

**IMPLEMENTATION OF MONAS (MOVING EXAMINATIONS) :
Web-Based Application for Examination in Universitas Terbuka**

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The advances of technology and computer bring positive impact in all aspects, especially in the world of education. It brings the world of education into limitless era of distance learning and reaches the unreachable. As an archipelago country, Indonesia has many islands from Sabang to Merauke. The uses of information systems developed by universities from the easiness of access, facilities and support users and facilitate students to do many academic lives from registration, tutorials and examination. This paper describes the use of web-based application to registered students in all over Indonesia and the world. It specifically discusses the effectiveness and optimization factors that can be use as the needs and flexibility of students in when they facing the examination. Students in Open University of Indonesia can do their examination throughout Indonesia or abroad, this application assists Universitas Terbuka to collect data of students who have limited time to interact significantly due to the daily activities of both work and responsibilities, it also affects the geographical location which is very far from the location of residence and its activities with the office of Open University of Indonesia, besides this application is very easy in classifying the data number of students, locations, courses, examination cards which integrated in one application on the web.

Keywords : Monas Application, Examination, Universitas Terbuka

Introduction

The progress of internet technology certainly has a positive impact in many aspects as well in all fields, including the world of education. The current internet technology that has been highly developed has brought the world of education to the era of learning long distances and increasingly reaching the unreachable and has been widely developed in various worlds especially in Indonesia. The use of information systems developed by universities is very large, starting from the ease of access, facilities and convenience provided to users to make it easier and pamper for consumers to access the many facilities and services that are already available, many universities that build information systems in service education, but in fact the use of information systems is not effective and efficient, even causing other problems that result in disruption of academic activities and the impact of loss of user confidence in the facilities and services provided.

This research is limited to the use of a web-based application developed by Jakarta regional office. The study in this study specifically discusses the factors of effectiveness and optimization that can be used as the needs of students when going for a test ride throughout Indonesia or abroad.

The purpose of this study is to analyze and evaluate the use of moving examination in the 2018.1 semester. This application is needed by students who have little time to be able to interact significantly because of the daily activities of their work and responsibilities, this also affects the geographical location which is very far from the location of residence and its activities with the Jakarta regional office, besides this application makes it very easy for regional office to classify data on the number of students, locations, courses and also examination cards that will be integrated in one application on the web.

The use of this application can answer and be a solution in the information needs related to administrative problems, especially the data of the applicants for the application of examination from one regional office to another cities in all over Indonesia and abroad. The presence of a test application is easier in terms of work and effectiveness, so the data made by students and regional office as long as they can be received directly by automation and reduce

time, money and student who come to Jakarta regional office to register himself in registration and examination.

In more detail, this application was created using the PHP programming language and using the Codeigniter Version 3.0.0 framework. The features contained in it are recording the examination passes from other regional office to the local UPBJJ and vice versa, KTPU printing specifically for students riding exams, and recapitulation of exam records .

The Role of Information Technology

Nowadays, the advances in technology, especially information technology have a great influence on daily work, especially those that can be done by human. Office work can be carried out easily and quickly with the help of information technology, because of human limitations in doing things both in terms of energy, costs and time. The following is the role of information technology that can facilitate human work specifically in an agency.

1. Making letters, reports and data

Since the presence of computers in human daily activities, there are many tasks and jobs that can be helped in working on letters, reports and data to be very easy, fast, precise and accurate. The presence of a computer can help complex work become very simple. In general, the functions of technology and information used can be as a center for processing, storing, printing and retrieving. Through technology and information can improve the performance and productivity of activities in an office, besides that the quality results that are made are also very valid and precise.

2. Office Communication

Through technology and information, communication becomes unlimited. Technological advancements make communication can be developed in a variety of media, tools and facilities. This progress also makes distance and communication become very clear and complete. In addition to communication via audio, conducting conversational activities can be via video, as currently at the Universitas Terbuka has a video conference room and also a web tutorial that allows anyone to communicate simultaneously without limits.

