

## **ABSTRACT**

Find a route on the map screen has many applications in many fields. The searched route is usually the shortest route in terms of a small fee. Dijkstra's algorithm is one of many algorithms. The advantage of this algorithm is time efficiency by not compromising cost. This is possible because in addition to cost, this algorithm also uses estimates to prioritize the correct search direction.

In this final project has been developed one of the features of LBS (Location Base Service), the shortest path or the shortest route seeker, with the creation of an android-based applications that are expected to provide information services to mobile device users in the campus area of Telkom University. In the working system of this application the user of the mobile device will do its position detection by GPS integrated in this application. Furthermore mobile device users determine where they want to be. After that the application will give the shortest command to the destination destination of mobile device user position previously detected by GPS.

The results achieved in this final task the formation of android-based applications that can determine the shortest route with Dijkstra algorithm from a point to the destination point that has been determined in the campus area of Telkom University.

Keywords: LBS, Shortest Path, Android, Dijkstra Algorithm, GPS