book it for specific time slot. The paper displays the nearest empty slot if present with respect to user location. Our project aims to make efficient use of parking spaces. A cloud-based smart parking application will enable real-time monitoring and booking of parking availability by providing enhanced services to the end users as well as reduce the workload of the parking administrator.*

Keywords: Arduino, IR Sensor , DC Motor, Android Studio

REFERENCES

[1]. J. Rico, J. Sancho, B. Cendon, M. Camus, "Parking easier by using context information of a smart city: Enabling fast search and management of parking resources", Advanced Information Networking and Applications Workshops (WAINA) 2013 27th Inter- national Conference on, pp. 1380-1385, 2013, March.

[2]. F. Zhou, Q. Li, "Parking Guidance System Based on ZigBee and Geomagnetic Sensor Technology", Distributed Computing and Applications to Business Engineering and Science (DCABES) 2014 13th International Symposium on, pp. 268-271, 2014, No- vember.

[3]. Amir O. Kotb; Yao-chun Shen; Yi Huang "Smart Parking Guidance, Monitoring and Reservations: A Review" IEEE Intelligent Transportation Systems Magazine (Volume: 9, Issue: 2, Summer 2017).

[4]. Yanfeng Geng, Christos G. Cassandras, "A new "Smart Parking" system Infrastructure and Implementation", Science Direct, Social and Science Behavioral sciences, 1278-1287 ,2012.

[5]. Tejal Lotlikar Minla Chandrahasan, Ankita Mahadik, Madhusmita Oke, Anjali Yeole "Smart Parking Application September 2016 International Journal of Computer Applications 149(9):32-37DOI:10.5120/ijca2016911529

Copyright to IJARSCT
www.ijarsct.co.in

DOI: 10.48175/568

ISSN
2581-9429
IJARSCT

249