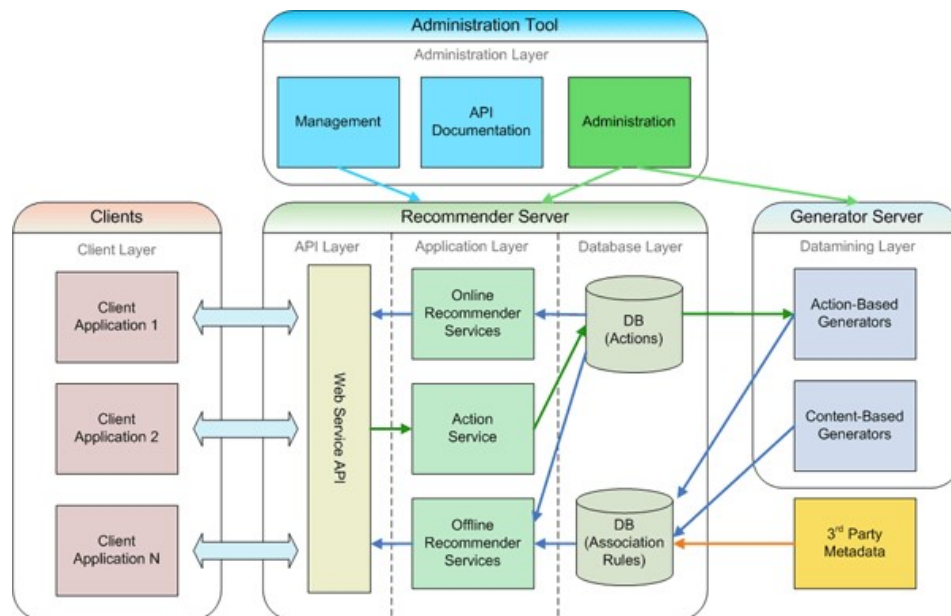
At present the role of technology and information in communication makes it easy for a variety of messages to be delivered properly, sending images, numbers, writing to the files needed in just seconds.

3. Delivery Data and Documents

Currently sending data and documents can not only be via e-mail or e-mail, sending data can also be through social networks or social media, through messages on whatsapp applications, data and documents can be sent in full, although the size sent is limited, but file sharing development which is very fast making it easy for us to share files in large sizes and together.

4. Management of Archives / Filing

Administrative activities are greatly helped by the role of technology and information. One of them is by compiling and easily retrieving important documents or data, this with the technology makes it easy to archive data stored neatly without seeing any piles of paper stored in a building, shelf or table. Archives can be stored on CD, flashdisc up online through a web or intranet network that can be shared with all existing staff, this makes it easy for anyone in need of data quickly (Ridwan, 2008).



Picture 1. Web Application Architecture (stacky.com)

System Analysis and Design Development

Building a system that is intended to optimize management of the process of carrying out ICT operations needs a systematic step system that is built in accordance with what is needed. In the context of this writing, Jakarta regional office as befits an organizational unit that carries out the process of organizing ICT operational activities requires this system to support services based on customer needs or Service Users. The development of information systems is through cycles or stages starting from the planning, development process to implementing it in full so that it can function in accordance with the needs and objectives of its manufacture.

Software Development Phase

The characteristics of development and software development are differ from one another affect the phase of software development that is passed. Each phase is composed of a series of steps and activities that aim to be able to produce the expected progress or output in the development and development of the software itself. The following are related reviews of each phase of software development and development:

Planning

The stages of planning are stages of a set of fundamental processes carried out in order to try to understand why an information system is built up and define the planning basis for the development and development process of the system itself. At this stage, planning something must be in accordance with the problems and solutions in the field, this stage is the initial process of an activity in building software.

Analysis

This stage starts after the planning stage is passed, the analysis phase consists of a set of activities or processes to define the needs of users of the system to be built, at this stage, the process of input, planning and concepts that have been seen in the field have been prepared and evaluated for use intact.

Design

At this stage, it can be seen from the needs that have been defined in the analysis phase of the system to be built, the design stage is the next stage consisting of a collection of processes and activities aimed at defining specifications and description of information systems to be built and ready to be developed and planned well and maximum.

Implementation

At this stage, it is a section where all the system specifications and descriptions produced will be implemented by developing and developing the system and then proceed with the installation of the system that has been built. The process is continued by carrying out support activities and maintenance of the running system so that it can function in accordance with predetermined needs (Suyanto, 2007).

In its development, the development of web-based software was built as an alternative solution to provide management systems for the operation of ICT operations, this could reduce both the cost, labor, time and efficiency of operational activities in an institution.

