

THE WEBSITE-BASED MAKASSAR AVIATION POLYTECHNIC E-LEARNING APPLICATION DESIGN USES MOODLENESIA

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Abstract

Desain of Aviation Polytechnic of Makassar E-Learning application website base using Moodlenesia created by Citra Astri Lestari at Bumi Permata Sudiang Block E1 No. 31, Biring Kanaya, Makassar, South Sulawesi. E-Learning is one of the technologies that serves to help teaching and learning activities. E-learning is growing rapidly. There are many platforms available to create E-Learning. One of them is Moodlenesia. Moodlenesia is a platform available on the website to create E-Learning. Moodlenesia has almost the same add-ins as Moodle, it's just that Moodlenesia is paid. This research method is based on the Government's Decision on the Implementation Learning during the Coronavirus Disease Pandemic Period 2019 (Covid-19). The instruments that we used are laptops or PCs and the internet. The results of this study show that using Moodlenesia in creating an E-Learning application is very easy. We can set its features, manage its users, and others. E-Learning by using Moodlenesia can make this current distance learning process run effectively.

Keywords: E-Learning, Moodlenesia, Application, Website.

Abstrak

Rancangan aplikasi E-Learning Politeknik Penerbangan Makassar berbasis website menggunakan Moodlenesia. E-Learning merupakan salah satu teknologi yang berfungsi untuk membantu kegiatan belajar mengajar. E-Learning saat ini berkembang sangat pesat. Banyak sekali platform-platform yang tersedia untuk membuat E-Learning. Salah satunya adalah Moodlenesia. Moodlenesia adalah platform yang tersedia di website untuk membuat E-Learning. Moodlenesia ini mempunyai add-ins yang hampir sama dengan Moodle, hanya saja Moodlenesia berbayar. Metode penelitian ini berdasarkan Keputusan Pemerintah tentang Penyelenggaraan Pembelajaran Di Masa Pandemi Coronavirus Disease 2019 (Covid-19). Instrumen yang digunakan pada penelitian ini adalah laptop atau PC dan internet. Hasil penelitian ini menunjukkan bahwa menggunakan Moodlenesia dalam membuat sebuah aplikasi E-Learning sangat mudah. Kita dapat mengatur fitur-fiturnya, mengatur penggunaannya, dan lain-lain. E-Learning dengan menggunakan Moodlenesia ini bisa mengefektifkan proses pembelajaran jarak jauh saat ini.

Kata kunci: E-Learning, Moodlenesia, Aplikasi, Website

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INTRODUCTION

According to PM No. 48 of 2019, the Makassar Aviation Polytechnic, from now on referred to as the Makassar Aviation Polytechnic, is a state university within the Ministry of Transportation which is under and responsible to the Head of the Transportation Human Resources Development Agency. There are 4 study programs at Makassar Aviation Polytechnic: Air Traffic Management Diploma Three Program, Airport Technology Diploma Three Program; Diploma Three Program, Air Navigation Technology, and Aircraft Maintenance Technology Diploma Three Program.

The outbreak of Corona Virus Disease (Covid-19), which has hit more than 100 countries in the world, has presented challenges for educational institutions and significantly higher education. Anticipating the transmission of the virus, the government has issued various policies, such as isolation, social and physical distancing to large-scale social restrictions (PSBB). This condition requires its citizens to stay at home, work (work from home), pray, and study. During the Covid-19 pandemic, the teaching and learning process was shifted from face-to-face to online. Some obstacles will undoubtedly be found in online learning, so students must find solutions to their challenges. According to Suryani (2010), obstacles in the learning process can reduce students' interest in education. According to Heri Gunawan (2020), Google Classroom (GCR) is the most used media (60%) in this online learning system.

Therefore, the authors designed a website-based Makassar Aviation Polytechnic e-learning application using Moodlenesia. This application provides features like e-learning in general, such as columns for lecturers to give assignments to cadets and others. With this, the author compiled a final project entitled "Design of Website-Based Makassar Aviation Polytechnic E-Learning Application Using Moodlenesia."

METHOD

In designing a website-based Makassar Aviation Polytechnic E-Learning application using Moodlenesia, the authors carried out several stages.

- a. Data collection is a process to fulfill the data that will be included in the designed application.
- b. Application design is a process that aims to be able to display the application attractively and dynamically so that application users are satisfied with the features and appearance are shown in the application to be designed.
- c. Application testing is the stage where the application design will be tested to see how well the designed application is running.
- d. Implementation of the application results from research designed to be tested in real terms with the form of a website application to see if the study is going well.

Moodlenesia has provided several features in it. The first thing to do is create an admin account which will later manage all access, courses/courses/subjects to be created, and most importantly, the application control center. Then, the admin creates teacher and student accounts or users. The teacher user here functions to provide material and assignments to

students. User students perform to deliver the results of projects given by the teacher. In Moodlenesia, we can see who is online, which allows us to communicate with each other.

