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DEVELOPMENT SYSTEM TEST PROGRAM INTERNATIONAL STUDENT INTEGRATEDAIS (ACADEMIC INFORMATION SYSTEM) UNIVERSITY OF MERCU BUANA

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Abstract: 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 in ordet to be 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 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 developed by University of Mercu Buana is ANS (Admissions of New Students) international class program that will be integrated SIA (Academic Information System). Expected with the development of this Information Technology, learning process activities can be used more effectively. The purpose of this system integration is the ANS no longer need to report data of prospective students manually who have successfully followed the exam and entered as a student at Mercu Buana University, but the ANS directly can enter the data of students who have successfully entered into the system . The method used in the development of integrated AIS ANS system is by using SDLC (System Development Life Cycle) and the analysis used is based OOAD (Object Oriented Analysis Design).

Keywords –Information Technology, ANS and AIS, SDLC, OOAD

I. INTRODUCTION

The development of information now has integrated with the technology, and technology has changed the way a company's perspective in running their business. Information is a vital in the role of activities and decision-making that will affect the development of an organization. With the information accurate, complete, easy, reliable then the organization can win business competition.

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The delivery and storage and processing of information can be implemented much more efficiently and effectively, either in terms of resources, time, energy used or in other words computer-based information systems and internet technology can support the entire business activities of the company as a whole. University of Mercu Buana is an educational institution that moves by using Information Technology media. The need for information is very important for the recipients of information, especially in this modern era. In terms of the use of the system especially to the student, lecturers and all academic parties to be a good tool in the utilization of information technology. The current delivery of information must be supported by excellent computerized technology. The role of the system at University of Mercu Buana will support all activities of interactive communication media process, such as the development of international class admissions model (ANS) model integrated with Academic Information System (AIS). With the use of information technology is expected all the work to be completed more quickly on time. The development of Information Technology is currently considered to have a very important benefit for its users. If an organization does not have then the organization will lose some information. Where this information is generated by the role of the use of Information Technology. With the existence of this Information Technology an organization can make decision with good and fast. The delivery of information can be said to be more effective and efficient if using Information Technology. The development to be undertaken by the University is by designing an integrated ANS system with AIS, with the aim of facilitating the delivery of information.

II. RELATED WORK

Collaborative Search in Context Collaborative search is part of a search method known as social search. Social search refers broadly to a process of finding information widely with the help of online media. Traditionally search tools inside the web have been designed to be used on their own in search engines, for example designed to include multiple keywords with what is searched for and then search engines will filter the word matching the entered search. All the content in the web can be used by everyone. Although it does not refer to a general search only, it can also search like Social Media Web Content [8]. 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.

