ABSTRACT

Batik is a world cultural heritage originating from Indonesia. The technique

to produce batik is by pouring malam liquid or candle liquid with the motif desired

by the craftsmen. Biodiversity in Indonesia can also be a reference for developing

new batik motifs. One of them is by using coral as batik motif.

With the development of the computing world, many methods have been

designed to make batik motif designs. One method that can be used to make batik

designs with L-systems. L-systems are mathematical theories applied in graphic

applications on computers. The main areas for developing the model include fractal

generation and realistic plant modeling.

In this final project, Batik Model is produce by Euphyllia Ancora's-type

coral with L-systems on Web-Application. The use of the L-systems method to

facilitate the making of new batik motif designs. The purpose of this final project

is to development of Euphyllia Ancora's coral motif on the application of web-based

batik motifs. The result of this final project is the creation of a batik motif design

with web-based Euphyllia Ancora coral. In its development several mathematical

operations are used to performfunctions, such as producing coral motifs and the

backgrounds. The form of coral is formed from 4 nodes that form a circle of flowers.

Based on the results of the survey, 100% of the surveyors agreed the coral as one

of the development of batik motifs, and 70% agreed that the development of

Euphyllia Ancora-type coral-based batik motif was similar to the original coral

form.

Keyword: *Batik*, L-systems, Web-Application, Coral, Fractal.

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