

ABSTRACT

Nowadays crimes repeatedly occur in every area, including the city of Bandung. Crime is every human behavior that violates the rule of law. Crimes usually occur because perpetrators have the opportunity to do so, besides that economic factors can also be a cause of crime. The police always try to provide security to the people so that they do not become victims of crime. However, random crime events have their own difficulties for the police to provide security to every area in the city of Bandung. Now the problem that arises is how the police can read the movements or know the crimes that will occur (predictions) in the one months and their regions. This is where the role of an application can help the police in predicting crime-prone areas in the city of Bandung.

In this Final Project will provide answers to the problems faced above. This Final Project discusses the design of a system that will be built from a crime distribution mapping website application at the Bandung Polrestabes level using the exponential smoothing algorithm, where the exponential smoothing algorithm is used to predict the crime that will occur in the next one months (short-term). then use the mapping of each area in the city of Bandung to see the prediction results in the form of mapping in each area of the City of Bandung. There will be three layering mapping results for each predictive area, namely red, yellow and green where the color is used to measure the intensity of the crime that will occur. The results of the mapping prediction application are mapping predictions of each area in Bandung along with the intensity of crime that will occur in the future.

Based on the results of testing that has been done, a prediction website for mapping the distribution of crime is needed to assist the police in handling crime cases in the city of Bandung. In addition, making predictions based on the time of the incident is considered very effective in helping to reduce crime in the city of Bandung.

Keywords: *Exponential Smoothing, Prediction, Mapping, Machine Learning, Crime.*