WEB-BASED CRIMINAL CHOROPLETH MAPPING AND ROUTING WITH WARNING SYSTEM

By

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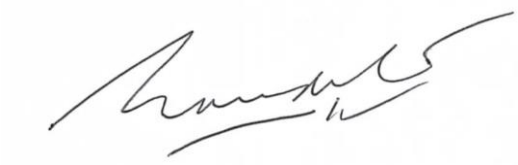

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ABSTRACT

Crime is any form of activity that can cause harm to the parties, both financially and psychologically. There are many different kinds of crime in this world, from minor crimes to crimes that take the lives of their victims. Information about crimes committed is available through television and Internet news broadcasts. However, much of the data is not processed first, so the form of information is data provided by BPS (Badan Pusat Statistik) or total crime counts per year. Because of that, visualizing data will help people understand data quickly. Data visualization makes the displayed data more appealing and easier to understand. Also, the proper and correct data source format is very important for good data visualization. Therefore, the project proposed in this regard is a web-based application that helps everyone to understand information about crimes happening around them and to provide detailed information about crimes that happened at a particular moment.

Data visualization in this application is more focused on how the data can be visualized in many ways. This application provides some data visualization such as a choropleth map, hotspot crime, and bar chart. Also, there is a point marker that will display the coordinates where the crime is committed with information about the crime committed. Besides that, the application also provides a routing or navigation system, and a report feature for users reporting the crime that happened around users.

DEDICATION

I would like to dedicate this thesis to my family and friends as the result of 3 years of study at President University majoring in Information Technology. I would also like to dedicate this thesis to my fellow friend in Bangkit Academy 2022, especially team C22-PS305. I hope the knowledge that I have gained over the past 3 years can be implemented by me to produce an application that will be helpful to many people.

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Praise the author for the presence of Allah SWT so that the author can complete the final project which refers to the title “Web Based Criminal Choropleth Mapping and Routing with Warning System”. The author is very grateful to everyone who has helped in doing this final project. Therefore, the author would like to express my gratitude to:

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