Abstract

ORM (Object Relational Mapping) is a technique in object oriented programming that it can be brigde the problem of mismatch data type between object oriented environtment and RDBMS environtment. Implementation ORM, developer can think in object orinted better than think in table structure like row and column in relational concept. ORM emerge to keep pure object oriented concept for developer.

The implementation ORM put on persistent layer that is layer have job to communicate with database. ORM task is to mapping data from database to object and vice versa. There are many ORM framework can be used as DAO(Data Access Object) the one is Hibernate.

In this final project, ORM implemented on case study (online exam application) and then the advantages of implementation ORM analized based on the exist theories in addition compare CRUD execution performance using response time and throughput as the parameters with implementation hand-coded JDBC as refererence. The result of this final project shows generally the proses that have more write data in database, Hibernate relatively faster than hand-coded JDBC in performance. While for the reading data processes, hand-coded JDBC faster than Hibernate.

Keywords: ORM, hibernate, CRUD, hand-coded JDBC, DAO.