Abstract

In any software project management, developing third party software tools and scheduling tasks are challenging and important. Any software development projects are influenced by a large number of activities, which can greatly change the project plan. These activities may form groups of correlated tasks or event chains. Assessment planning is a crucial challenge in software engineering whose major goal is to schedule the persons to different tasks in such a way that the quality of the software product is optimal and the cost of the project should be minimum. In the traditional approach an event dependent scheduler ant colony optimization is applied on task scheduling. The ACO will develop an optimized plan, in the form of matrix, from all the iterations. And from that plan the EBS(Event Based Scheduler) will develop schedule based on events. ACO solves the problem of project scheduling, but it does not consider the updated task allocation matrix. The ACO is not a satisfactory model to solve the problem of project scheduling. The traditional ACO system also indicates the problem of allocating the identical activity for several numbers of employees in varying periods. In this proposed work, an improved ACO approach to optimal global search using a neural approach was introduced to schedule multiple tasks. An activity with specified number of tasks and relevant resources can be optimally scheduled using multi-objective approach. When an uncertain event occurs the remaining resources will be effectively calculated, also the remaining tasks to complete. And
again a new schedule will be generated according to it. An enhanced Entropy method can be used to denote the level about how much threshold or information has been figured out into the pheromone trails and subsequently the heuristic parameter can be improved accordingly.

References

- J Leung, (Ed), Handbook of scheduling: algorithm models and performance, CRC Press LLC; Florida. 2004
- Mohammad Amin Rigi, Shahriar Mohammad K. N. Toosi Finding a Hybrid Genetic Algorithm-ConstrainSatisfaction Problem based Solution for ResourceConstrained Software project Scheduling University of Technology, Industrial faculty, IT group Tehran, Iran, 2009 International Conference on Emerging Technologies.
- Xinggang Luo 1,2, Dingwei Wang 2, Jiafu Tang 2, Yiliu Tu 3ResourceConstrained Software project Scheduling Problem , Proceedings of the 6th World Congress on Intelligent Control and Automation, June 21 23, 2006, Dalian, China.
- Yan Liu1,2,Sheng-Li zharo2, Xi-Ping Zhang2, Guang-Qiandu2, A GABased Approach for solving fuzzy software project scheduling Proceedings of the Sixth International Conference on Machine Learning and Cybernetics, Hong Kong, 19-22 August 2007.

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Index Terms

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Keywords

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