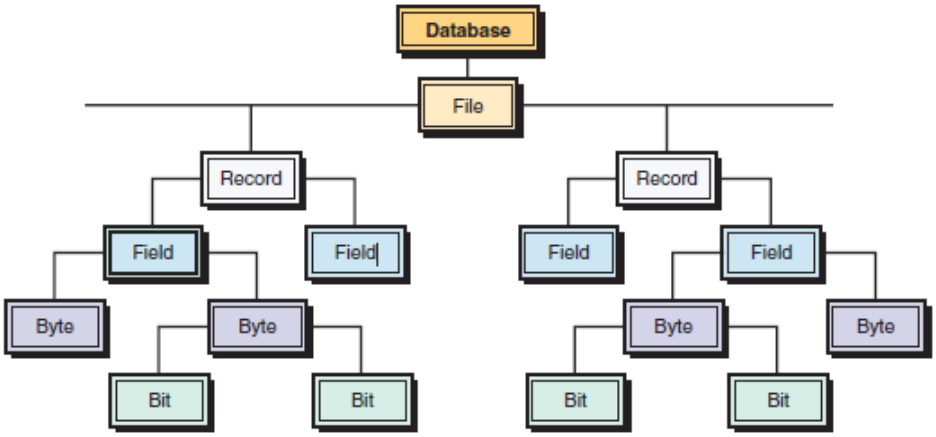

Fig 1.Hierarchy of data for a computer-based file

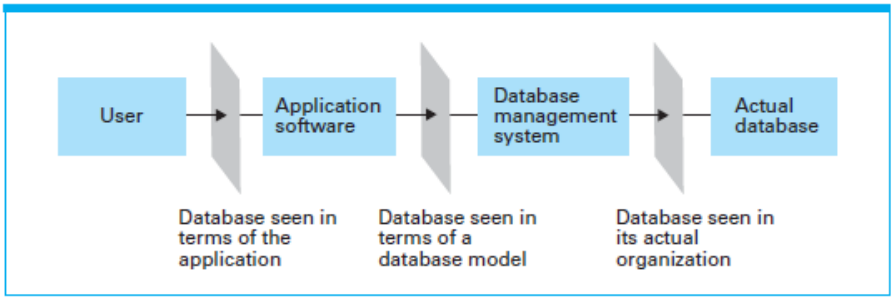

Fig 2. The conseptual layers of a database management

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 a software called DBMS (Data Base Management System)[9].

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In designing or building a system will not be separated from some of the components - the components of the information technology infrastructure. The components - components that play an important role in building the information technology infrastructure that is as follows [4, 6]:

Computer Hardware consists of several components, the components are: computer processing, data storage, input and output. Components include large mainframes, servers, midrange computers, desktops and laptops, mobile devices to access corporate data using the Internet. **Computer Software** consists of both software system and application software. The software system manages the resources and activities of the computer. Application software is assigned to a specific job.The relationship between system software and application software and users can be illustrated in a nested box. System software consists of operating system (operating system), translator language (translator language) and utility programs that can be integrated with the hardware.

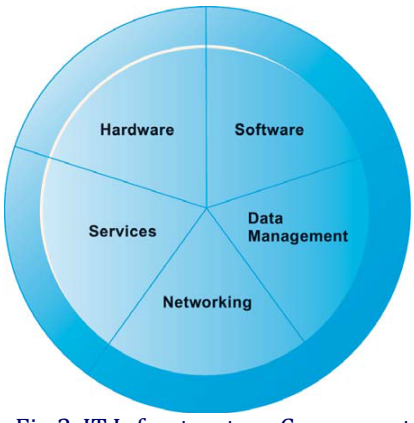

Fig 3. IT Infrastructure Components

Application software is included in programming languages (programming languages). Data Management Technology where its use as data storage from a company. Companies want and need software that can make the work of an organization easier. **Data Management** technology manages all data activities of a company. Such as inventory data, customers and vendors. Networking and Telecommunication Technology provides data activities such as voice data and video connectivity to consumers and suppliers. **Technology Services** Some companies use this technology because it will facilitate all access to business partners of the company.

