

ABSTRACT

The component data management system for incinerator machines at PT Sarana Tunas Niaga was previously handled manually using Excel spreadsheets and printed documents, leading to issues such as limited accessibility, human error risks, and inefficiencies in data retrieval. To address these problems, an Android-based catalog application using WebView was developed exclusively for internal company employees. This application displays incinerator component data in a structured, interactive, and mobile-accessible format. The development process followed the Software Development Life Cycle (SDLC) using the Waterfall model, consisting of literature review, requirements analysis, system design, implementation, and testing. Technologies used include Android Studio (Kotlin), Firebase, OneSignal, MySQL, and JavaScript-based visualization integration. The application features include page navigation, real-time notifications, PDF invoice downloads, and web-based backend data management. The final result shows that the application functions well across various devices, accurately presents data, and enhances work efficiency for internal users. This application is expected to serve as an effective digital solution that supports the transformation of technical information management within the company.

Keywords: *Android application, WebView, incinerator, component catalog, Firebase, MySQL*