

## **ABSTRACT**

Learning media is a tool for teaching and learning process. Learning materials can be applied to be more interesting and interactive, so that can attrack more attention to students and provide motivation to learn. This application aims to help smooth the learning process in which learning activities with this learning media can be done independently or accompanied by the teacher. Through learning media, students can observe more and demonstrate not only listening to teacher explanations. The functionality of this application is to display mathematical logic material with maximize and minimize material feature, displaying truth table and simulation feature on every mathematical logic material that is conjunction, disjunction, implication, konvers, invers, kontraposisi, ingkaran, and conclusion. Another functionality in this application is a quiz consisting of 2 games: Random quiz and Drag n Drop quiz with scoring system and timer on each game. This application is made with waterfall method. Tools used in making this application is Adobe Flash Professional CS 6. This final project builds and designs an Application Media Learning Mathematics Class X with platform-based desktop platform. Application testing is done by functionality test and user satisfaction test. Test results from 100 correspondents of Telkom Sandhy Putra high school students, 80 correspondents argue that the application can improve the spirit of learning and can understand the lesson of Mathematical Logic. Applications are able to explain the material and provide quizzes that can help students understand the subject matter.

Keywords: E-learning, Biology, Diversity of Living Things, Applications