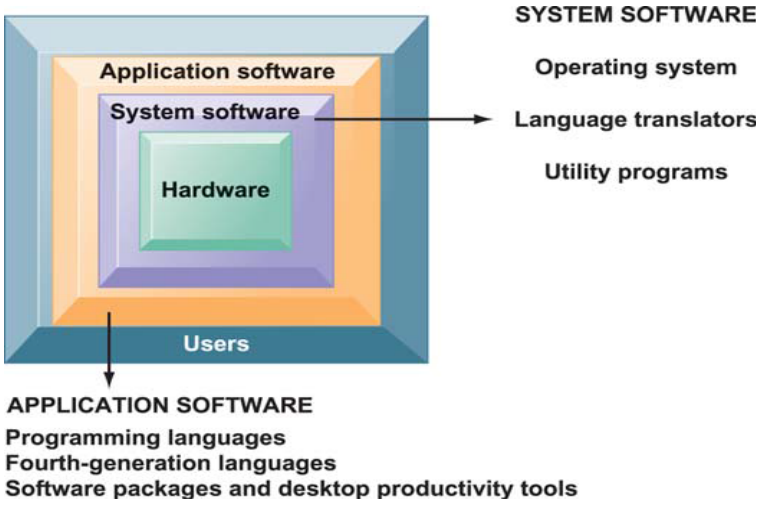

Fig 4. The Major Types of Software

HCI (Human Computer Interaction) is an interaction peopleto the computer. People could interact with computers to perform activities or daily. With the computer all the information needed will be able to get obtained, therefore the computer is very helpful in everyday work. In the current era of Information Technology, technological progress is getting faster and better in helping the daily activities of human life. Humans are the main characters that use computers that make interactive media [2]. An information system aims to collect process and store data, perform data analysis and distribute objectively[3]. An information system aimed at collecting, processing, storing data, and learning Management System (LMS) is comprehensive software integrated into various features for the delivery and management of the course. LMS will automatically handle course features, course submissions, ratings and quizzes.

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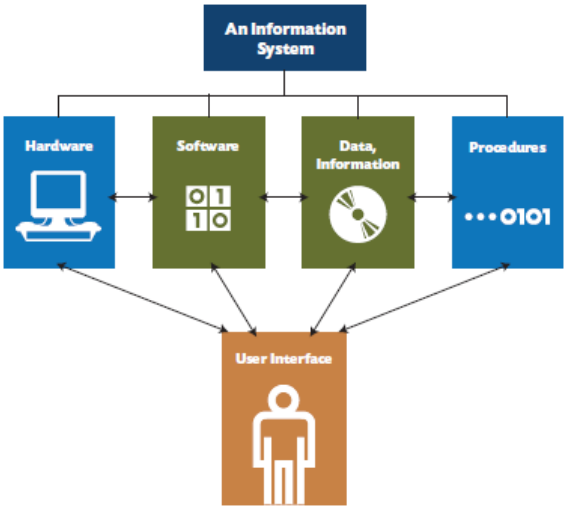

