Abstract

Soft computing approach like swarm optimization can be used in the software development environment also for developing effective software. Software development and testing cost must be reduced and optimized so that companies can survive and sustain in the market. Object oriented analysis and design is used for developing complex real time software systems. In object oriented software methods, class plays very crucial role and all the systems responsibility and functional and non-functional requirements are implemented through class. Assigning responsibility of the class with optimization is an issue which should be dealt carefully. An attempt is made to study Class Responsibility Assignment in the context of object oriented analysis and design. It is a crucial issue encountered in the software design phase in the software development life cycle. Class Responsibility Approach (CRA) depends on human judgment and decision making skills to a great extent. In this paper we have presented an algorithm using Particle Swarm Optimization to provide decision-making support for class responsibility assignment, to re-assign methods and attributes to classes in a class diagram. This will help the designers and developers of the object oriented software.


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- Dinesh Kumar Saini and Hemraj Saini “Identification and characterization of software testing process for object oriented systems”, National Conference on Mathematical Analysis and its Applications in Real-World Problems, Berhampur University, September.

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