

ABSTRACT

Health Office of Sleman District is the regional institution that is responsible for organizing health services in the area of Sleman District. In performing these duties and responsibilities, Health Office of Sleman District requires health data and information that is accurate, precise and quick to assist policy decision making process and the health sector by leveraging communication and information technology. This research aims to design a database and SOA-based access service for transactional data center on Health Office of Sleman District. Expected from these results, it can help monitor the health department in Sleman district public health and help in making decisions regarding such matters.

These stages are carried out in this research analysis phase of Sleman District Health Office needs through surveys, interviews and literature studies, later stages of system development including analysis of information systems and health databases, designing databases for health services, create a prototype of an automatic data transmission application from the clinic to the health department, then test the prototype. The next phase is to create a report and a prototype system to access these reports, create SOA-based access service and sample client to test, then conclude the results of research and provide suggestions for further research.

Results from this study are made of a design database for Health Office of Sleman District with 24 entities. The next to answer the information needs of Sleman District Health Office in monitoring the public health, created a prototype application that send data automatically to the health department and a prototype system for the Health Office of Sleman District, equipped with various reports that retrieve data from a database that has been built. Then made three SOA-based data access service is realized in the form of web service. Tests performed on the database design, prototype systems and SOA services. Expected the results of this research can help Health Office of Sleman District in monitoring public health and to establish interoperability with systems from agencies or other institution.

Keywords: *Health Office of Sleman District, database, Service Oriented Architecture, web service.*