Fig 5. A framework for human–computer interaction

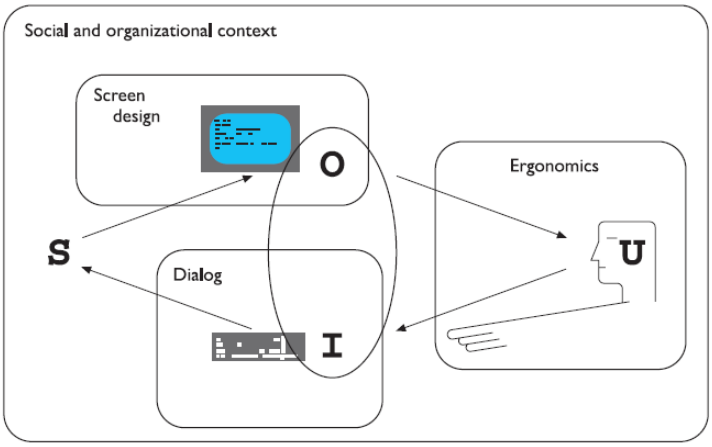

Fig 6. Information Systems and Information Technology: Core Concepts

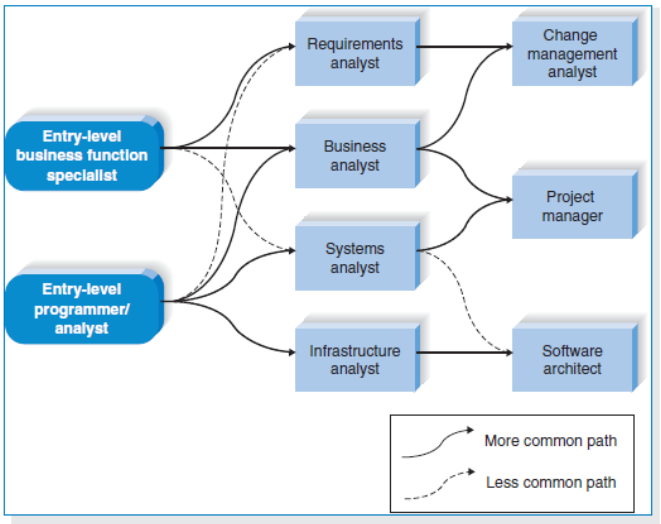

Fig 7. Career Paths for System Developers

The features available in the LMS for educational institutions are as follows: (1) Management of user access rights, (2) Management courses, (3) Resource management, (4) Management activities, (5) Value management, (6) Value presentation,(7) Management of e-learning visualization, so that it can be accessed by web browser data analysis and distribute for the needs objectively[10]. Analyst System and Information System Development will discuss how to build systems in a project. Where in building the system will require some stages to be done.

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The main points of system development include 4 (four) parts, namely: planning, analysis, design and implementation[1]. Use Case Diagram illustrates the very simple path of the main function in the system and gives the number of actors (users) involved in the system, where the purpose of the actor is to interact with other actors.

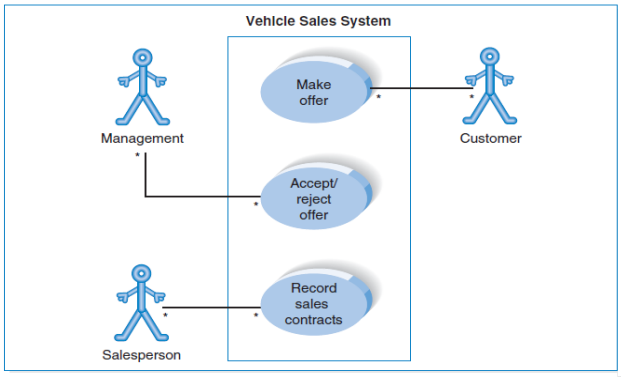

Fig 8. Use Case Diagram for Vehicle Sales System

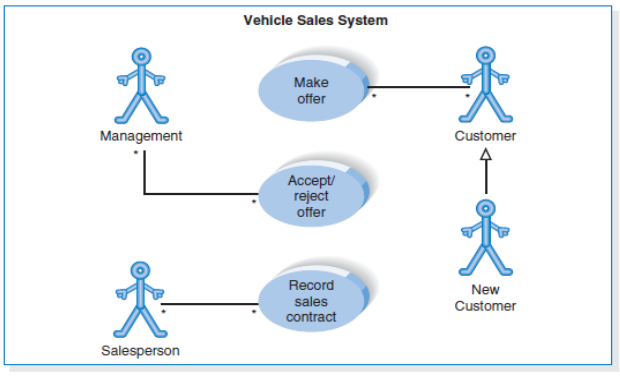

Fig 9. Use Case Diagram With Specialized Actor

III. METHOD

This research will be conducted for one year at University of Mercu Buana. This activity manages data of prospective student data that has passed the international entrance test of the international class program and the student data that has passed the test, the data will directly enter into the AIS (Academic Information System).

