

## **ABSTRACT**

### **ANALYSIS AND DESIGN OF WEBSITE PROTOTYPE PT. KAI BASED ON INCLUSIVE DESIGN TO IMPROVE ACCESSIBILITY FOR PEOPLE WITH VISION DISABILITIES LOW VISION**

By

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*PT. Kereta Api Indonesia (Persero) is one company that provides online ticket sales services. However user with low vision disabilities are less able to use the train ticket booking website. People with disabilities, they have physical limitations, so they will have little difficulty in adjusting. These obstacles are exacerbated by environmental situations and public facilities that are not conducive to growth, participation and activities in life. Physical Disabilities have different ways of mankind in general in performing everyday activities, so that they require specific guidance to perform the activity. Accessibility to be taken as a proxy for the concept to provide convenience in accessing website. Web accessibility means that everyone is able to use the website properly without any obstacles from person's physical limitations. One of the standards governing web accessibility is Web Content Accessibility Guidelines (WCAG).*

*This study aims to analyze web design PT. KAI as a train transportation service provider that provides online train ticket reservation. In this study, based on the above considerations it is necessary to discuss a user interface (UI) solution using the results of a user experience (UX) analysis. In designing UI / UX in this study, the inclusive design method can assist in the process of creating a website created to assist persons with disabilities in accessing the website. The inclusive design method can improve user accessibility in facilitating direct website display based on WCAG 2.1 guidelines and taking measurements using the System Usability Scale (SUS). Tests are carried out to evaluate the design results using the SEQ and SUS methods. With the final test result using SUS obtained an average of 80,2% then the usability of the prototype website PT. KAI can be accepted by user with low vision that the website prototype user interface design that has been made successfully meets user needs and can solve problems on the accessibility of the website PT. KAI for user with disabilities low vision.*

*Keywords: Website accessibility, WCAG guidelines 2.1, disabilities, inclusive design, system usability scale*