ABSTRACT

Rapid people's growth will impact on the increasing of the number of vehicles. In view of the large number of existing vechicles, especially four wheeled vehicle that requires large space when it will be parked.This will lead to a problem that is the difficulty in finding parking location when the driver doesn't know whether ter is an empty parking location or not. The problem can be solved if the user know the condition of the destined parking location. Based on the problem above, the author had an idea to create an application about mobile based smart parking system.

This application is created as the mobile application with android platform and maximized by adding AI (Artificial Intelligence). Driver can make a booking to the destined parking location and if the quotas on the destined parking location is full then driver will be directed to the nearest alternative parking location. The searching of the alternative parking location will use DWA* method. DWA* method is affected by heuristic score (h(n)) and dynamic score (w(n)). Heuristic score (h(n)) and dynamic score which is false will make the searching to be wrong. Smart Parking System application is developed to help driver to know the information about parking location with accuracy 92.592%, the average time of execution is 0.49 msekon and memory savings..

***Key Word** : mobile application, android,smart parking*