ABSTRACT

Microservices is a software architecture concept that can be a solution to make large software more organized and can quickly adapt to the development of existing business needs. For institutional colleges of information systems technology has become a necessity to support the educational process.

As an academic information media that has an important role, IGracias still adopt monolithic architecture. Monolithic application is developed and deployed as one entity [1]. This results when a monolithic application develops into a very large and complex, it will become very difficult for advanced development process, testing and deployment. Microservices is a framework that can integrate existing business processes, supporting information technology infrastructure according to business priorities. Design and Analysis of microservices architecture in academic system of college with approach of architecture tradeoff analysis Method (ATAM) as method of evaluation of microservices architecture.

In this final project, design and analysis of microservices architecture have been applied to iGracias. From the results of surveys and tests using scenarios as assessment materials there are four components that can handle the problem of iGracias academic information system that is with microservices that modularity, independent, maintainability and scalability. *Keywords: Microservices, monolithic, iGracias, Architecture.*