# UNIVERSITI TEKNOLOGI MARA

# MALAYSIA CRIME MAPPING: GIS DASHBOARD

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## SCIENCE AND GEOMATICS (HONS)

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Thesis submitted in partial fulfillment
of the requirements for the degree of
**Bachelor of Surveying Science and Geomatics (Honours)**

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# AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Undergraduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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# ABSTRACT

Crime mapping indicates an important contribution to the societies and securities forces to develop an effective and efficient solution spatially to enforcing the geographically distribution of crime prevention. The increment usage of social media nowadays such as Facebook, Twitter, and others social media platform could be useful to this endeavor on developing the suitable crime mapping platform. Thus, the aim of this study is to accommodate the systematic criminal statistical study involved the visualization and organized spatial data using dashboard. The objectives of this study are to i) prepare types and number of crime cases in Malaysia acquire through crowdsourcing approach and ii) developed informative GIS dashboard for crime cases in Malaysia. The focused areais carried out in Malaysia. Four parameterssuch as the types of crime, date range of crime, location of hotspot area, and statistics of crime from 2015 until 2020 that will be used in this study. The methodology of this research consists of main four phases which are i) data acquisition and preparation, ii) data processing, iii) design and development and i) deployment. This study helps to demonstrates on how the crime mapping dashboard aid the prevention of crime in hotspot area in Malaysia using the proposed dashboard.

**Keywords**: Crime Mapping, Crowdsourcing, social media, Dashboard, Malaysia, GIS

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