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DESIGN MODEL SYSTEM MEASURING PERFORMANCE OF LABORATORY ASSISTANT AT FACULTY OF COMPUTER SCIENCE

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Abstract: The development of Information Technology today is fueling the use of Information Technology which is very brush and very easy to use. In the development of Information Technology becomes a good tool in connecting giver and receiver of information. The development of Information Technology today is not only used by the company, but various universities use Information Technology as an effective means of delivering information to its users. Application of good Information Technology will produce a good information also for the recipient. Application of Information Technology within the scope of Higher Education is the University of Mercu Buana. University of Mercu Buana has a very good and big role in providing information for the recipient. In this case the University of Mercu Buana also rely on Information Technology to run activities within the scope of Higher Education. Information Technology to be built is to bolt the design of mdel wake system performance assessment assistant lab at the Faculty of Computer Science. It is hoped that with the design of this system model, the performance of lab assistants will be better so that the learning process becomes more effective.

Keywords –Information Technology, Performance, Measuring, Lab Assistant, effective

I. INTRODUCTION

Application of Information Technology is currently the focus of life that leads to the advancement of Information Technology. The development of Information Technology is supported by the life of everyone who wants to use the Information Technology in helping solve existing problems. Development of Information Technology in the world of education has a very big role in everyday life. Application of Information Technology helps users solve existing problems. Faculty of Computer Science (FASILKOM) The University of Mercu Buana has an important role in education. FASILKOM University of Mercu Buana in developing the learning process has very good results, it is not apart from the activities of lecturers and lab assistants who always uphold the concept of learning. FASILKOM requires the design of a performance assistant assessment assistant lab, with the aim that the assistant lab in assisting the learning process will be the best in the University level.

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II. RELATED WORK

An information system aims to collect processand store data, perform data analysis and distribute objectively needs. The basic functions of information systems such as[3]: input, process and output.

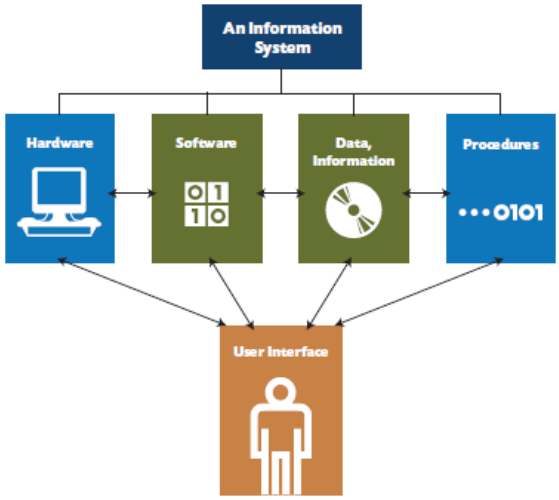

Fig 1. Information Systems and Information Technology: Core Concepts

Discussing a database (DB) has the meaning of data collected in the storage data of the computer and the terminology of distributed explains that one computer will cooperate or send data to another computer. Each DB provides illustrations of 2 related data, i.e. data structure and data content.

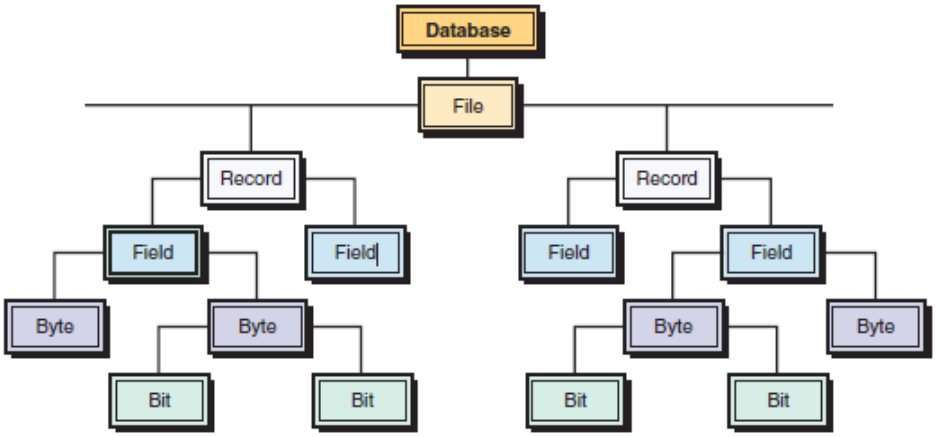

Fig 2.Hierarchy of data for a computer-based file

When the DB is used to describe large amounts of data or explain complex data structures the potential for errors will be of concern as the size and complexity of the data gets larger, some vendors create software called DBMS (Data Base Management System). Where this software is used to manage all activities pertaining to data storage [9].

