

ABSTRACT

This final project was developed to address inefficiencies in the management, recording, and reporting of payments at PAMDes Cihideung, which were previously handled manually. The manual process created difficulties in collecting payments from PAMDes water consumers and required a significant amount of time to prepare payment reports. This, in turn, hindered the ability to monitor income and make timely, accurate decisions. Therefore, through discussions and case studies, a web-based application was developed to facilitate the payment process and record payments, which can automatically generate complete and accurate payment reports. Additionally, this application is equipped with an integrated Payment Gateway system, making it easier for PAMDes water consumers to make payments and simplifying the payment collection process for PAMDes managers, as they no longer need to visit consumers homes one by one. The development of this application used a spiral method consisting of several stages: data collection to understand user needs, application design and development, and evaluation through user feedback. The tools used in the application development process included Visual Studio Code for writing program code, Microsoft Excel for initial finance data processing, and PostgreSQL for database system management. Based on the results of the testing and evaluation conducted, this application can assist in processing payments and recording transactions more quickly, as well as generate payment reports automatically and accurately, thereby enabling better decision making based on the data recorded in the system.

Keywords: (Payment Report, Payment Gateway, Payment Transaction, Web-Based Application)