Research methods

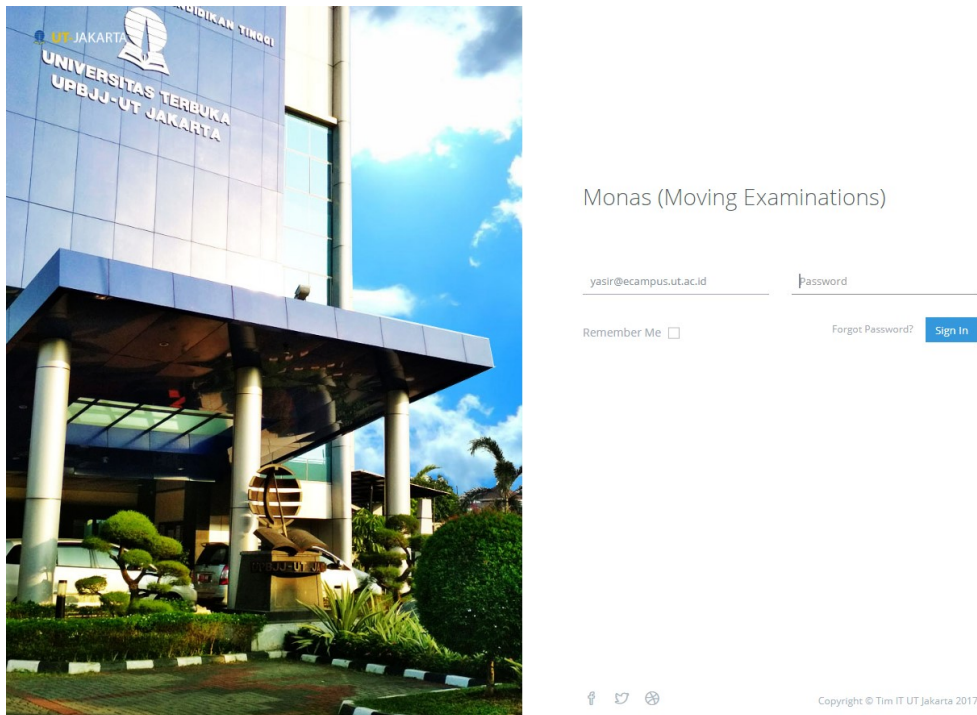
This study is planned to use a descriptive qualitative approach that aims to explain systematically, factually and deeply to the actual facts that occurred in the use of the MONAS application during registration in the 2018.1 semester.

This research will be held at Jakarta Regional Office by analyzing the use of Monas applications during registration in the 2018.1 semester. The research was conducted in March to mid November 2018, specifically when registration was completed and the application developed by Jakarta regional office was implemented during registration in the 2018.1 semester.

Analysis

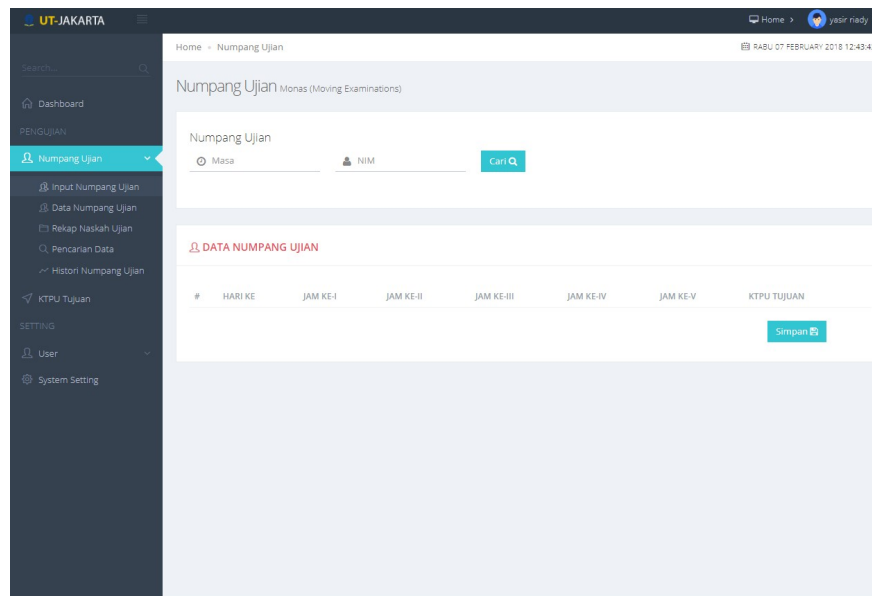
This research focuses on the use of Monas or Moving Examinations applications which can also be known as riding exams from the regional office as they registered to the destination regional office, with the hope that students can carry out final semester examinations anywhere without any restrictions. This study reviews the use of this application, the impact, input, usability, effectiveness and efficiency and also the possibility if used in all UPBJJ in Indonesia.

