



## Information System Development of Web Portal alumni National University

Deden Ferdiansyah<sup>1</sup>, Moh.Iwan Wahyuddin<sup>2</sup>, Andrianingsih<sup>3</sup>

Informatika

Fakultas Teknologi Komunikasi dan Informatika, Universitas Nasional, Jl.Sawo Manila, Pasar Minggu, Kota Jakarta Selatan, Daerah Khusus Ibukota Jakarta 12520

Email: [dedenferdiansyah199@gmail.com](mailto:dedenferdiansyah199@gmail.com), [iwan\\_wyd@yahoo.com](mailto:iwan_wyd@yahoo.com), [andrianingsih@civitas.unas.ac.id](mailto:andrianingsih@civitas.unas.ac.id)

### ARTICLE INFO

### ABSTRACT

#### Article history:

Received: 04/04/2020

Revised: 20/04/2020

Accepted: 30/05/2020

National University is the oldest Private University in Jakarta and the second oldest in Indonesia which has thousands of Alumni spread across various fields. The aim is to create an alumni web portal in other words to make it easier for alumni to communicate or interact with alumni and share information. With this advantage is expected to be able to build data or information sources.

#### Keywords:

Web, Alumni Web Portal,  
Information Systems, PHP

Copyright © 2020 Jurnal Mantik.  
All rights reserved.

## 1. Introduction

Information technology change and grow with agile so as to make the alternation in various lines of life, including academic circles. All academic institutions need to adopt information technology to support capacity and character of Educational institutions. The National university of the oldest Private Universities in Jakarta and the second oldest in Indonesia. established on 15 October 1949 on the idea or the ideas of popular leaders of the chime.

The results of the impact of alumni is very valuable for the educational institutions. Due to the interaction of professional and personal owned by the alumni can open the gates to the Country.

Thousands of alumni UNAS have been scattered in diverse aspects as political, official, expert knowledge, researchers, professional businesses, artists and entrepreneurs.

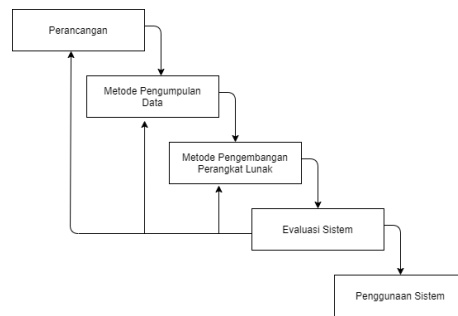
The academic Portal at the National University bears the contribution is very useful to all alumni. The interests of the current information to portray one needs not to be underestimated the most important in the educational environment, for students information must be agile and careful not to lag behind a thing. The ease to get this information will be achieved with the utilization of technology, utilization of appropriate technology becomes an important thing in order to achieve a Cyber University. With its information portal, the campus is able to convey diverse information in agile to the alumni of the absence of an explanation between the time.

## 2. Research Methods

The waterfall Model is one model of the cycle of system development which includes several stages, starting from design, data collection methods, software development methods, evaluation system, as well as the use of the system. In the image below are the stages of the waterfall method.



**A. Waterfall Method**



**Fig 1. Waterfall Model**

Above is a picture of the stages in the mode waterfall.

**B. Design**

At this stage the design for the purposes in the manufacture of the system.

**C. Data Collection Methods**

To carry out this research, the author utilizes qualitative descriptive method which will obtain the data required of the author.

**D. Methods Of Software Development**

The authors apply the intent of building System Information Portal Alumni of the National University of this is the waterfall model.

a) **Needs Analysis.**

This step the authors conducted the data collection.

b) **Design.**

In this method the author meeris translate events forpurposes of a software preparation can dipk sobelumakukan coding. Namely, the authors design the design of the its system such as, sequence diagram, activity Diagram, and use case Diagram. Ago designed interface design of Web Information Systems Alumni of the International University.

c) **Coding**

At the stage of coding done coding (the process of creating the code). where at this stage the author execute a design that was made before, to be programmed in less time is about 2 weeks, in order to produce the desired system.

d) **Testing System**

In this process, the researchers will test the ability and effectiveness of the system has been created, where the authors test a system that has been so functional with the methods of black box testing. Do it in order to find flaws and weaknesses in this application so that improvements can be made before it can be implemented later.

**E. Evaluation System**

At this stage is a stage where the whole system design that has been created previously in the form of Coding or code the program in evaluation (trial) starting from the installation of the system on a smartphone that will be used by the User.

**F. The Use Of The System**

To this section made use of a system that has been in the test of any bug or error in the system.

**2.1. Needs Analysis**

Needs analysis is the information system for the evaluation of problems and needs so that it can be filed and make improvements.

