

ABSTRACT

Perform manual registration and bring medication card as well as explaining your medical history or records to doctors are activities that we often do when we want to check up our health in the clinic, hospital or other treatment places. If those activities are done in a different place, then we need to do that activities over and over again and of course could cause problems such as increasing numbers of medication cards, differences in medical history or records, and medical history or records information is not accurate. With the development of technologies such problems can be solved.

In this final task, it is done design and implementation of distributed database using Single Identification Number (SIN). This design is implemented in web database medical record application and built using PHP, HTML and CSS programming language and also using Oracle Database Management System. The system that designed and implemented then will have to be tested for the components, integration for each component, the system, and the acceptance.

Based on the results of the interface components testing, data storage, application functions, and test validation function we can get the result that the entire test that we tested to the system succeeded 100% which means the system can be run as expected. Based on query execution testing with the number of data 5000, 10000, 25000, 50000 and 100 000 on each server we can obtain the average query execution time per one record is 3.236 ms for INSERT query and 0.803 ms for SELECT query. Based on survey result towards easiness of the operation aspect, adequacy of data on the application form, and function in the diagnosis of disease, this application has a good value compared with existing systems in general nowadays.

Key Words : Patient's Medical Record, Distributed Database System, Implementation and Analysis of System