ABSTRACT

Traffic jam is one of common problems in big city. Traffic jam is line with the high mobility of people in a city that does not comply with the highway capacity. Traffic jam makes travel time from source to destination is longer than it should. In fact, shortest route selection is less effective if the route have potential traffic jam.

The thesis is to make an application on an Android phone that integrates Google Maps. By utilizing one of the features in Google Maps, Traffic, it designed a system by processing the Google Maps image that can classify the traffic density in four levels (well, crowded, jammed, and so jammed), gives distance information, provides an estimate of the travel time, and also give alternative routes option.

Based on the test results, the system will take the traffic color on the 4th point from point of origin with average of point's color which is appropriate with the traffic color of Google map is 74% and the success of the color elements of RGB used by system is 86%. Applications can provide an estimate of the travel time with an error rate of 27% when compared to the travel time provided by Google Maps Desktop. This application can help users to know about traffic congestion on a road. This final project also can be a reference for mobile application developmnet of Bandung traffic information.

Key words : traffic jam, android, Google Maps API