Websites are often also called Web, can be interpreted a collection of pages that display various kinds of information text, data, still or moving images, animation data, sound, video or a combination of all, both static and dynamic, Forming a series of interconnected buildings in which each is linked to a network of pages or hyperlinks. Or the definition of a website is a collection of various pages of sites, which are summarized in a domain or subdomain, which is more in the WWW (World Wide Web) which is certainly located on the Internet. Website pages are usually documents written in Hyper Text Markup Language (HTML) format, which can be accessed via HTTP, HTTP is a protocol that conveys various information from a website server to be displayed to users or users via a web browser.System Analyst and Information System Development will discuss how to build systems in a project.

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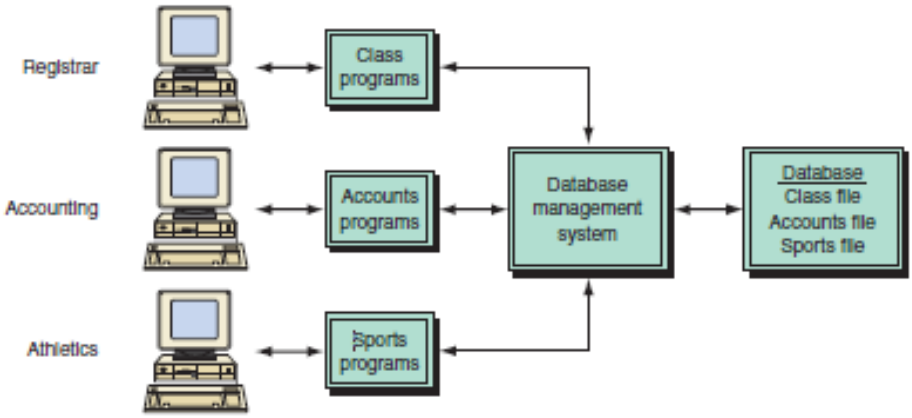

Fig 3. The conseptual layers of a database management

Where in building the system will require some stages to be done. The main points of system development include 4 (four) parts, namely: planning, analysis, design and implementation.The design and development of systems using SDLC (System Development Life Cycle) usually have 4 stages, the stages are: planning (planning), analysis (analysis), design (Design) and implementation (implementation).

III. METHOD

This research will be conducted for one year at University of Mercu Buana. This activity manages data of lab assistant at faculty of Computer Science University of Mercu Buana. In this study we separates in 4 step, such as: planning, analysis, design and implementation.

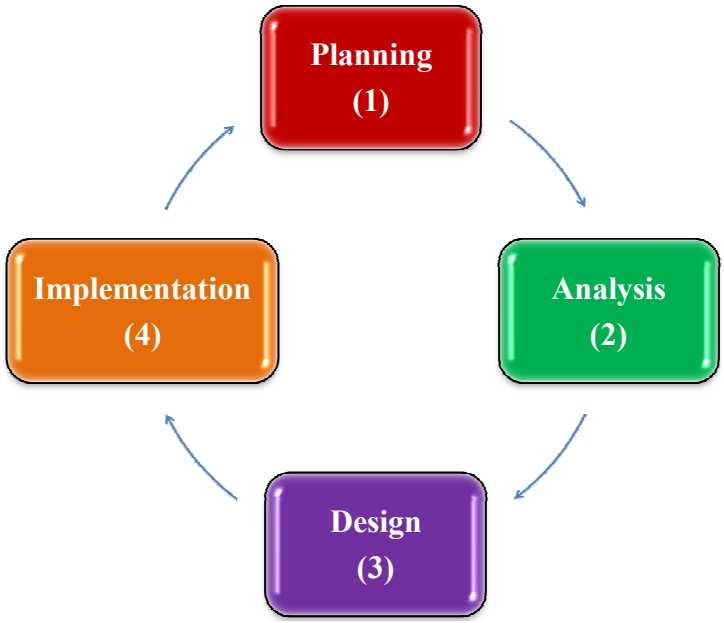

Fig 4. Schema of research

Planning

In the planning stage (planning) to be performed on the design of performance models Assistant Laboratory is to collect all data supporting the performance assessment of laboratory assistant. An assessment to be performed on laboratory assistants is:

a. Assessment of activities

Assessment of activities to be performed on the basis of how much activity of lab assistants in the learning process in the laboratory.

b. Assessment of attendance (presence of lab assistant)

Assessment of attendance will be done on the basis of how much the level of attendance of lab assistants in the learning process in the laboratory.