In general, the appearance and usability of this application can be informed in the following sections:



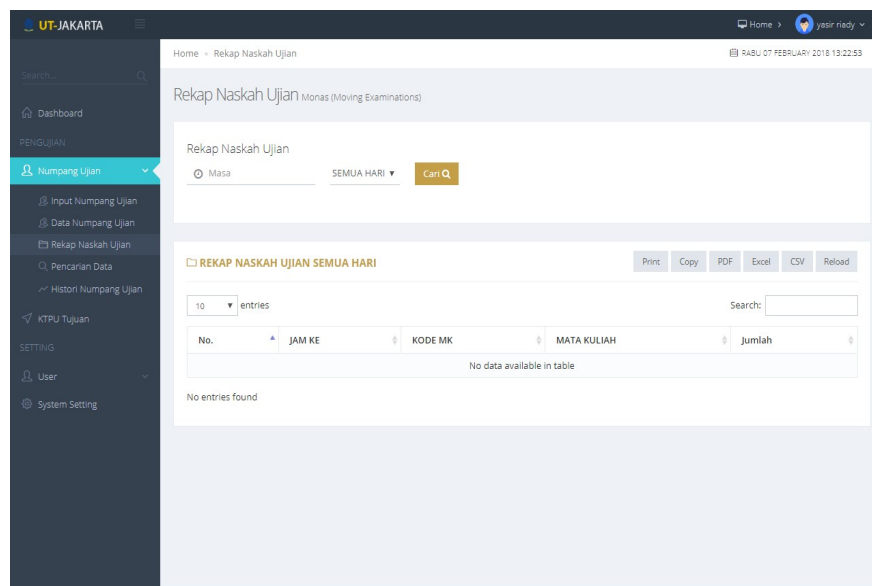
Picture 1. Homepage of Moving Examinations

This display can be seen on the Monas home page, this application can be accessed through Jakarta.ut.ac.id by entering using a username and password. Users of this application are limited to a number of staff in Registration and Testing, in general admin is IT at Jakarta regional office, besides that the registration and testing coordinator has main access, followed by general access by some staff in registration and testing that can input data and fill all information needed for the implementation of a test ride.



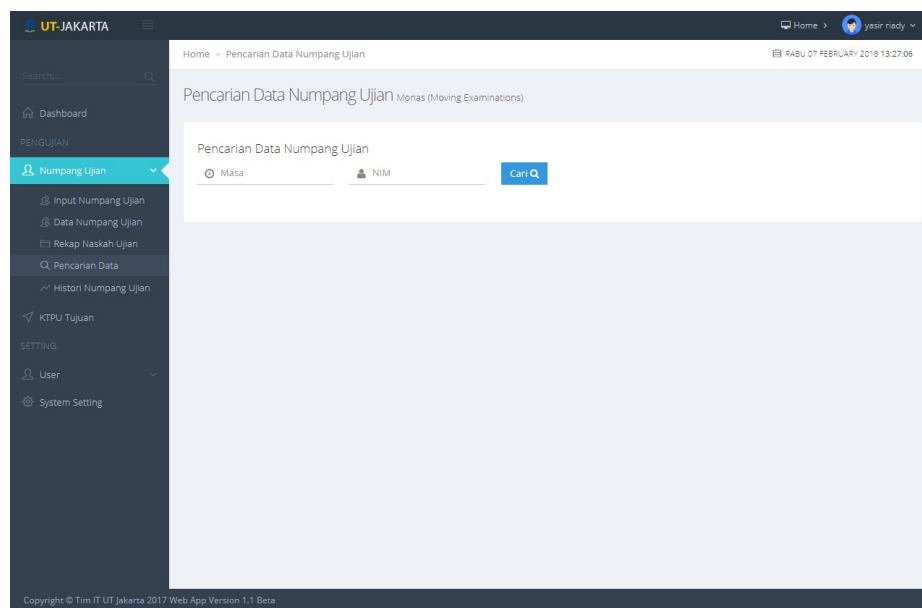
Picture 2. Features and Data of Moving Examinations

When it has comes to the main display, the registration and testing staff can fill in the data and the choices that will be made. The choice of features for this exam pass can be filled by students who will take the exam outside of the Jakarta regional office and students from outside Jakarta regional office who will take an exam to the Universitas Terbuka office in Jakarta and its surroundings. This option can be filled by inputting student data, automatically the registered subjects will come out and can be selected based on the student's request.



Picture 3. Feature of examinations schedule

This application makes it possible to be able to recapitulate the entire text needed from students who will take the exam to Jakarta regional office, this can minimize mistakes in the course code and facilitate the recapitulation of texts to be requested to the UT Center or duplicated by regional office. This application is very helpful and makes it easy in the administrative process considering that the recap of this text requires considerable accuracy and carefulness.



