Optimization of Project Scheduling Using Genetic Algorithm Methode

Name : KHAIRIL JUHDI SIREGAR
NRP  : 5209 100 710
Department : INFORMATION SYSTEM FTIF-ITS
Supervisor I : WIWIK ANGGRAENI, S.Si, M.Kom
Supervisor II : AMALIA UTAMIMA, S.Kom, MBA

Abstract

Scheduling problem is a NP-Hard class optimization with a complex optimization combinatory. Project Scheduling instead of some activities which related each other. Sum of activity and the arcs that related activity with another make the space of searching solution for project scheduling problem is enormous. Optimization technic or method is needed to find the value of objective function of problem. The objective function that aim of this final project is to minimize duration of project. Alba and Chicano have showed that Genetic Algorithm was flexible and accurate for scheduling project, and considered as an important technic in automatic project management.

Using Genetic Algorithm method, this final project attempts to optimize the project scheduling problem with minimize duration of project as objective function. Evaluation value each chromosome is the objective function of problem. Selection process was held for half of individu in population. Therefor, the individues were relusted selection process going to pass genetic process as crossover process or mutation process.

Based on the counting result found an optimal solution or the minimum project completion time was 38 weeks.

Keyword : Scheduling, Genetic Algorithm, Project Management, Optimization.
Halaman ini sengaja dikosongkan