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c. Assessment of responsibilities

Assessment of responsibilities to be undertaken on the basis of how much responsibility the laboratory assistant in the learning process in the laboratory.

Analysis (Analysis)

The next stage is to do the analysis, the analysis will focus into several things, namely: who (who), what (what), where (where) and when (when).

a. Who (who)
   In the development of the lab assistant performance at. Faculty of Computer Science will be involved directly there are 4 actors: Assistant Lab, Lecturer, Head of Laboratory and Head of Study Program
b. What (what)
   What each actor will do in the system
c. Where (where)
   This research will be conducted at University of Mercu Buana
d. When (when)
   This research will be conducted for 12 months (1 year)

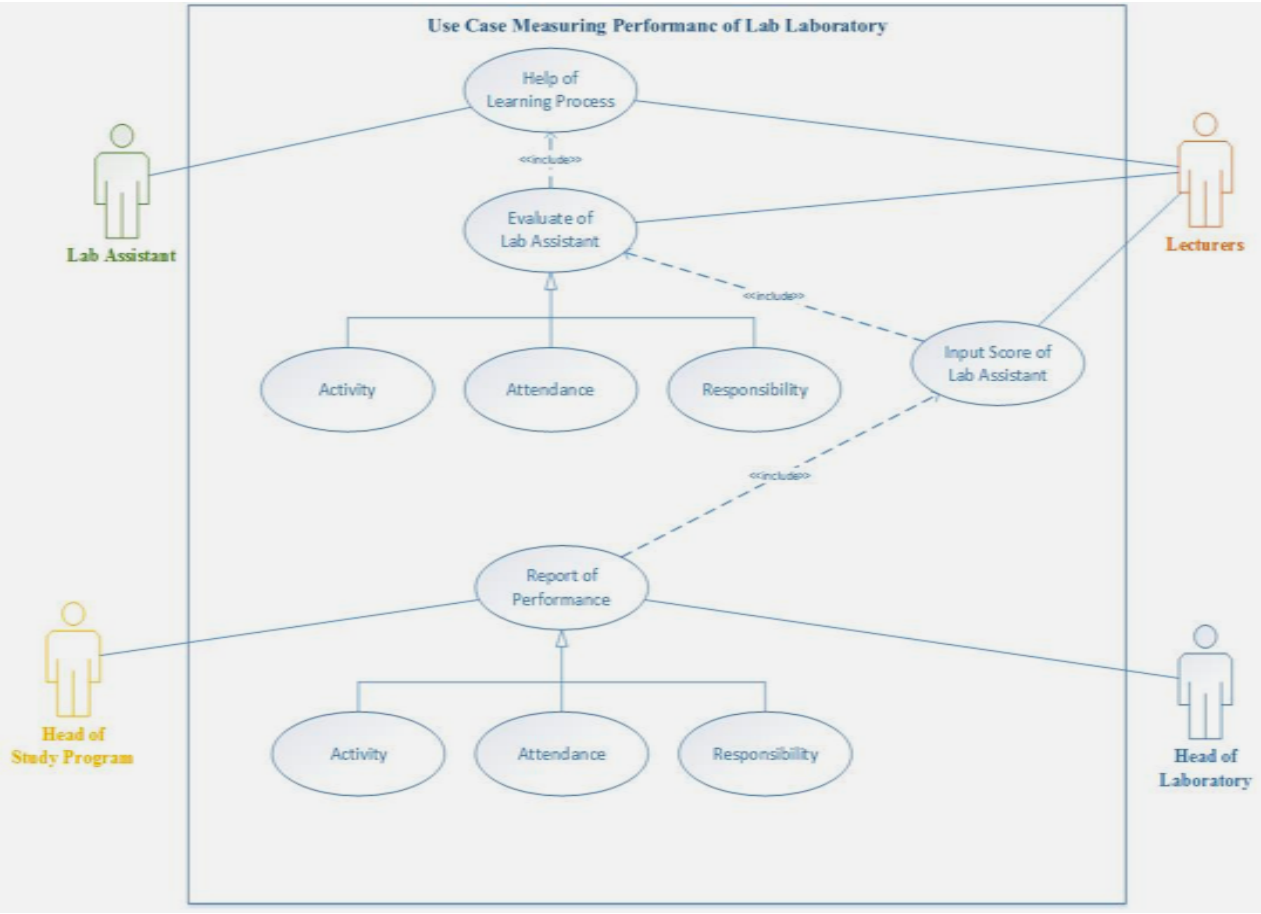

Fig 5. Use Case Diagram of Lab Assistant Performance

The lab assistants and lecturers do the learning process, where the lab assistant helps the learning process conducted by lecturers. The lecturer will assess the activities performed by the lab assistant on 3 conditions, namely: laboratory assistant