

UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

**LEAVES PATTERN GENERATED BY BEZIER AND NB1
CURVES
(P13M22)**

MOHAMMAD ALIF AIMAN BIN MOHAMMAD ZAMRI	(2020859746)
MUHAMMAD AZRI BIN HANAFI	(2020984839)
SHAREEZ EZZUAN BIN SHAARI	(2020971155)

**Supervisor:
NOOREHAN BINTI AWANG**

**Report submitted in partial fulfillment of the requirement
for the degree of
Bachelor of Science (Hons.) (Management Mathematics)
Faculty of Computer and Mathematical Sciences**

August 2022

ACKNOWLEDGEMENTS

IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL

Firstly, we would like to thanks to Allah S.W.T for giving us the strength to complete this project successfully.

We would like to acknowledge and give our warmest thanks to our supervisor Miss Noorehan Binti Awang who made this work possible. Her guidance and advice carried us through all the stages of writing this project. We would also like to give special thanks to our family for their continuous support and understanding when undertaking this research and writing this report. Their prayer for us was what sustained us this far.

Finally, thanks to our beloved friends that always sticks together and also works hard to produce a good project with all afford and responsibility. Hope that all the effort will give a lot of benefits to us.

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ABSTRACT

Recent studies on generating leaves design rarely can be met. Researchers tend to design other complex shape compared to leaves design. This lack of study will decrease the source of reference. Existing study does not highlight much about the perfect shape of the leaves hence making it less in information. The objectives of this research are to generate the Bezier curve for different degree in generating leaves design and to identify the best degree to represent the leaves by using Bezier curve and NB1 curve. This study highlights the use of Bezier curve and NB1 through MATLAB software to produce the best curves to represent selected leaves. Based on the resulting shape, the use of these two curves, namely Bezier curves and NB1 curve, succeeded in producing a good and beautiful curve to represent the shape of the leaf. Nevertheless, it is true that the use of Bezier curve can represent the leaves more realistically and resemble the selected leaves. This research provides the fundamental knowledges on the best degree to represent an individual leaf.