

ABSTRACT

**APPLICATION OF ANDROID -BASED RESIDENTIAL CITIZEN DATA COLLECTION
AND MONITORING SYSTEM USING THE RAPID APPLICATION DEVELOPMENT
METHOD
(CASE STUDY: TAMAN GADING HOUSING, CILACAP)**

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Taman Gading Housing, which is located in Tegalkamulyan Village, South Cilacap District, is a comfortable and strategic residential area. There, several routine activities are carried out by residents and officers, including collecting data on the identity of residents and facilities. Based on observations and interviews with the management of RT 09 Taman Gading Housing, the current data collection process is still carried out manually. This manual method faces obstacles, such as taking a long time because residents are sometimes not at home. Data is manually recorded on paper, then converted into a spreadsheet file, which is inefficient, prone to errors, or data loss. The process of converting and changing data also takes a long time, and it is difficult to provide evidence of citizen data collection, so data collection occurs repeatedly. The purpose of this study is to implement an Android-based data collection and monitoring system to make it easier for the management of RT 09 Taman Gading Housing in the process of collecting data and monitoring residents. This research uses the Rapid Application Development development method, which excels in increasing productivity because it allows developers and users to work together to develop applications quickly and efficiently. The results of the implementation of the data collection and monitoring system for residents in RT 09 Taman Gading Housing will be tested using the blackbox testing method, ensuring that each feature functions properly. Testing with the blackbox method carried out on the system with a total of 54 scenarios in the user and admin roles showed the results of all scenarios being successfully executed with a 100% percentage, indicating that all functions were running well. In detail, out of the 54 scenarios tested, 54 were successfully executed correctly, resulting in a 100% success rate.

Keywords: *housing, blackbox, android , restfulapi, data collection system, Rapid Application Development*