ABSTRACT

Number of motorcycles and especially car is increasing every year in Indonesia. Comparison between parking lot and number of car is decreasing along the year, so parking lot necessity will be increased. To find idle parking lot is getting harder for car driver. Driver have to look around parking lot without help from direct information to an empty parking lot. Searching an empty parking lot activity in world can be assumed is using 1.000.000 barrel of fuel in one day. Around 220,000 to 300,000 barrels of fuel can be saved in one day at year of 2050 if an effective parking system is applied.

Suggested parking system to be a solution from problem above is an implementation Wireless Sensor Network (WSN) with Internet of Things (IoT) to make user easier to get information about an empty parking lot, that will make it easier, efficiently used-fuel and time-saving for finding an empty parking lot.

The result of this final project is to be able co create a smart parking application that is integrated with a realtime data server and has data accuracy >90%

Keyword: *Parking System, IoT, Wireless Sensor Network (WSN), Fuel Saving*