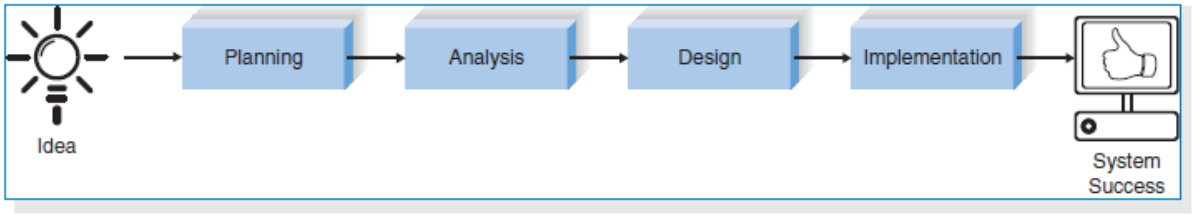

Fig 10. Schema of research

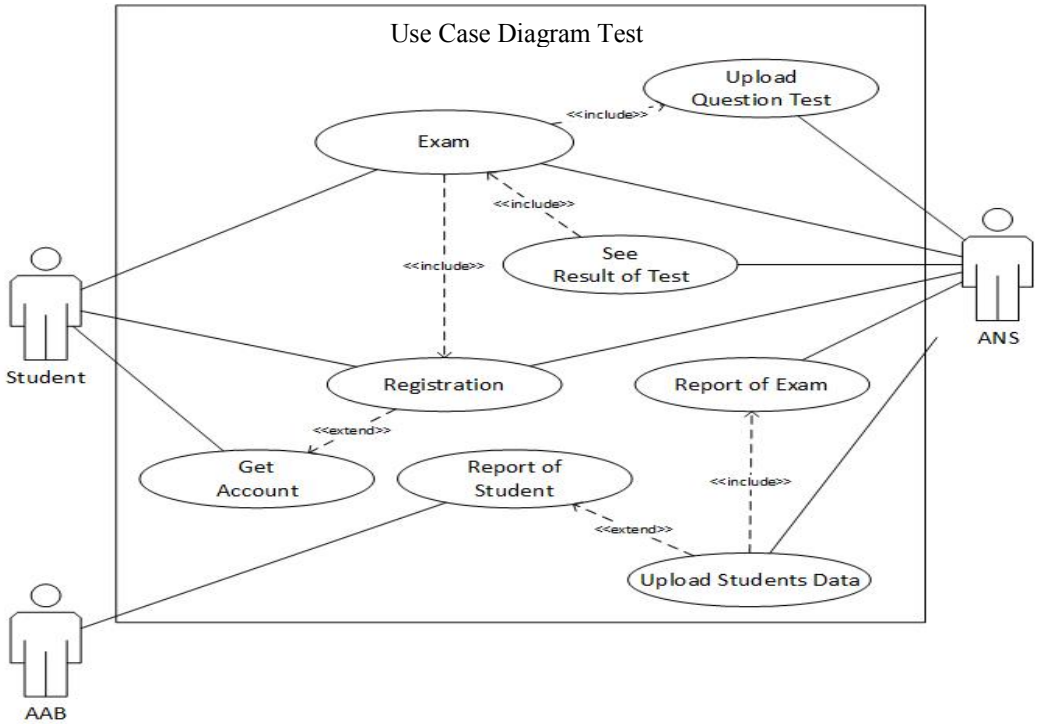

Fig 11. Use Case Diagram Test

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The first stage will be done in building Application Model Admission Test Entry International Class Program Students Integrated With AIS (Academic Information System) University of Mercu Buana is to do the planning, the planning is to collect all data - data about business processes that exist in the exam (ANS) at University of Mercu Buana. The focus of this plan is to facilitate the data collection of students who have passed the entrance exam. Upon successful completion of the international entrance test, the student data will be submitted directly to the AIS, so the party from AAB (Academic Administration Bureau) will immediately receive the data already entered by the ANS section. Student before taking online exams should register themselves to ANS by completing personal data, after which the ANS section will create an account to take the online exam. After getting an account to conduct an online exam a prospective student could take an online exam. After attending the online exam the student get online exam results. After passing the data, AAB can see the data already entered by the PMB section. Thus, students who have successfully completed the online exam are registered as students atUniversity Mercu Buana.