activities, attendance (attendance) lab assistant and responsibilities of lab. Assistant. After assisting the learning process, the lecturer will conduct the assessment process, the result of the assessment done by the lecturer, will be given to Head of Laboratory.

Lecturer input an assessment of the lab assistant. The assessment is based on 3 assessments, namely: activity assessment, attendance assessment (attendance) and assessment of responsibility. Head of Study Program and Head of Laboratory could see the results of the assessment after the lecturer entered the score. Head of Laboratory will give the results of the assistant lab assessment, after Head of Laboratory received reports from lecturers.

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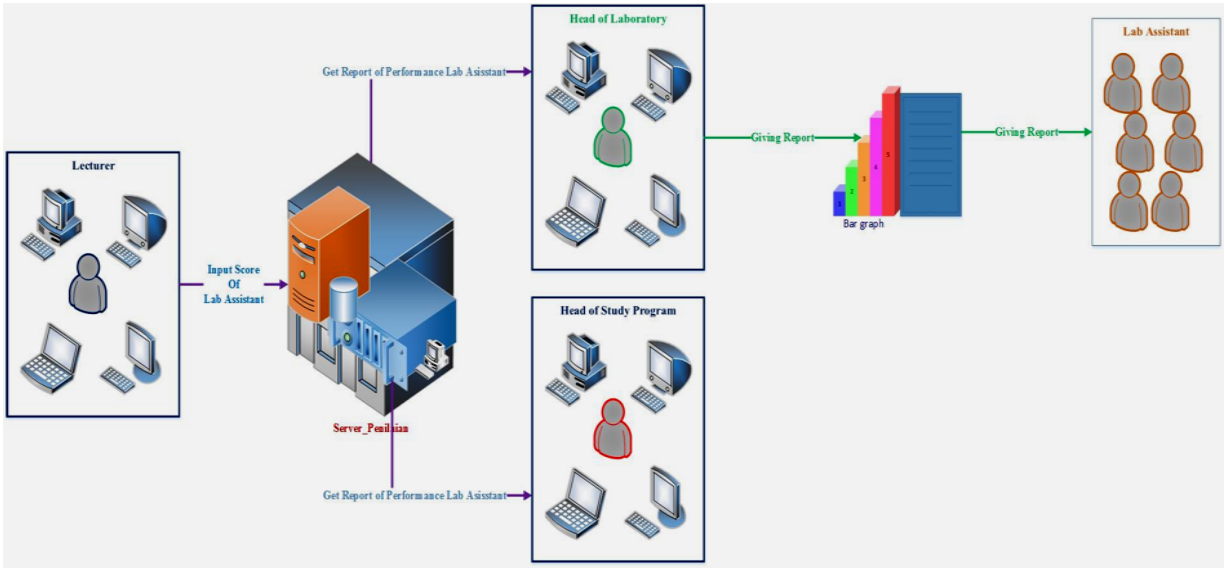

Fig 6. Conceptual Model Measuring Performance of Lab Assistant

The results of this report are used as a performance meter from a lab assistant. If the performance of the lab assistant is good, then for the learning process next semester will be given additional classes, if the lab assistant performance results. Not good, then Head of Laboratory will reduce the schedule of assistance.

