DESIGN AND IMPLEMENTATION OF OUTPATIENT APPLICATION WITH INTEGRATED DEVELOPMENT PARADIGM USING THE ENTERPRISE SERVICE BUS (ESB)

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Abstract

Hospitals as health care providers have a variety of related business units, such as pharmacy, inpatient, outpatient, laboratory, personnel, and finance. While for each business unit usually has its own application that allows data are not integrated and are not valid when used in other applications. Therefore it is necessary to design and installation of applications that can be integrated outpatient with applications in hospitals.

Method that can be referred to overcome this is to use the Service-Oriented Architecture (SOA). In addition, there are also technologies that have the ability as a bridge / middleware that can recognize and transform the service from a module to be read by other modules, namely the Enterprise Service Bus (ESB). With ESB technology, Outpatient module that implemented on a hospital information system can be integrated into each inter-module that has been and will be there. Although using or providing service to a different standard because it was developed by application vendors or even different programming languages, outpatient modules can still be integrated with other modules that exist in the Hospital Information System.

The result of this Final Project is the outpatient application that is integrated with the Medical Record module,
Inpatient module and Point of Sales is located on Hospital Information System. Enterprise Service Bus (ESB) that is used in the implementation of the WSO2 which is a GUI version of Synapse. ESB functions that used in this Final Project is to use the Endpoint and the Proxy Service from WSO2 to direct service to the destination server from the web service. The use of Web services should be avoided in methods for frequently accessed data to display because it can slow the load time applications

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