



ABSTRACT

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Tuberculosis Cleaner

**(Development of an Android Application to Optimize the
Handling of Pulmonary Tuberculosis Disease during the Covid-19
Pandemic)**

Research Team Name:

Bagas Nur Ardianto

Diah Kusuma Wardani

Research Competition Fields:

Computer

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ABSTRACT

Development of an Android Application to Optimize the Handling of Pulmonary Tuberculosis Disease during the Covid-19 Pandemic

Bagas Nur Ardianto, Diah Kusuma Wardani

In the midst of modernization that is happening in various fields like today, tuberculosis is still a disease that endangers human health. As many as 3.2 million Indonesians in 2020 are known to be infected with TB and 16% of them have died (WHO, 2020). The Covid pandemic that has occurred in almost 3 years is predicted to be one of the causes of the increasing number of deaths due to TB. This is because during the pandemic screening and tracing activities for TB did not go well. Therefore, the development of android applications that can help in handling TB is expected to be a solution to existing problems. Through this application, it is hoped that it can help health workers to remain optimal in handling TB problems in the midst of a pandemic. This Tb Cleaner application was successfully created using the User Centered Design (UCD) method using the Java programming language. The results of the ISO/IEC test show that the application has a score for each aspect of the test, namely: functional 100%, Usability 84.05%, Performance Efficiency 80% and compatibility 91.35%. Based on these data, it can be concluded that the Tb Cleaner application is classified as "very feasible". Based on the results of interviews, it is known that users feel this application is very useful to help treat TB at UPT. Puskesmas Kayen.

Keywords: *Tuberculosis, Tb Cleaner Application, User Centered Design, ISO/IEC 25010 Testing.*

ABSTRAK

Ditengah modernisasi yang terjadi pada berbagai bidang seperti saat ini, tuberculosis ternyata masih menjadi salah satu penyakit yang membahayakan kesehatan manusia. Sebanyak 3,2 juta masyarakat Indonesia pada tahun 2020 diketahui terjangkiti Tb dan 16% diantaranya meninggal dunia (WHO, 2020). Pandemi covid yang terjadi pada hampir 3 tahun ini diprediksikan menjadi salah satu penyebab meningkatnya jumlah kematian akibat Tb. Hal ini dikarenakan selama pandemic kegiatan screening dan tracing Tb tidak berjalan dengan baik. Oleh karenanya pengembangan aplikasi android yang dapat membantu penanganan Tb diharapkan dapat menjadi solusi permasalahan yang ada. Melalui aplikasi ini diharapkan dapat membantu tenaga kesehatan untuk tetap optimal menangani masalah Tb ditengah pandemic. Aplikasi Tb Cleaner ini berhasil dibuat dengan metode *User Centered Design (UCD)* menggunakan bahasa pemrograman Java. Hasil uji ISO/IEC menunjukkan bahwa aplikasi tersebut memiliki skor masing-masing aspek pengujian yaitu: *functional* 100%, *Usability* 84,05%, *Performance Efficiency* 80% dan *compability* 91,35%. Berdasarkan data tersebut dapat disimpulkan bahwa aplikasi Tb Cleaner tergolong "sangat layak". Berdasarkan hasil wawancara diketahui bahwa pengguna merasa aplikasi ini sangat bermanfaat untuk membantu penanganan Tb di UPT. Puskesmas Kayen.

Kata kunci: *Tuberculosis, Aplikasi Tb Cleaner, User Centered Design, Pengujian ISO/IEC 25010.*