

## ABSTRACT

DKI Jakarta Province has begun easing Large-Scale Social Restrictions (PSBB) with the number of new cases of the corona virus (Covid-19) continuing to increase. Based on data from the Ministry of Health (Kemenkes) there were 1,211 new cases added on Monday (12/10/2020) bringing the accumulation to 88,174 people. On the same day, 1,086 patients recovered, bringing the total to 72,540. The number of deaths increased by 25 people, bringing the total to 1,914 people. Overall active cases or patients under treatment for Covid-19 in DKI Jakarta reached 13,720. With the still massive spread of Covid-19 in DKI Jakarta, there is a need for a quick response route for the community to go to locations that provide rapid tests and swab tests in each area in DKI Jakarta. If there are more and more patients, hospital locations that provide handling of Covid-19 patients are needed. If you look at the current traffic scheme in DKI Jakarta, picking up hospital ambulances to the patient's location or vice versa can take quite a long time. with traffic jams scattered in the DKI Jakarta area.

Applications that will later be useful for helping the public or patients in the DKI Jakarta area to go to strategic locations such as places that provide Rapid and Swab tests, self-isolation places and hospitals that are willing to handle patients infected with Covid-19 without having to go through various the point of the road that is experiencing congestion. This application is designed to provide information such as location points for handling Covid-19 such as Rapid Swab Tests, self-isolation places, and hospital referrals. This application uses the A\* algorithm to determine the shortest route to be traversed by the community.

The closest application from the patient's location to the covid-19 facility with the application of the A - Star algorithm can determine the shortest route to assist the handling of Covid-19 cases in DKI Jakarta by using an optimal weight of 77% for distance and 23% for congestion. The average memory required to determine the route with the A – Star algorithm in this application is 84.76 MB and the time required to determine the route with the A – Star algorithm has an average of 00: 02.126 (2126 ms).

**Keywords:** Covid – 19, A\* algorithm, shotheest route