IV. RESULT AND DISCUSSION

From the results of research that has been done to obtain the results of a Model Assessment of Lab Assistant performance. Faculty of Computer Science (FASILKOM), while the results of the Model such as:

Fig 7. Login User

In the picture above can be explained that the user (Assistant Lab, Lecturer, Head of Study Program and Head of Laboratory) before entering into the system firstly have to login, entering suing username and password. If the login is successful then the user will be able to view and manage the content (menu) that exists in the system.

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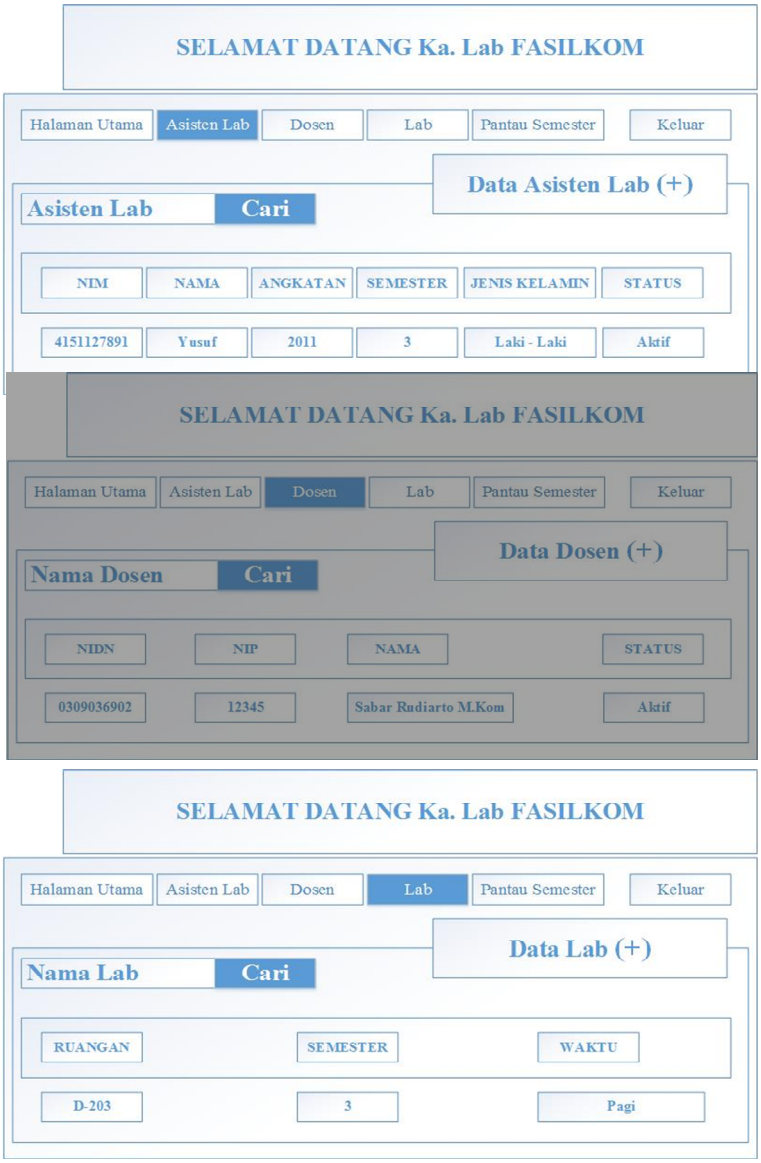

Fig 7. Home of Head of Laboratory Manage Content

In the picture above can be explained that Head of Laboratory could manage content such as lab assistant data, lecturer data, class data and assessment data (monitoring semester).

Fig 8. Home of Lecturer

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Fig 9. Lecturer Assesment Performance of Lab Assistant

In the Fig 8 and Fig 9 could be explained that after successfully login (enter the username and password) it will enter into the main menu as shown Fig 9. In the pictureFig 9 lecturers could make an assessment of the lab assistant. The assessment consists of competent assessment of responsibilities and competencies professionally. Competence of responsibility consists of two components, namely: sincerity in helping the teaching and the ability to perform the task. Professional competence consists of the mastery of lecture materials and the breadth of scientific insight. The weight of the given value has a scale of 1-5 (with condition 1: very bad, 2: bad, 3: medium, 4: good and 5: very good).