Picture 4. Features of searching Moving Examinations

This feature in the Monas application is also available on search for passenger test data, this makes it easier to be able to search and see the number of students who will take the exam. Every semester, Jakarta regional office is always boarded by nearly 140 students throughout Indonesia and abroad who will be staying at Jakarta regional office, requiring 6 classrooms to be used on each exam. It is very helpful and makes it easy to find data if there are students who want to see and check data that has been input by Universitas Terbuka staff.

In this application, searching for exam data is very necessary when there are students who come and will carry out examination activities. It can be remunerated for around 140 students who simultaneously come to check the location data and the courses and the exam hour

session. This feature is very supportive for Jakarta regional office students and staff in recording data as a whole and also can see and check the total data that has been entered.

UT-JAKARTA

Home > KTPU Tujuan

RABU 07 FEBRUARY 2018 13:27:15

KTPU Tujuan Monas (Moving Examinations)

KTPU TUJUAN

Data KTPU Tambah KTPU

Print Copy PDF Excel CSV Columns

10 entries Search:

NO.	KODE KTPU	KTPU	TANGGAL INPUT	USER INPUT	PILIHAN
1	210	JAKARTA PUSAT	06/11/2017 20:13:45	Mafatikhul Habibi	
2	211	Kota Tangerang Selatan	06/11/2017 13:32:15	Ajld. S.Kom	
3	21R	Karawang	06/11/2017 13:32:30	Ajld. S.Kom	

Showing 1 to 3 of 3 entries

Copyright © Tim IT UT Jakarta 2017 Web App Version 1.1 Beta

Picture 5. Feature printed examination cards

The last feature possessed by a test application is to place an examination card or KTPU card. This is needed so that students have a schedule of locations, courses and what sessions they have to face on the exam. This feature is quite important considering there is a lot of data coming in to be input and there are also many students who will take the exam to either Jakarta regional office or outside Jakarta regional office.

Conclusions and recommendations

Based on the use of the test application, it has been implemented at Jakarta regional office and in-depth interviews with informant sources, the following conclusions can be made:

1. In general, this application is one of the good facilities owned by Jakarta regional office, this also greatly helps students and regional office staff in resolving administrative issues.
- 2 There needs to be some additional information, the admin role as the person in charge of the application and also updating the overall data
3. Promotion of the use of this application can be improved

4. Hopefully in the future, this application can be more maximal and comprehensive to all regional office throughout Indonesia.

From the results of the analysis of material experts and instructional design experts it can be recommended as follows:

1. Expand and maximize the use of applications in all services at the Universitas Terbuka
2. There needs to be a special admin to be able to help focus in carrying out daily administrative activities.

References

Falahah, Rijayana. 2011. *Evaluasi implementasi sistem informasi dengan pendekatan utility system (studi kasus sistem e-campus universitas widyatama)*. Jurnal ilmiah kursor, vol. 6, no.2.

Gemmel M and Pagano R. *A Post-Implementation Evaluation of a Student Information System in the UK Higher Education Sector*. *The Electronic Journal of Information System Evaluation*. 6: 95-106. 2003. URL: <http://www.eijse.com/volume6-issue2/issue2-art111-emmel.pdf>, akses tanggal 12 Januari 2013.

Jha, Niraj Kumar .2009. *Criteria for a Good Website*.
<<http://www.whereincity.com/articles/technology/5881.html> >

Kendall KE and Kendall JE. 2007. *System Analysis and Design*, 7th Ed. Prentice Hall.

Lawrance, Kate. 2008. *Usability testing*. <<http://www.slideshare.net/lispardi/mobile-usability-testing-theory-pracitce>>

Rahayudi B dan Sukoharsono EG.2008. *Pengaruh Kompetensi Teknologi Informasi Terhadap Keberhasilan Penerapan Sistem Informasi*. KURSOR. 4: 8-14.

Sabihain.2006. *Analisis Pemanfaatan Teknologi Informasi dan Kinerja Individual* (Studi Pada Rumah Sakit di Yogyakarta).

Siregar, Ridwan. *Penggunaan Sistem dan Teknologi Informasi Untuk Usaha Kecil dan Menengah*. 2008. Universitas Sumatera Utara

www.stacky.com

Suyanto, Asep Herman. 2007. *Step by Step Web Design : Theory and Practices*. Ed. 1. Yogyakarta : Andi.