ABSTRACT

EKO SIPRAPUA SIJABAT. Business Information System Analysis and Design in a Dairy Cooperation with UML (Unified Modelling Language). Supervised by TAUFIK DJATNA and MUSHTHOFA.

This work proposes an application for business information system in a cooperation of dairy enterprise. UML (Unified Modelling Language) diagrams were deployed to analyze and design all requirements in the development by using a CASE (Computer-Aided Software Engineering) tool called Sybase Power Designer 15.3. The object oriented analysis was conducted by creating use case diagram, activity diagram, and sequence diagram. The designing process was conducted by creating a class diagram from the diagrams which are already created in the analysis. The main diagram in this research was class diagram from which the PDM (Physical Data Model) would be generated. From PDM, a database was generated as the inputs to this application. This system was developed by using NetBeans with MVC method, which separates the system into three components, which are the model, the view, and the controller. This system could produce reports which were generated by plug-in iReport 4.0.1. These reports are sales report, farmers report, customers report, loans report, purchasing report, remuneration report, and products report. System testing was conducted by black-box method by inputting some samples of data to the system by the user. This system should be able to manage sales data, loans data, products data, farmers data, and other transactions data.

Keywords: business information system, dairy cooperation, Unified Modelling Language