ABSTRACT

Vehicle parking is an absolute thing that is urgently needed in public places or public facilities. Finding empty parking spaces is difficult in major cities especially during rush hour. Existing parking systems in several major cities in Indonesia can provide parking information at the entrance of the parking building. However, this system is still not helpful because the driver still has to find his own parking space so it is time consuming and can cause congestion in the parking area of the building. In this study designed parking system by determining parking location. Riders will receive a printout ticket from a thermal printer that says the recommended parking location. From the results of the tests carried out, a parking system has been produced that can provide recommendations for the location of the nearest empty parking lot from the parking gate to the entrance of the main building based on order checking by the microcontroller program. In each parking location there are sensors to detect the presence of vehicles and parking codes as a differentiation of one parking tile with another. At the entrance, the display of parking building information and the display of empty parking tile location information can provide information on the number of empty parking lots, the number of customers, and the position of the recommended empty parking plot with 100% success rate if the vehicle enters in parallel.

Keywords: Parking Building, Parking System, Microcontroller.