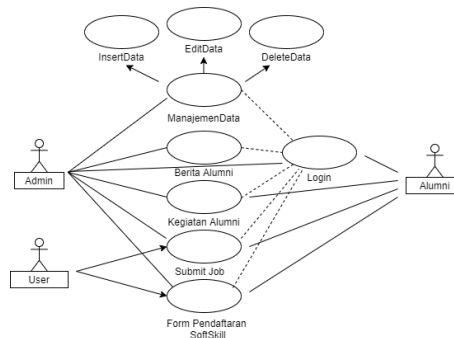
In the problems are listed, among others, as for the process of tracer study and user survey alumni using a questionnaire created by the google form and not using the account.

With the problems and needs that have been presented of it was built again portal website of the alumni of this using the Framework Code Iginiter using PostgreSQL database and added the login feature for the user in accordance with the needs.

**2.2 System Design**

Based made of the needs Analysis, that for this study will be re-designed website web portal for alumni.

**A. Use Case**



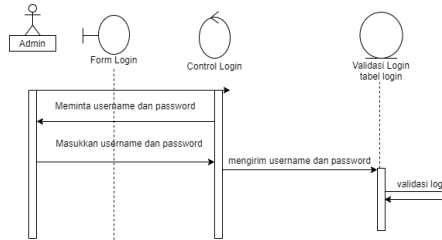
**Fig 2. Use Case Diagram**

In the diagram case is the construction to the system described in the user's eyes. For that purpose modeling use cases for the purpose of the system functional and operational and system and can be defined user scenario that is agreed upon between the user and the developer.

**B. Sequence Diagrams**

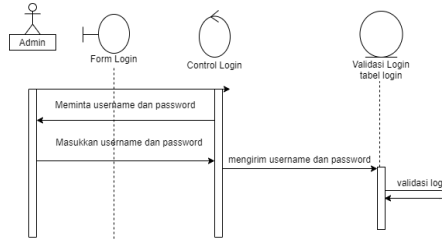
In the sequence diagram of the described row operations executed by the system.

**a) Login Administration**



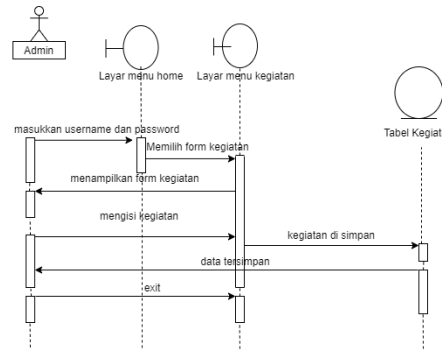
**Fig 3. Sequence Login Admin**

**b) The Post News Of The Alumni**



**Fig 4. The Order Of The Posts Alumni News**

**c) Alumni Activities**



**Fig 5. The Sequence Diagram Of The Alumni Activities**

d) Send Task

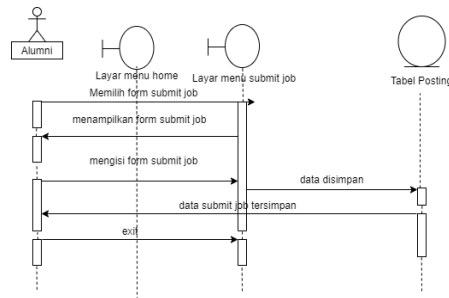


Fig 6. Sequence Diagram Submit Job

The image taken is the image for the process activity diagram



Fig 7. Activity Diagram

3. Results and Discussion

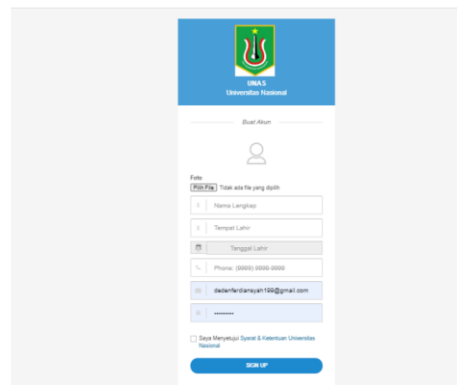


Fig 8. Menu display the account list

On the ganbar above is atalah to create an account, to mickses meperetes menu as a sub job, job search, alumni Kuwait, registration kalfetm penskill, form penspegeri, form kukisioner pascasera.

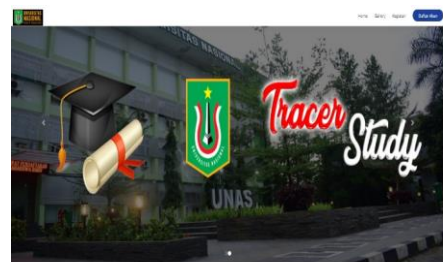


Fig 9. Display Home Page

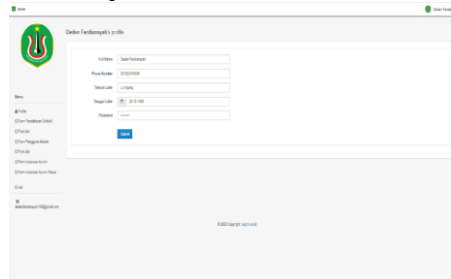
In the picture above is the view to the main menu home.





