ABSTRACT

Purpose: Determine the fastest Evacuation Path to the evacuation point or Refugee Barrack based on the smallest time that has been determined by the Google Maps API by comparing the time of each point to be addressed, namely the first gathering point or Refugee Barracks.

Design/methodology/approach: Using the Nearest Neighbor to determine the fastest Evacuation Path to the Refugee Barracks.

Findings/result: Comparing the time of the first gathering point with other gathering points, it will get the fastest time and then comparing the time of the refugee barracks point, the fastest evacuation route to the driver will be found and the route will be described on the maps on the application.

Originality/value/state of the art: The difference between this research and previous research is in the method of determining the path and object of research. In this Method, the data collection points and refugee camps are analyzed and then the import process is carried out into the database. Then the results of the data analysis of the first gathering point and refugee barracks will be processed using the Nearest Neighbor Method. The Output of thuis system is the fastest route taken by each other driver in evacuating residents affected by the Mount Merapi Disaster.

Keywords : Evacuation Route; Google Maps API; Nearest Neighbor; Mount Merapi Disaster