

**RESEARCH OF HFMD DATA USING LEAST SQUARE
METHOD AND INTERPOLATION METHOD**

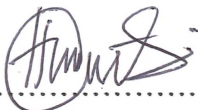
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Bachelor of Science (Hons.) Computational Mathematics in the
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DECLARATION BY CANDIDATES

We certify that this report and the project to which it refers is the product of our own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

HFMD is hand, foot and mouth disease that typically a benign and common illness among children. HFMD cases are one of the cases that occur in Malaysia. The estimation number of HFMD cases can be calculated by using mathematical modelling techniques. A few numerical methods have been introduced which is least square method, Newton forward divided difference interpolation method and Lagrange interpolation method in order to help the organizations especially health organization to help calculate and solve on problem such as HFMD cases and other health threat cases which need to be estimate. These methods are chosen because this is the suitable method to use.

This research analysed and compared the error to get the best method and the best equation to estimate the number of HFMD cases. There are three equation that used which is linear, quadratic and cubic equation. The error are calculated using RMSE (root mean square error) and executed using Microsoft Excel 2016.

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