Abstract

In Indonesia there are many types of jobs. One type of job that can be found in Indonesia is trading. Trade is the activity of exchanging goods or services between seller and buyer, trading can be done in various ways, one example of how to trade is by going around. The means to going around is the merchant sells goods or services by going around a place, but this method does not guarantee that all goods or services are sold, and sometimes only takes time and energy. For the sample of traders that the writer took, it was a mobile meatball trader. This final project designs a smart cart system, where before going around a place, traders will know where buyers are because buyers can order through the application. This system is designed to make the workings of mobile meatball traders more effective and efficient using the fuzzy-Dijkstra algorithm. Fuzzy-Dijkstra algorithm is a combination of fuzzy logic and Dijkstra algorithm which is used to consider the distance between places and the number of buyers who are in a place. This system is built based on Android and utilizes Internet of Things technology. Based on the test scenario using the smart cart application system shows the distance and time taken to get to the customer's address is more efficient 137 seconds or 2 minutes 17 seconds and a distance of 188 meters compared to without the system.

Keywords: internet of things, dijkstra algorithm, fuzzy logic, fuzzy-dijkstra.