ABSTRACT

The development of four-wheeled vehicles in the city of Bandung from year to year increasingly rapidly. In 2015 there were 1,617,022 cars, in 2016 there were 1,681,647 cars, and in 2017 there were 1,811,498 in Bandung. The increase in the number of vehicles is expected to continue to increase in the coming years. However, parking lots require a lot of attention from the side of four-wheelers, as well as parking managers, discussing the problem of time wasted just looking for available parking locations. This information relates to the absence of information regarding the number and location of parking available at some parking locations.

The method used in this thesis is the design and manufacture of an admin system prototype that can be used to manage ssmart parking based on Internet of Things (IoT) technology. System testing is done through functionality test, fairness test, and web admin service quality test.

The results of this study indicate that the system designed and implemented is able to work and function properly in terms of the endpoint login functionality, endpoint logins, endpoint registers, and get-all-parking endpoints, which get a status code of 200, which means that all endpoints successfully made requests and get the data you want. Fairness test results from the parking fee benchmark are fair for parking managers and users. While the results of web admin quality test results in 80,000bps throughput, 50ms delay, 0.0015% packet loss, from the benchmark using the third Tiphon the three quality tests are very good.

Keywords : website, smartphone, sequential search, smart parking