ABSTRACT

Islamic boarding schools are Islamic educational institutions that play an important role in shaping the character of students. The internet in everyday life serves as a means of accessing information and news, however, it can be used to find access to the location we are looking for quickly and precisely. So we need an information system to find the shortest path to Islamic boarding schools that can make it easier for prospective students to find Islamic boarding schools in the East Java area. With the information system to find the closest route, it can make it easier for prospective students who do not know the location of the Islamic boarding school. From the author's observations, there are several Islamic boarding schools that are not accurately connected on google maps. Therefore, the author raises the title of the final project entitled "Searching for the closest path to Islamic boarding schools with the Android-based Dijkstra method", to make it easier for prospective students to locate the Islamic boarding school. From the results of testing the system that has been made, the functions of this application can run well. for the difference in the calculation of the distance from 272 data of Islamic boarding schools, the lowest calculation is -0.201%, which means that the distance difference from g-maps to Dijkstra is very small, and there is a difference in the highest distance reaching -40.560%, which means that the distance difference from g-maps to Dijkstra is still classified as accurate. The percentage comparison of the shortest distance of Dijkstra is 62% shorter than G-Maps with the shortest distance of 38%, so the system of finding the shortest path for Islamic boarding schools using the Dijkstra method is more accurate and effective.

Keywords: Islamic boarding schools, closest distance, android, dijkstra.