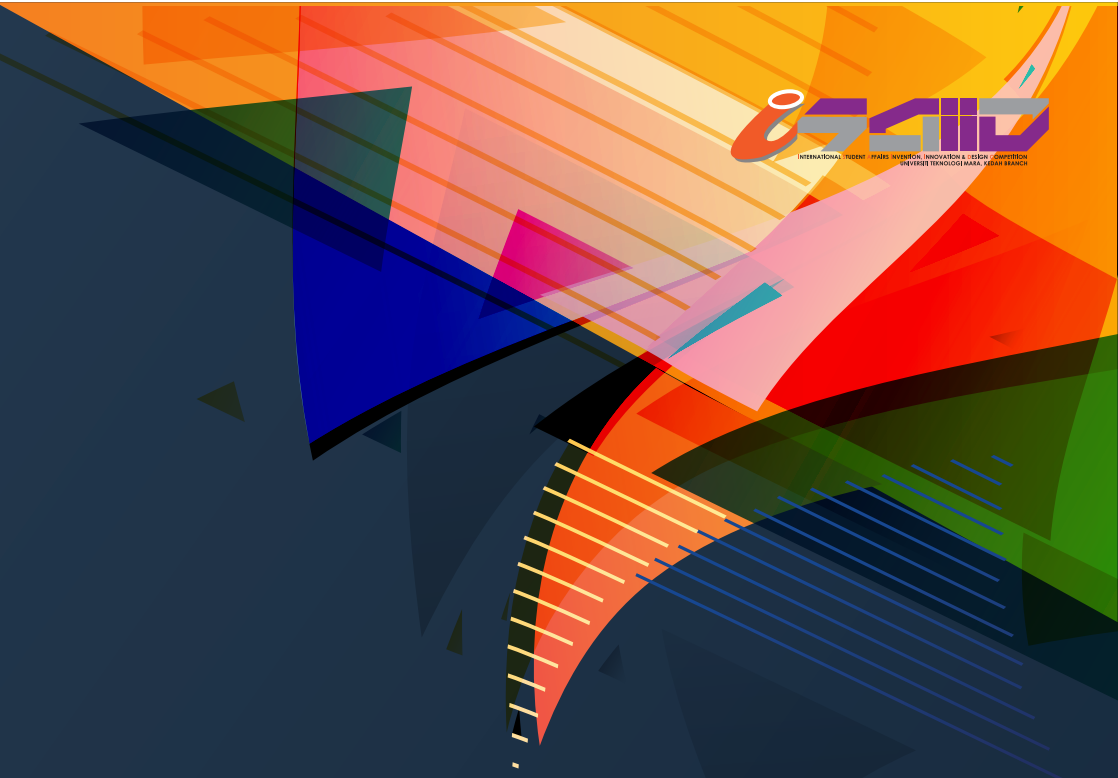

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*My*DISEASE@MAPPER: A FREE AND OPEN SOURCE PLATFORM FOR GEOSPATIAL DISEASE EPIDEMIOLOGY IN MALAYSIA

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Information and communications technology (ICT) has the potential to greatly improve the quality of health care and disease control management. For example, Malaysia has an intermediate country burden of tuberculosis (TB) incidence and the disease is still contributing to one cause of death in the country. The local health departments may need to expense high cost to process the complex disease datasets using current technologies. This innovative product aimed at developing MyDisease@Mapper, a Free and Open Source Platform for Geospatial (FOSS4G) disease mapping and analysing of TB in Malaysia. The elements and functions proposed in this platform were created according to current requirement of the departments such as using spatial pattern, hotspot map statistic toolbox in the software to explore the local TB pattern and dynamics. In addition, from comparative studies of the platform capabilities, revealing that this platform has basic functions of disease mapping and analysis that are essential operations in local spatial epidemiology. In analytical aspect, this platform can process both vector and raster analysis especially for determining the relationship between risk factors and the disease outbreaks. Overall, this product is not only having basic technical capabilities to be implemented in the local health departments, but also have special features such as practical operation, minimal cost and easy to use by local health staffs to be applied at real site.

Keywords: MyDiseaseMapper, Geohealth, Geospatial, Mobile apps, ICT, pidmiology

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