ABSTRACT

The information about places of worship in North Purwokerto is still inadequate which causes difficulty for the local communities or immigrants in North Purwokerto to locate the places. The routes to go to the places of worship are too far which make people lazy to do worship. The purpose of this research is to build an Android-based application that can display the location places of worship, provide information places of worship and determine the shortest routes to go to the places of worship in North Purwokerto. The application uses Dijkstra algorithm for determining the shortest routes. The application is developed using spiral method which contains five general phases namely, communication, planning, modeling, construction and deployment. This application is using Java language and SQLite database. The result is a mapping application places of worship by implementing Dijkstra algorithm and Google Map API. The final test of the application shows that application can run on Android JellyBean platform and later version. The shortest routes which are generated from the application is compared with Google Direction. The comparison shows that Dijkstra algorithm can be applied to find the shortest routes.

Keyword: Places of Worship, Dijkstra, Google Map, Android, Spiral