ABSTRACT

Global market demand for Information access is increasing. Availability of information resources that can be accessed from anywhere and at anytime becomes an advantage of mobile application. One of the most needed information is the information of tourist destination, such as Bandung. To fulfill those needs, a rich and innovative application is needed. Android operation system offers the ability to built those rich and innovative applications and also open source.

In the making of this final assignment, the application developed is e-iTrip, which is an application that consists of 6 options to help user find the information about public facility in Bandung, including GIS feature. GIS feature here allows user to get the shortest route to the destination point based on A* (A-Star) algorithm and BFS (Breadth First Search) algorithm. This application is developed using Android SDK Tools Revision 6, SDK Platform Android 2.2, API 8 revision 2, Google's APIs by Google Inc.,Andorid API 8 revision 2 and Netbeans IDE 6.7 as its IDE. This application can be implemented on the handset with Android operation system based.

This e-iTrip application can provide information which is needed by every traveler, such as hotel, restaurant, shopping center, tourism object, and up-to-date weather information. This application also has the ability for calculating the sourthest path to reach those destination points. GIS features provided on this application allows travelers to be able to see the map of Bandung, the A* and BFS algorithm which are applied to this application are capable of predicting the shortest route which can be traversed to reach the destination point.

Keyword: Android application, open source, handset, GIS, A* (A Star) Algorithm, BFS (Breadth First Search) Algorithm.