



## Design Of Web Information System Universitas Nasional

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### ABSTRACT

The purpose of this research is to design a system that makes it easier for the Academy's campus web college national university to easily find out academic information designed using the PHP programming language and use the Cascading Style Sheets Framework as a responsive design on the national university academic campus in helping students and users others can get campus information, lecturer information, and student data. The results showed that the Academic Information System makes it easy to manage data on the web-based academic information system on the national university's Academy Campus. With features in managing academic data that is checking student data and simplifying and improving campus performance in informing students about campus information. Furthermore, a web-based academic information system will be implemented at the Academic Campus of the national university arranged as a guide for students taking courses. By structuring it so that students will know the various technologies that underlie the web today. Web technology that is practiced in the guidelines on the web lecture is very dependent on the students' efforts to develop it further. On the other hand, this guideline was prepared in the hope that students could easily participate in the activities

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## 1. Introduction

National University is the oldest private university in Jakarta and the second oldest in Indonesia. In the current third millennium era, the challenges of competition in the world of higher education in Indonesia are getting tougher. Commitment to improve the quality of infrastructure and academic superstructure becomes a benchmark for the community to choose which universities can support the future of prospective students. Demands for the development of the learning process in the world of education move very quickly. we only provide learning with face-to-face methods organized by institutions with classroom facilities. The weakness of this model is that if a lecturer or student is unable to attend, then at that time, no material is obtained by the student.

By utilizing technological advancements, the National University seeks to provide full support for the completeness of the information technology and telecommunications infrastructure by creating web lectures to support educational regulations at the National University. The existence of lecture material, discussion forums, assignments and quizzes that are held on-line, is very helpful for students especially to encourage students to be more proactive in the lecture activities organized by the lecturer concerned with the existence of internet and intranet facilities in the campus environment. The development of the internet has also supported the use of computers in the field of education. The internet can be accessed and used for various purposes, by anyone, anywhere, at any time.

Various kinds of internet technology can be used, one of which is the World Wide Web (or hereinafter referred to as "the web") which is able to provide information in the form of the Web. Its development is very rapid, but in general the web like this can still manage data in the form of databases, it is necessary to develop a web-based information system. Based on the problems and previous studies, a web-based learning media will be developed for national University Curriculum courses.

The aim of effective and efficient learning media as an alternative is to use the web as a learning medium. It cannot be denied that the existence of computer-based learning media has become an important part in the world of education today. Computer-based media in the development of instructional media is often referred to as learning because the computer's ability to convey messages through text either in the form of recordings or in the form of technology is expected to be able to help the educational process in general or specifically so that what you want to achieve through the educational process can be obtained properly.



Although still debatable, the principle role of this technology is to help improve the efficiency of the teaching and learning process as a whole conducting a study of the use of computer animation technology in learning Communication. Developing website-based learning media for learning computer assembly and operating system installation. Based on the problems and previous studies, a web-based learning media will be developed for Curriculum and Teaching courses with case studies in the Department of Informatics Engineering, National University

**2. Research Methods**

In the website design, lectures are carried out in several stages in the preparation of these applications through the following stages:

**2.1 Flowchart of Web Design**



**Fig 1.** Webkuliah Design Flow Chart

In the process of making webkuliah there is a research that is needed at the research stage so that research becomes systematic. Stages or flow charts can be seen in Figure 1.

**2.2 Analysis in Needs**

The need for software to build this research is needed to smoothly build research, as follows:

1. By using WordPress version 5.4
2. Configuring the XAMPP Server is apache and MySQL or MariaDB.
3. Sublime Text for PHP programming language text editor.
4. Adobe Photoshop CS6 for creating website logos.
5. Mozilla Firefox to open the website that is being designed.

**2.3 System planning**

The design of this system is by implementing a wordpress application using xampp as the initial process of making a website. The selection of the operating system used on the object of this study is a web-based learning media for Curriculum and Teaching courses. The research approach used in this research is the Research and Development method, with the website development design of the National University.

**2.4 Implementation**

The author tries to implement as an experimental material for the application of the wordpress application. Data collection methods used are as follows:

1. Observation  
The author makes observations that are used as material in writing this thesis.
2. Literature review  
The method of data collection is by studying several books, library facilities, lecture notes and visiting the proposed sites as the author's analysis material.

**2.5 Testing**

Testing on college web sites uses a blog engine application that is WordPress with a text format that uses a web programming language that is PHP with a source code editor using a sublime text application to edit the text that functions to change the appearance of the design and fill the look of the website. For accessing databases using the XAMPP application that functions as a local server to support various types of website data that is currently in the process of development. The module in XAMPP that is used is Apache



which is a web server application while MySQL is a database server application that plays a role in processing, editing, and deleting lists through the database, but with the current development of the database not only MySQL but there is also the latest version of MariaDB now . In the final results of testing the WEB WEB website this website can be made with a display design through the WordPress blog engine so that the final results of this website test have a dynamic appearance.

### 3. Results and Discussion

#### 3.1 System Discussion

This chapter will explain the analysis of the results and discussion of the National University website. In this chapter also presents an explanation in the form of an interface explanation of the system design that has been made. As well as testing the system carried out with the functions that exist in the webkuliah by observing the results of the execution through the menu features available on the National University webkuliah.