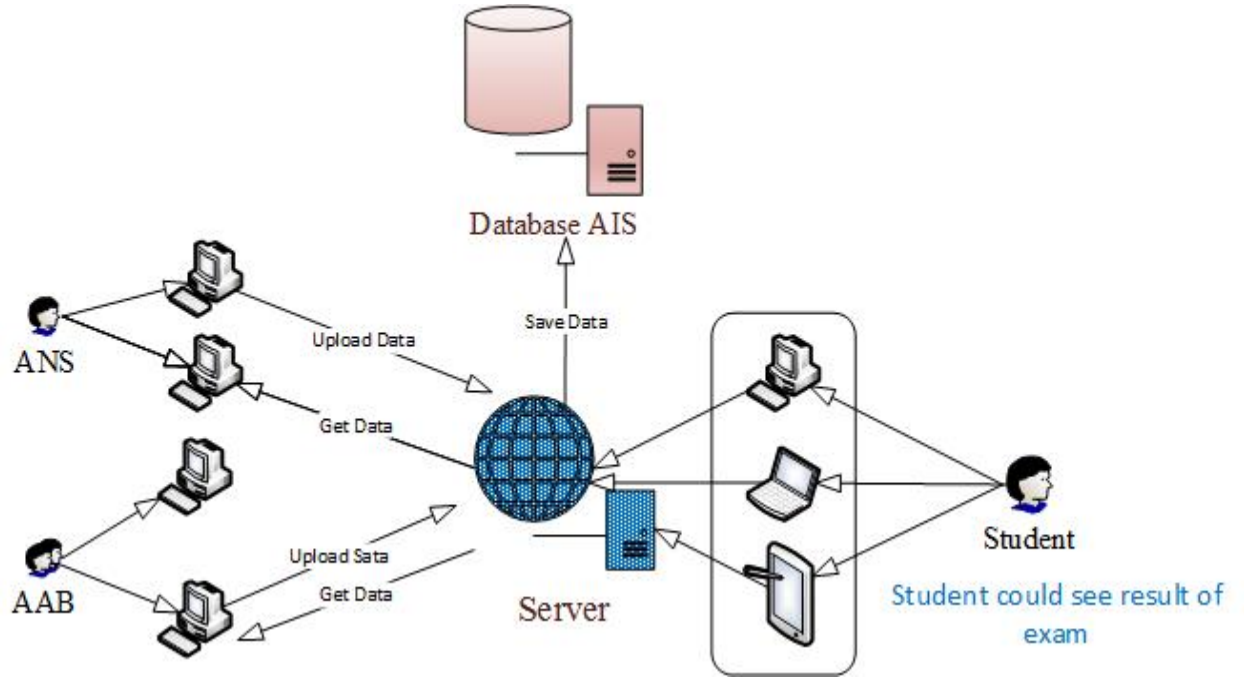

Fig 12. Conceptual Model of System

IV. RESULT AND DISCUSSION

From the results of this research has been done, the results obtained from these studies, while the results of research studiess:

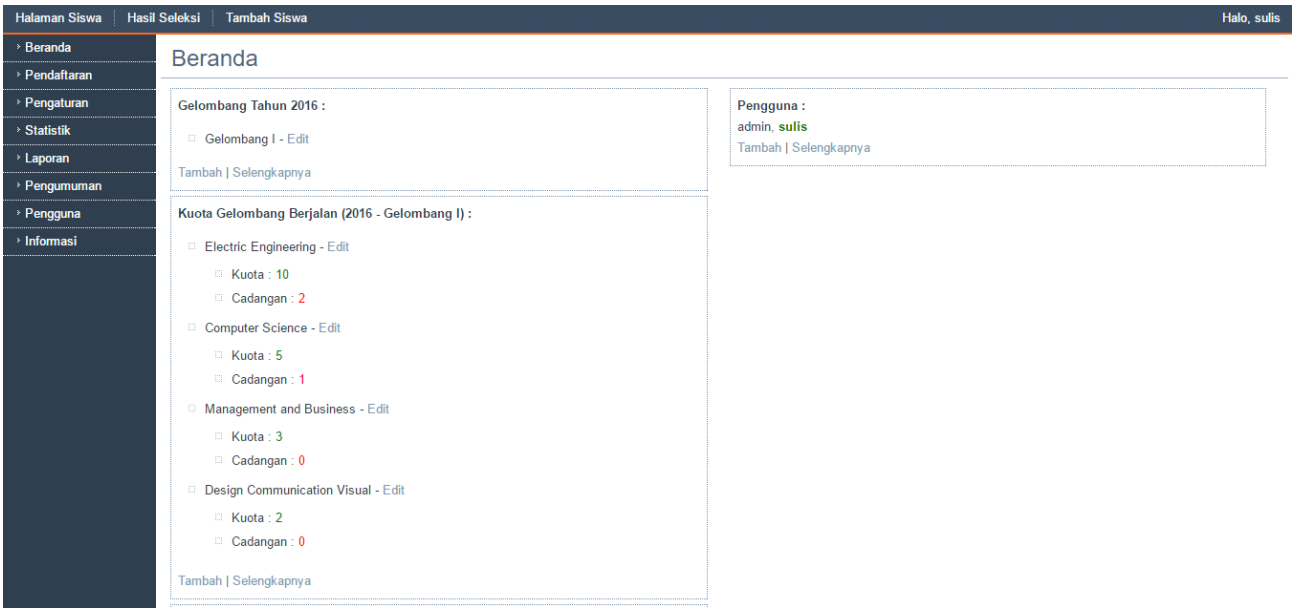

Fig 13. Home of ANS

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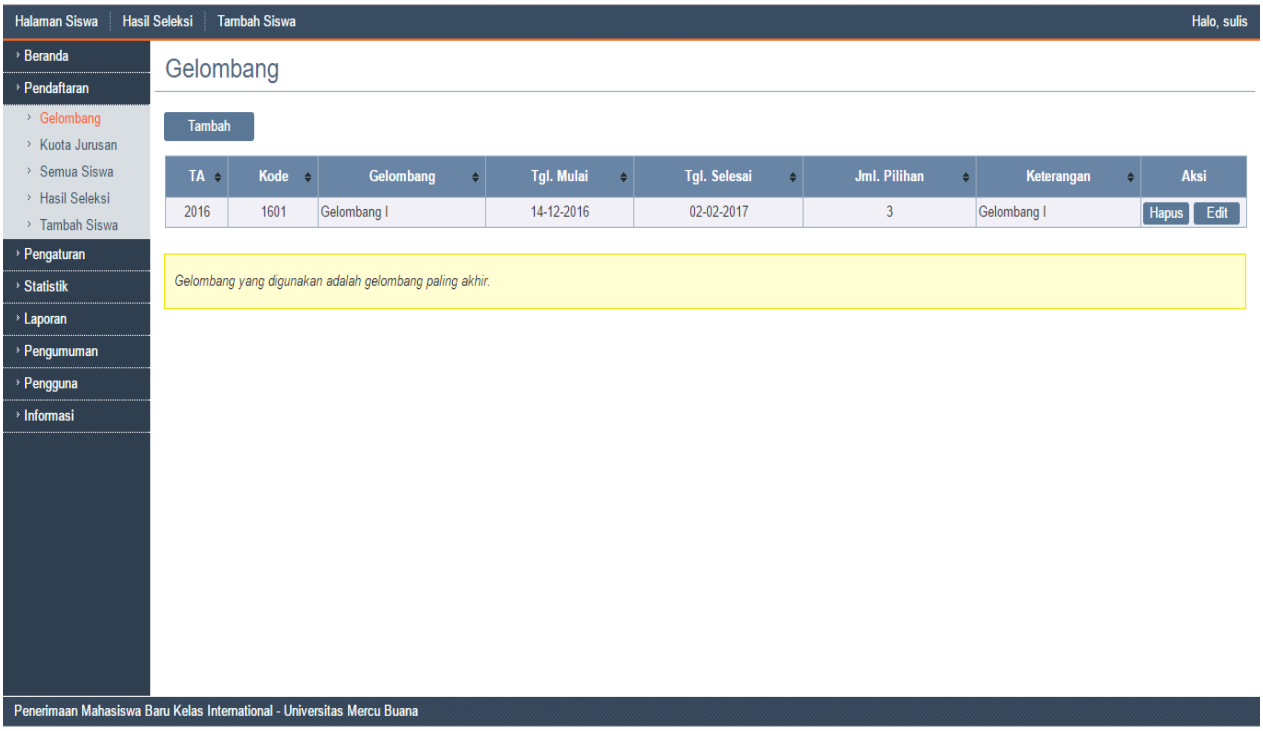

