# ABSTRACT

## ANALYSIS AND DESIGN OF PROTOTYPE KAI ACCESS MOBILE APPLICATION USING INCLUSIVE DESIGN TO INCREASE ACCESSIBILITY FOR PATIENTS DISABILITY OF VISION

By

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PT. Kereta Api Indonesia (Persero) or commonly abbreviated as PT. KAI (Persero) is a State-Owned Enterprise (BUMN) that provides, regulates, and manages railroad transportation services in Indonesia.

PT. Kereta Api Indonesia (Persero) has an official mobile application that is used to improve its services to the public, the KAI Access mobile application. The mobile application has functions to facilitate ticket booking, fast transaction processing, reduce operational costs when booking tickets, and as a source of information about ticket schedules and prices that can be accessed quickly. There are many features that can be used, from ticket reservations, ticket cancellations, to changing departure schedules. However, the mobile application can only be accessed by people with good physical conditions, while people who have special needs / disabilities are very difficult to use the application. This is due to lack of accessibility to the KAI Access mobile application.

Based on the above problems, it is necessary to analyze and design an android-based mobile application prototype which aims to help people with visual disabilities use the KAI Access mobile application, and help improve the quality of accessibility on the KAI Access mobile application. The mobile application will be analyzed and designed using the web content accessibility guidelines 2.1 (WCAG) and the Mobile Accessibility WAI. The method used in this research is inclusive

design. Inclusive design method can increase user accessibility in interacting directly with the application display. After the prototyping process is complete, the testing process will be carried out using the SUS and SEQ methods. The result obtained from SUS is worth 82.5, which means that the score is acceptable to users. Meanwhile, based on the results of SEQ, it resulted in the majority of users assessing the application's function very easily.

Keywords: KAI Access Mobile Application, Inclusive Design, Web Content Accessibility Guidelines 2.1 (WCAG), Mobile Accessibility WAI.