Implementation of Genetic Algorithm in Course Scheduling Application

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ABSTRACK

Scheduling courses or lessons in the world of education is something that is very important to note. Basically teaching and learning activities in a university will run smoothly if the schedule is according to the needs. A good schedule is a schedule that can be carried out by all parties involved in teaching and learning activities. Scheduling courses in the Shipbuilding Engineering, Bengkalis State Polytechnic itself still uses the manual method, namely still using Microsoft Excel, so it requires quite complicated accuracy and takes around 2 weeks to complete the scheduling of these courses. In this study, researchers used an algorithmic method, namely the Genetic Algorithm (Genetic Algorithm), with the aim of facilitating scheduling and shortening the time in the scheduling process using a Genetic Algorithm that is quite good to use in the process of scheduling courses at a university because this algorithm can solve multi-dimensional problems. criteria and multi-objectives to solve problems modeled by biological and evolutionary processes. For testing the research system using the Blackbox Testing method.

Keywords: Algorithm, Genetic Algorithm, Course Scheduling