ABSTRACT

Practicum activity is one that supports the learning process carried out by the Faculty of Industrial Engineering (FRI), Telkom University. The results of the practicum will be the value that determines graduation, in determining graduation there are regulations for the Industrial Engineering practicum, each student who takes the practicum again according to the type of failure based on these regulations. This process will affect the administration of lectures and practicum, so that lecturers and laboratory assistants must see the details of practicum students. The purpose of this research is to provide information from students who test practicum to lecturers and assistants, so that a media that acts as a data visualization tool is needed, where the data that has been obtained will be processed and as the information needed, namely the Management Information System (SIM).

In research developed using the waterfall method with the stages of the method of analysis, design, coding, testing and maintenance. The first stage of the analysis will discuss the business processes and conditions that exist in the organization, the design stage discusses mock-up and UML design, after that coding, namely making the system and testing to test the system is running well. All these steps must be carried out systematically, as they are characteristic of the method.

This research has produced a SIM that provides information to several parties, namely laboratory assistants, lecturers and study program heads, these three parties are included in the user level in the application, namely admin, lecturer and study program chairman, then another additional user is the super admin who manages user problems.

The SIM that has been developed during the process of study program heads, lecturers and laboratory assistants in finding information on students who are repeating the practicum, because the process that was previously carried out manually switches to a process where several parties can be connected via SIM. In the interest of future business strategies, it is requested to create a real-time dashboard from the information on the SIM.

Keywords: Industrial engineering laboratory, MIS, practicum, waterfall.