Fig 14. ANS input wave of registration

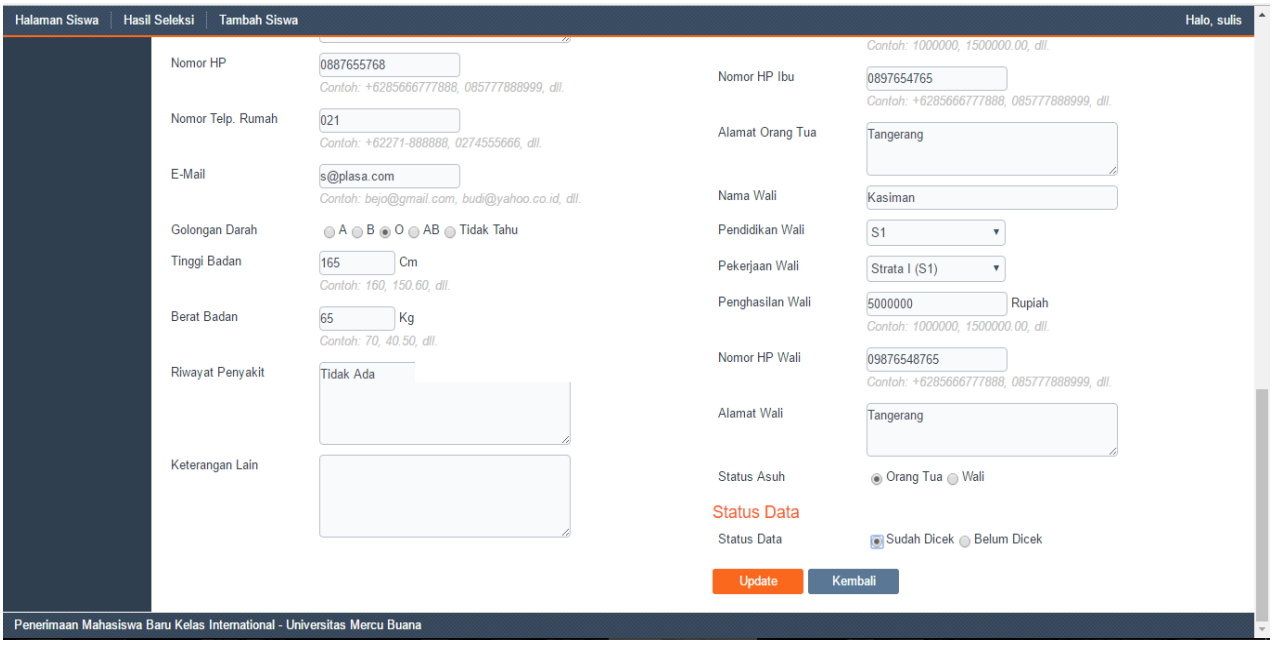

Fig 15. ANS input registration data of student

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Fig 15. Student see result of exam

V. CONCLUSION

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

a. How to design a test system for students of the international class program of Mercu Buana University integrated with AIS (Academic Information System) is web-based, thus the results of this web-based system will be effective and efficient in terms of usage.
b. With the existence of this system the benefits that are received by the institution or institution is As a means of developing the quality of student achievement data improved well
c. Reports that can be taken from this system are the Study Program could see each student who has the ability in accordance with their respective fields - each.

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