Fig 2. Display Development of Webkuliah Website

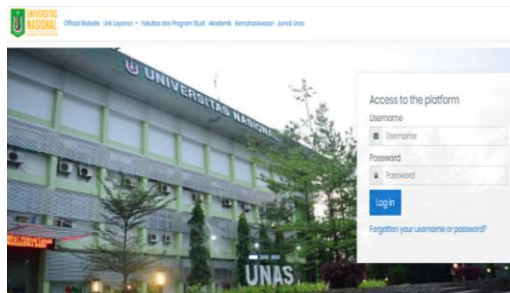


Fig 3. Website Display

In Figure 3 is the result of a comparison of the previous display, in Figure 3 is the result of development on the Web site college by adding several optional features to the header. To make it easier for users to find out the services that exist on the website's appearance and there are services from each faculty

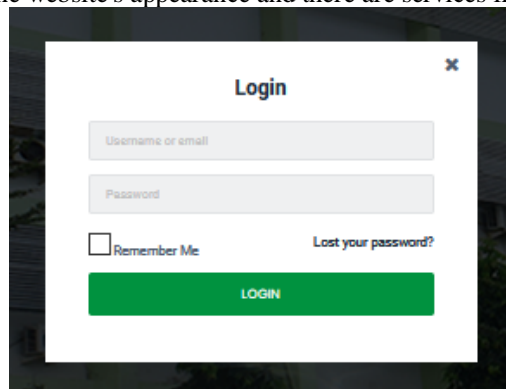
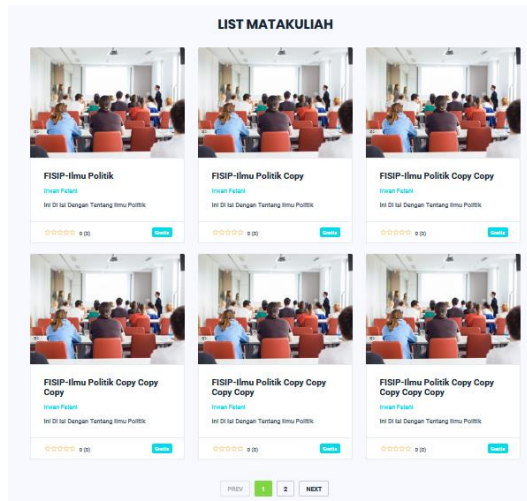


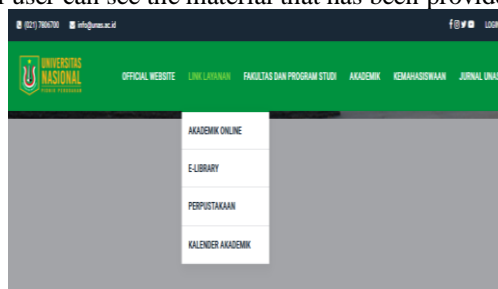
Fig 4. Login Menu Form

In Figure 4 is a login menu that serves to limit access rights for users to view and interact with data. Only registered users can access confidential data. With this login menu function students can do the learning process online and can access uploading the results of the assignments and access to download the files from the website.



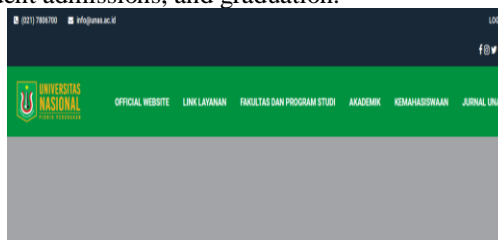
**Fig 5.** List of Subjects on Webkuliah

In Figure 5 is a list of courses that can be directly accessed on the website page of the webkuliah website, with the function of this feature students can conduct learners directly without having to use the login feature. From this overall user can see the material that has been provided on this feature menu.



**Fig 6.** Service Link Feature Menu

In Figure 6 there are several user features, in online academics go directly to the login menu in the learning process by access rights. And there is an online library menu that functions to process most of the book collections in digital format and which can be accessed by computer. This type of library is different from the conventional type of library in the form of a collection of printed books, micro films, or a collection of audio cassettes, videos, etc. And the general academic calendar menu in the world of education that refers to the annual schedule of activities of an educational institution that contains all matters related to the teaching-learning process, student admissions, and graduation.



**Fig 7.** Unas Journal Feature Menu

In figure 7 there is a journal feature menu which is a special article containing articles about a particular field. Journal is also a writing issued by a competent person in his field and published by an institution. Scientific journals cover all fields of science, such as Natural Sciences, Social Sciences, Humanities. With this feature, make students look for journal references needed by college website users.

### 3.2 Webkuliah System Testing

**Tabel 1**  
Website Functionality Testing

No	Testing the menu feature	Results	Status
1	Official Website	First time access to this web is the initial display.	Valid
2	Service Link	On the successful service link menu, users can go directly to the display of some of the features of this menu.	Valid
3	Faculty and Study Program	In this menu the user can go to the choice of each faculty and study program.	Valid
4	Academic	In this menu the user can do login privileges to edit personal data as well as filling in the enrollment and scheduling courses.	Valid
5	Student affairs	In the student affairs menu, users can view the event activities of each National University faculty.	Valid
6	Unas Journal	On the journal menu, users can access the required journals.	Valid

### 4. Conclusion

Based on the results of the testing process on the Lecture Website, it can be summarized as follows:

1. Online learning information system via Web This lecture can help National University students to get campus learning information online.
2. Providing a forum in the field of learning and science in facilitating the teaching process of lecturers to students to support the advancement of the National University education.
3. The learning process with the login menu feature has access rights that can be used by users who come from the National University.
4. The academic menu feature system was created as a means of information in presenting information on grade reports in the current semester and as a place for storing student personal data files.

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