ABSTRACT

Angkot, or could be said as Angkutan Kota (Public Transportation) is one of public transportation's kind that is mostly used by Indonesian. Unfortunately, many of it's passengers that change their preference into using their own transportation, or could be said as private transportation. this issue could be caused by amount of problems that they have faced, things like traffic, finding optimal route to reach their current destination, and other related things. An ability to find an optimum route for the passengers can be a breakthrough to make angkot become a much better public transportation from the passengers' point of view. Coming from that idea, to prevent issues in. It's a strong point to be created an application that functions in finding the optimum route for the angkot's passengers to make their experience in using angkot could be covered optimally and efficient. In this case, area that was modelled for the angkot's route is Bandung. Method that is used is A* algorithm. This algorithm is used to performs multi criteria calculation, that the results will be input in Google Maps API.

The result of this research shows that A* algorithm had a optimum result then the mass transportation path finding from Google Maps service, with the result from 30 trial A* shown result 60% optimal route, however the result from Google Maps had a result 13,3% optimal route, and 16,7% had a same result between A* and Google Maps. The visualization from the Google Maps API could help users to see the route and shows which angkot that they can used to reach their end point.

Key Words: Angkot, Google Maps, Google API, A*, Optimal Route