ABSTRACT

Data accuracy, resource efficiency, and archive/integration effectiveness are important aspects of correspondence administration in government agencies. In this study, an integrated Correspondence Management System was designed in the village with the waterfall method. The system is built using the MERN stack (MongoDB, Express.js, React.js, Node.js) as the Backend and Frontend, and RESTFUL as the API. One of the key advantages of the RESTful API is its ability to improve performance, scalability, and flexibility over SOAP API services. The Correspondence Management System that has been designed will go through the trial stage before being released. Testing the feasibility of the system from the Frontend, Backend and database sides to ensure that the system to be implemented is in accordance with the needs. Among the tests carried out are system testing, unit testing, integration testing. All tests were carried out to prove that the system built was not only running correctly, but also light with an average system resource usage of 0.10%. This system will help the village in improving the quality of public services and optimizing data management.

Keywords: Correspondence Management System, MERN stack, sistem administrasi desa, waterfall,