ABSTRACT

Indonesia has a high rate of traffic accidents, with a significant increase in the number of accident cases by 2023 reaching 6.8%, with motorcycles as the main mode of transportation causing traffic accidents which account for 77% of the total incidence. The main factors causing the increase in traffic accidents are the negligent and disrespectful behavior of motorists and the increasing number of motor vehicles. As the vehicle population increases, traffic control and surveillance become increasingly important. This research aims to develop an Android-based CNReport application that allows users to report traffic accidents in Indonesia, with an additional feature in the form of accident images equipped with GPS location as part of the submitted report so as to speed up the response of emergency services. The development was conducted using the ICONIX method with a structured and documented approach. The results showed that the application of the ICONIX method in developing the CNReport application succeeded in producing a well-structured application, minimizing design errors, and improving application quality. It is expected that the CNReport application can facilitate the community in submitting traffic accident reports and can contribute to reducing the number of traffic accidents in Indonesia.

Keywords : Android-based application, ICONIX process, Driver negligence, Accident reporting