

ABSTRACT

Disasters such as floods remain a serious problem in rural areas of Indonesia, including in Citeureup Village, West Java. Limited access to fast and accurate information leads to delays in decision-making and disaster response. This study focuses on the design and development of the backend system for a flood disaster information dissemination application aimed at improving the efficiency of flood management in the village environment. The system provides key features such as flood report management, presentation of disaster mitigation tips, evacuation site information, real-time flood location maps, and management of community-submitted reports. The development process was carried out using the Iterative Incremental method, which enables the system to be built gradually and adaptively based on user feedback. The main focus of the system's development lies in the Admin module, which is responsible for managing flood data, accessing citizen reports, and organizing the dissemination of important information to the public. To ensure the quality and reliability of the system, three types of testing were conducted: Unit Testing to test features internally, Functional API Testing to ensure backend service integration runs as expected, and User Acceptance Testing (UAT) to validate the system's alignment with the actual needs of village office users. UAT was carried out in two iterations, involving representatives from various roles such as the village secretary, village staff, and the secretary of the BPD (Village Consultative Body). UAT was conducted in two iterations with a total of 20 tasks, resulting in a success rate of 95%. The final results show that the developed backend system has met the functional and operational needs and is capable of effectively supporting disaster information dissemination at the village level. This system is expected to serve as a digital solution that strengthens the preparedness and response of rural communities to flood disasters.

Keywords: *Backend, Flood, Flood Dissemination Application, Iterative Incremental*