ABSTRACT

Inequality distributed relief to disaster victims caused by the donors of the agency or company executed direct assistance to the victims in evacuation shelters which resulted in accumulation of relief at one point. Therefore, in this study, the monitoring system of disaster relief distribution web-based using the first-fit algorithm method that can minimize the occurrence of such inequality. First-fit algorithm will decide where relief is channeled to post evacuation that requires in compliance with the large number of daily logistics needs with appropriate. In addition, this system is aided by the use of barcode scanners which serves to facilitate the process of verification of relief goods have arrived in the post evacuation, that is by scanning the barcode from the goods and automatically verified data items entered into the data base system. Model systems are designed using object-oriented approach to one of such tools is UML. From the test result, the monitoring system of disaster relief distribution using the first-fit algorithm method can help Badan Penanggulangan Bencana Daerah in determining where appropriate evacuation shelters are given assistance.

Keyword : natural disaster, distribution of relief, first-fit algorithm