The testing technique that will be carried out is the first, namely whether the user can enter the E-Learning website that has been made. Then, check whether the tabs on the left work correctly. Then try to make one subject and assignment whether it can be accessed according to what you want. For the certificate page, the user will try, as a teacher, to provide certificates for students. For personal files, pages will be tested.

Table 1. Dashboard test

Test Case	Scenario	Expected result	result	
Dashboard	Showing profile and following course	Displayed and accessible	Yess	no

Table 2. Course page

Test Case	Scenario	Expected result	result	
Course Page	Displaying the lesson	accessible	Yess	no

Table 3. Certificate page test

Test Case	Scenario	Expected result	result	
Certificate page	Displaying the certificate given by the lecturer	accessible certificate	Yess	no

Table 4. Lesson page test

Test Case	Scenario	Expected result	result	
Individual page	Uploading available column	File uploaded	Yess	no

Table 5. Assignment page test

Test Case	Scenario	Expected result	result	
Calendar page	Press one of the dates of the	Display the organized schedule	Yess	no

RESULT AND DISCUSSION

This research uses the Moodlenesia platform, where Moodlenesia no longer requires hosting. Moodlenesia is like Moodle; the difference is that Moodle is free but requires hosting, while Moodlenesia is paid but does not require hosting.

This Moodlenesia is complete for E-Learning, making it easier for us in teaching and learning activities. Moodlenesia is managed by an admin who adds users, edits platforms, and controls systems in this E-Learning.

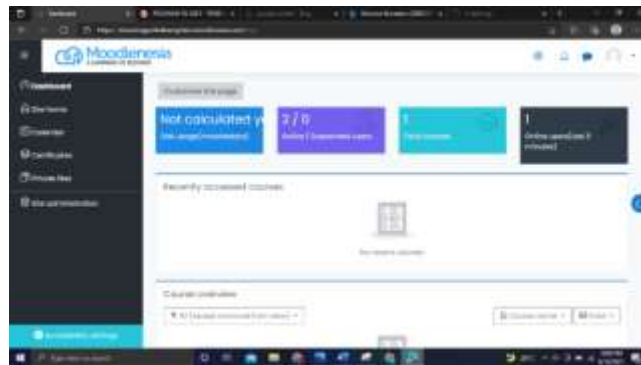


Figure 1. Display of Moodlenesia

The advantages and disadvantages of the application:

A. Advantages of the application

1. Easy to build or install
2. It does not require a host, so using the application is very easy.
3. The storage media is cloud-based or online, so files are needed so we can retrieve these files in our account.
4. This application is easy to set what features we want.
5. Moodlenesia has a Technical Support feature that is ready in 24 hours.

B. Disadvantages of the application

1. This application is paid
2. This application has a storage space limit according to the selected package.
3. This application has user limits according to the selected package.

Comparison of Makassar Aviation Polytechnic E-Learning with E-Learning using Moodlenesia. In this study, the authors compared the current Makassar Aviation Polytechnic E-Learning using Moodle 4.0 and E-Learning using Moodlenesia. After coordinating with the IT Head, E-Learning at the Makassar Aviation Polytechnic is currently using the latest version of Moodle, namely Moodle 4.0. We need to download Moodle 4.0 first. To be able to run Moodle, XAMPP have to be installed as well. XAMPP here is used to manage the Moodle database. However, we need a host for our Moodle E-Learning to be accessible through the website.

Meanwhile, to create E-Learning using Moodlenesia, we only need to visit the Moodlenesia website, then fill out the form to create a domain address and select the desired package. And our E-Learning has been made and can be accessed on the website. The features in Moodle and Moodlenesia are almost the same, namely Dashboard, Site Home, Calendar, Private File, and Site Administration features. However, in Moodle, there is a Content Bank feature where this feature contains files in the form of content such as videos, music, and others.

CONCLUSION

From the results of this design, it can be concluded that Moodlenesia is almost the same as Moodle, which distinguishes Moodlenesia from utilizing online storage (Cloud). While Moodle makes use of hosting, in Moodlenesia, we can manage what features we will use; Moodlenesia has limited users and storage according to the package we choose, and Moodlenesia is very easy to make.

REFERENCES

- Surjono H. D. 2010. Membangun Course E-Learning Berbasis Moodle.
- Rizal S. & Walidain B. 2019. Pembuatan Media Pembelajaran E-Learning Berbasis Moodle Pada Matakuliah Pengantar Aplikasi Komputer Universitas Serambi Mekkah.
- Hardyanto R.H. dan Surjono H. D. 2016. Pengembangan Dan Implementasi E-Learning Menggunakan Moodle Dan Vicon Untuk Pelajaran Pemrograman Web Di SMK.
- Muhammad, H., R. Eka Murtinugraha dan Sittati Musalamah. 2020. Pengembangan Media Pembelajaran E-Learning Berbasis Moodle Pada Mata Kuliah Metodologi Penelitian. *Jurnal Pensil: Pendidikan Teknik Sipil*, 9(1), 54 - 60. <https://doi.org/10.21009/jpensil.v9i1.13453>