



UNIVERSITI TEKNOLOGI MARA

**ANIMATION MAPPING
ON CORONA VIRUS (COVID-19) DISEASE
CASES IN MALAYSIA**

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Thesis submitted in fulfilment of
requirements for the degree of
Bachelor of Surveying Science and Geomatics (Hons)

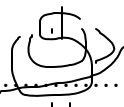
Faculty of Architecture, Planning and Surveying

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AUTHOR'S DECLARATION

I declare that the work in this thesis/dissertation 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.

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ABSTRACT

Recognizing the spatial distribution of the COVID-19 epidemic is important for forecast local outbreak and designing policies on public health during COVID-19's early stages. The issue here is insufficient research on geographical modelling of COVID-19 disease. Public health authorities rely on conventional approaches to track and manage the spread of infectious diseases. Therefore, this study aimed to develop spatial data infrastructure for COVID-19 local distribution in Malaysia, analyze the pattern of COVID-19 diseases based on spatial distribution of the cases, produce an animated map of COVID-19 disease cases for Malaysia. Geo-visualization techniques are used in this study which is use the animation mapping method to support analyze spatial temporal data to determine the hotspot area for the disease cases. Animated maps play an important part in the spatial temporal exchange of information. To ensure the data is well organized in this study, the Spatial Data Infrastructure Framework (SDI) was implemented. Through understanding the movement patterns of this disease, it is beneficial to help the Ministry of Health Malaysia (MOH). Therefore, some actions can be planned and will soon be taken by the MOH to overcome the problems that cause this disease. Actions that can be taken is to enforce restrictions on the movement of people in or out of areas with high cases or hotspots.

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