

Abstract

The organization business process will always change. However the application will be changed to. Due to that change not only environment development that make application more adaptable with business process requirements growth but also application design quality.

JEE is standardized environment development and have rich API. AOP and DI approach have advantages by Inversion of Control principle. However the writer wants to know the relation between AOP and DI toward JEE application design quality. Spring framework is used as cases study because have support to AOP and DI.

With AOP and DI of spring framework will be analyzed coupling between functionality concern and non functionality of some JEE application. As tool for analyzing, package dependencies metrics, CK metrics suite for AOP, and *LOCC metrics* are used.

From calculation of all those metrics can be summarized that AOP and DI of spring framework can decrease coupling between functionality concern and non functionality concern and also reduce code duplication of JEE application. Finally increase the design quality of JEE application.

Keywords: AOP, DI, JEE, application design quality, spring framework.