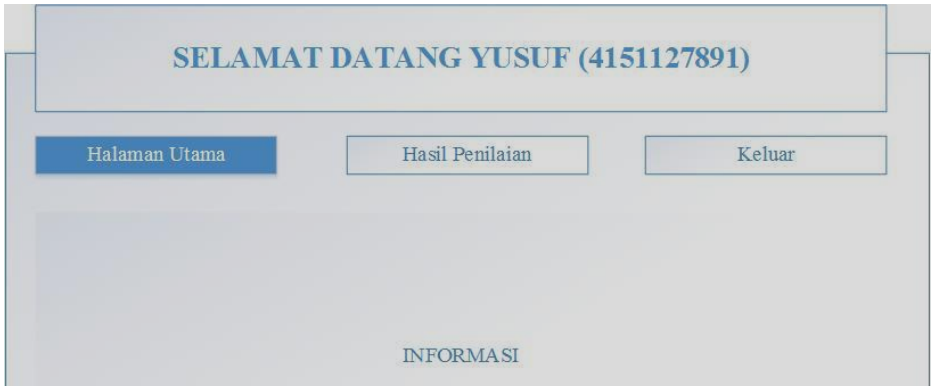

Fig 10. Home of Lab Assistant

From Fig 9 could be explained that, the display is the main page for laboratory assistant Faculty of Computer Science. Inside the page consists of content (menu) assessment results. The lab assistant can see the results of the assessment as shown in Fig 10, where the results of the assessment have been filled by the lecturer. The results of the assessment are seen for 2 aspects, namely Responsibility Competence scored 77 and Professional Competence scored 92. Thus the results obtained by students by the name of Yusuf and NIM 4151127891 results are good.

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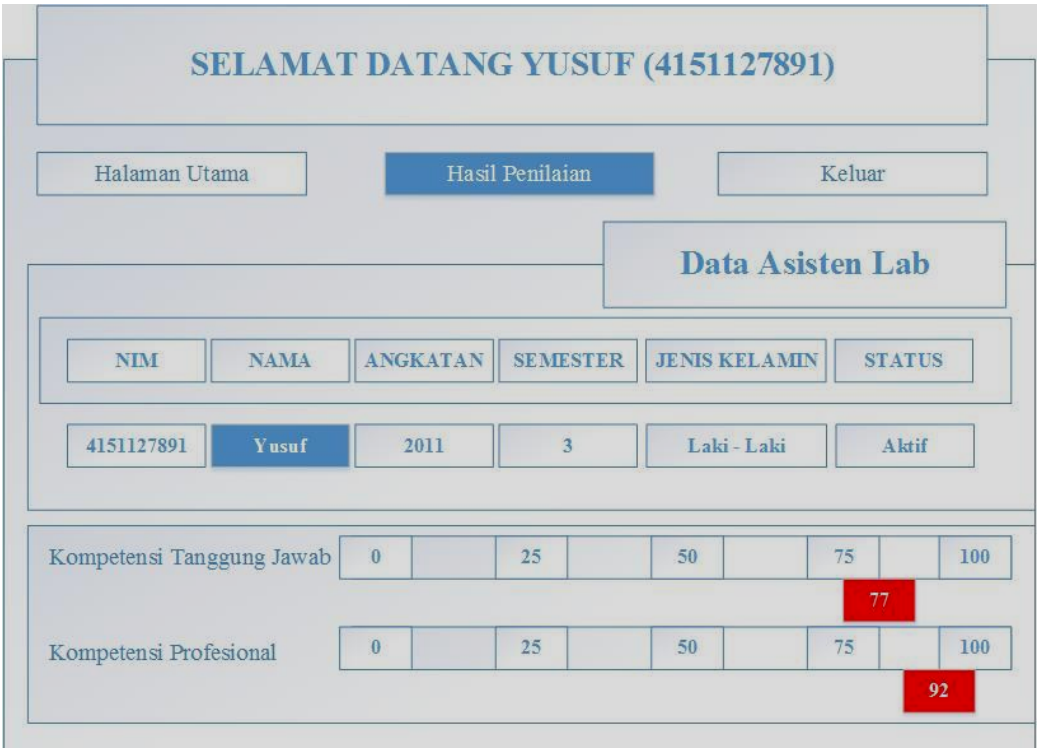

Fig 10. Lab Assistant see result of measuring performance

V. CONCLUSION

After doing research on steganography, then got the conclusion, as for conclusion of this research such as:

a. How to design a model measuring of performance lab assistant to the needs Faculty of Computer Science
b. The way in which the performance of the lab assistant to be effective is by the interaction of all users

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