

## **Abstract**

Design by contract is technique to reduce software error. This method provides assertions inside a module, so that if there's a function added, then an assertion must be added too. Aspect-Oriented Programming is an advanced method from object-oriented that focused to crosscutting concerns. Crosscutting concerns will be separated from core concerns and wrapped into aspect. Java is an object-oriented programming language. This language can run in more than one platform, but java language wasn't created specially for DBC method.

This final project will analyze how to implement Design by Contract using Aspect Oriented Programming method with Java language. As a case study, this final project will use CD-DVD Collection.

The program will be written in Java with AspectJ as extended library for Aspect-Oriented programming in Java. Modeling will made in UML by using Rational Rose.

**Keywords** : design by contract, assertions, java , aspect-oriented programming