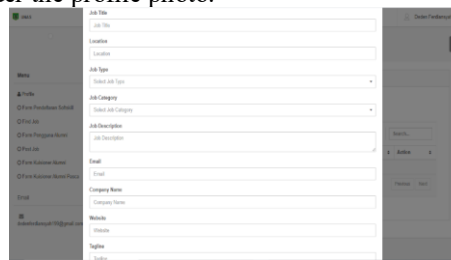
**Fig 10.** The appearance of the service portal

In the picture above is the appearance of the portal service such as submit a job, find job, questionnaires alumni, the registration of soft skills, form the user alumni, the form of the questionnaire of the alumni, and the form of questionnaire alumni post can only be accessed for the user/alumni who already have an account



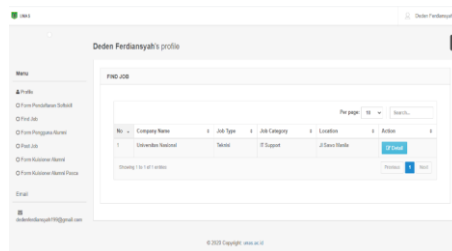
**Fig 11.** Menu view profile

In the picture above is the view to the profile menu that we have created, once we have an account we can access to the menu of the submit job, find job, questionnaires alumni, the registration of soft skills, form the user alumni, the form of the questionnaire alumni, and form of the questionnaire of the alumni post, the menu we can see on the picture under the profile photo.



**Fig 12.** From post job

For the image above we can fill in the form provided by the service to post job, then we fill out the appropriate form provided.



**Fig 13.** Menu find job

In the menu find a job we can see there are lowongna crimes anything, we can find a job that fit our desires if available.

**4. Conclusion**

The conclusions that are able to cited in the project this thesis is able to produce an Information System Alumni-Based Website devoted to the Alumni of the National University, which developed with the waterfall model with the design phase, data collection methods, software development methods, evaluation system, as well as the use of the system.

Information systems Alumni Web-Based is able to help alumni of the National University to be able to



interact with the other alumni, but it also makes it easy to obtain information such as job information, scholarship information as well as information about the development of the alumni of the National University.

## 5. References

- [1] D. B. Gant and J. Gant, *Web portals: The key to enhancing state government e-service*, Washington, DC:PricewaterhouseCoopers, 2001.
- [2] EllisD. B. Gant and J. Gant, *Web portals: The key to enhancing state government e-service*, Washington, DC:PricewaterhouseCoopers, 2001.
- [3] Elsera, M. (2018). Portal Publikasi Jurnal Karya Ilmiah Program Studi Sistem Informasi Ftk Universitas Harapan Berbasis Web Dengan Metode Fast, *Jurnal Ilmiah Teknologi Informasi*, 3814.
- [4] Imam Rafi'i, H. A. (2016). Model Sistem Informasi Alumni STMIK Banjarbaru. *Progresif*, 12(2), 1387–1524.
- [5] Imam Rafi'i, H. A. (2016). Model Sistem Informasi Alumni STMIK Banjarbaru. *Progresif*, 12(2), 1387–1524.
- [6] Informatika, D. T., Sumbawa, U. T., Informatika, M. T., Sumbawa, U. T., Studi, P., Universitas, I., & Sumbawa, T. (2020). SISTEM INFORMASI ALUMNI PROGRAM STUDI INFORMATIKA UNIVERSITAS TEKNOLOGI SUMBAWA BERBASIS WEB. 2(1), 59–68.
- [7] Pranata, D., Hamdani, H., & Khairina, D. M. (2015). Rancang Bangun Website Jurnal Ilmiah Bidang Komputer Informatika Mulawarman : *Jurnal Ilmiah Ilmu Komputer*, 10(2), 25.
- [8] Primasari, C. H. (2018). Pengembangan Sistem Informasi Portal Alumni dengan Tracer Study dan Survey Pengguna Alumni Universitas Atma Jaya Yogyakarta. *Jurnal Buana Informatika*, 9(1), 21–30.
- [9] Rustamaji, H. C., Santosa, B., & Setya, D. (2009). Web Portal Alumni (Studi Kasus Di Upn "Veteran" Yogyakarta). 2009(semnasIF), 197–204.
- [10] Sumarsono, & Husin, A. S. (2013). Sistem Terintegrasi Portal Web Perguruan Tinggi Agama Islam Negeri Menggunakan Metode Grabbing. *Kaunia*, IX(2), 21–26. [http://digilib.uin-suka.ac.id/18659/1/Sistem Terintegrasi Portal Web Perguruan Tinggi Agama Islam Negeri Menggunakan Metode Grabbing.pdf](http://digilib.uin-suka.ac.id/18659/1/Sistem%20Terintegrasi%20Portal%20Web%20Perguruan%20Tinggi%20Agama%20Islam%20Negeri%20Menggunakan%20Metode%20Grabbing.pdf).
- [11] Yeremia, 2013, Perancangan Sistem Informasi Berbasis Wesite Subsistem Guru di Sekolah Persatuan Islam 99 Rancabango, Vol. 9, No.40, ISSN 2302-7339.

