

Abstract

Bicycles are one of the traditional transportation tools that are environmentally friendly and easy to use. At Telkom University, bicycles are available that can be borrowed by students to travel in the campus area. With this, it will certainly make it easier and faster for Telkom University students to go from location A to location B. However, there is currently no system that can help students determine the best bicycle shelter according to their destination, so that sometimes students travel far enough and quite a long time by walking from the shelter to its destination. Therefore, in this final project a system can be developed to help students determine the exact location of the shelter and the closest distance to the shelter using the effectiveness method and A * in the form of an android application. This application is equipped with GPS and google maps features to be able to produce maximum output. The result, using the method of effectiveness and A * students can save travel distance of 54 meters and travel time of 1.5 seconds. For the accuracy of the GPS in the application is quite accurate with a difference of only 12.5 meters from the actual coordinates.

Keywords: GPS, efektifitas method, A* method, distance, time