CHAPTER 6

CONCLUSION AND SCOPE FOR FUTURE WORK

6.1 CONCLUSION

- In this research work, it has been proposed that a new approach to the computation of dynamic coupling measures in DOO systems by introspection and adding trace events into methods. First, we provide formal, operational definitions of coupling measures and analysis.

- We propose dynamic coupling measures for distributed object-oriented systems i.e., coupling measurement on both clients and server dynamically. We described the classification of dynamic coupling measures. The motivation for those measures is to complement existing measures that are based on static analysis by actually measuring coupling at runtime in the hope of obtaining better decision and prediction models because we account precisely for inheritance, polymorphism and dynamic binding. Admittedly, many other applications of dynamic coupling measures can be envisaged. However, investigating change proneness was used here to gather initial but tangible evidence of the practical interest of such measures.

- Finally we propose our dynamic coupling measurement techniques which involve Introspection Procedure, Adding trace events into methods of all classes and Predicting Dynamic Behavior while running the source code. The source code is filtered to arrive the Actual Runtime used Source Code which is then given for any standard coupling technique to get the Dynamic Coupling.
My research does not affect the throughput of the system. Throughput means number of process completed per second, even my research may increase the throughput of the system but does not affect the throughput of the system.

6.2 SCOPE FOR FUTURE WORK

The source code is filtered to arrive the Actual Runtime used Source Code which is then given for any standard coupling technique to get the Dynamic Coupling. Future work will include investigating other applications of dynamic coupling measures and the cost-benefit analysis of DOO software. Further, a number of other applications of dynamic coupling measurement will be investigated, mainly focusing on Cost benefit analysis of Distributed Object Oriented software.

By implementing this research in cloud computing, one can easily analyze the coupling factor between the services, and also minimize the coupling between the software components.

Cloud Computing plays a vital role in providing the software as a service, infrastructure as a service and platform as a service. The main motive of the cloud computing is the availability of the services to the end users in order to attain that Availability, Reusability and Extensibility.

To attain both Reusability and Extensibility, we need to provide the loose coupling among the services. By implementing this research work in cloud computing, one can easily analyze the coupling factor between the services,
By using Reusability and Extensibility concepts, one can attain the following:

1. Quality of Service
2. User satisfaction
3. Availability of services