# **Counseling System Lecturer for Bali State of Polytechnic Students**

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Keywords: Technology, System, Application, Counseling, Communication.

Abstract: The development of computer technology is now very far developed from previous years. This development occurs in all areas of life. Like the world of medicine, industry, agriculture and others. Technology also greatly helps various human work easier, fast and efficient. This computer technology is in the form of hardware and software. The software used can be in the form of a system and application. To run this system and application requires software in the form of student data processing as a student guided by a certain amount of lecturers. Previously there were many problems in terms of data collection of prospective students who were guided because of the limitations of communication especially with the situation of the Covid-19 pandemic like now. As in early January 2021 when students have begun to vendor and before the street vendors end they have scrambled to look for the final assignment lecturer. This Counseling System application will help students as a user in terms of searching for information on the condition of the lecturer they will make the final assignment lecturer. Good time and communication will be shorter and easier. This application can be chosen with any recorded system by giving a link in the form of navigation buttons.

## 1 INTRODUCTION D TECHNO 1.1 Problem Background T DN=

Technological progress is currently very fast and covers all disciplines. Especially on the computer technology, the use of computers in everyday life cannot be separated by lifestyle. Almost every activity or the work done is very helpful with the existence of computer. Technological advances always aim to help human life better, more comfortable, or easier. But there are still many that have not been used technology, for example the closest to our lives, namely digital technology. Digital technology has been widely used in various fields, both felt and not feels, as the closest example is a song. In the era 80s and 90s, listening to music still uses cassettes (cassette tape), while now without feeling digital files used for songs, namely MP3. Digital the camera also gives us a lot of convenience in comparison to the film camera.

In the development of communication and interactions between students and lecturers, a lot of media including whatsapp. Towards the beginning field work, students have interacted a lot with the lecturer to be submitted as a final project teaching lecturer. There are many obstacles in terms of submission as a supervisor so that students look scramble to become a student guidance. Many of time wasted interacting final determination lecturer's assignment.

#### 1.2 Problem

One way to make it easier for computer users to interact with this system is to manage student data as final assistant student guidance.

The problems that arise are:

How to record student data as guidance of

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#### 60

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prospective students ends easily and not hard to find.

 What application is used to record data of final project student guide.

## 2 RESEARCH METHOD

This research is conducted by a literature study method or literature study, data collection techniques, measurement and software with the following work steps:

#### 2.1 Research Approach and Concepts

Use books, articles, and other sources that feasible, such as scripts available on the internet for support this research problem. Design from this research is described as follows:



Figure 1: Existing Condition and Research Design.

From the picture above is a research concept that can be explained by the following steps:

- Prepare Digital Guidance of Guidance Form entered in the master system.
- The inputted data will be stored in the system database.
- Using the PHP programming language as file processing to produce digital documents which will be used as a basis for making decisions.
- Files in the form of digital documents produce information for students and lecturers.

#### 2.2 Flowchart

This research begins by preparing supporting data such as Windows system, Word, Excel, PowerPoint, Photoshop, Corel Draw applications, anti-virus application as Resident Memory application and several other applications. File processing using the PHP programming language that is run on the Windows Explorer and Mozilla Firefox browser. And we use the laravel framework to layout the system. This framework now familiar on every web designer.

#### 2.3 Research Procedure

- System installation on a computer with various versions such as Windows XP SP3 system, Windows Vista system and Windows 7 system and some others applications such as Microsoft Word, Microsoft Excel, Microsoft PowerPoint, graphics applications like Adobe Photoshop, Corel Draw, Macromedia Flash, Macromedia Dreamweaver.
- Implementation of this PHP programming language is used on localhost first with various browsers such as Windows Explorer and Mozilla Firefox.
- Perform processing on localhost, after running well then publish to hosting and domain servers.
- Measuring lecturer data and student data in uploaded conditions.
- Comparing the results of data processing in localhost with data on hosting.



Figure 2: System Flowchart.

## **3** RESULT AND DISCUSSION

In this study we use the same files to get stability in measurement. This treatment was carried out on the same application by distinguishing the use of localhost and cpanel in hosting. Making Index.php files using Macromedia Dreamweaver and sent using FileZilla. Header design uses Corel Draw version 12.

### 3.1 Result Measurement

The data that is narrowed in this study uses a text format. With the VARCHAR data type for the name of the student and the name of the supervisor, as well as the integer data type for NIM students and NIDN supervisors and the maximum number of students being mentored by lecturers.

Name	NIM
Ni Putu Mira Dewi	1815323013
I Komang Widi	1815323040
Ni Wyn Diah Astuti	1815323008
Gede Ananda AA	1815323012
Putu Arva Gotama	1715323027

Table 1: Student Data used for research.

Table 2: Lecturer Data used for research.

Name	NIDN
	001005(500
Drs. I Nyoman Sangka, MT.	0010056509
I Gede Suputra Widharma, ST.MT.	0027127205
Putu Gde Sukarata, ST.MT.	0014037205

### 3.2 Discussion

Features in this system are homepage, student and supervisor. On the homepage, you can see the welcome user display. On the Student menu, you can see the data of students who have registered and have a supervisor, there is also a check list to see the supervisor with the remaining quota. If a student tries to re-enter his name by selecting a supervisor who turns out to be a full quota, the system will display a message that the supervisor has a full quota. And if there is still an empty quota, the system will display a message that the student data has been successfully entered with the remaining quota for the supervisor. In the Lecturer Excellence feature, there is a Data Input Form, the name of the supervisor and the maximum number of guided student quotas and there are changes and delete actions.



Figure 3: Landing Page Arsipdosen.

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		Counseling S Dosen - Mahasisu	<b>7stem</b> 7a PNB	
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Fi M MATERIALORO @ Home 21 Monorphic	Q Mahasiswa Hana J. Adhasiswa Data Mahasiswa	C	59	
Fi M MATERIALORO @ Home 21 Monorphic	Q Mahasiswa Hane 3 Adhasiswa Data Mahasiswa		nseling System	
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Fi MATERIALORO MOTOR	C Mohasiyaa Mara Jakonina Data Mahasiwa Cata Mahasiwa Mara Mara Mahasiwa Mara Mara Mara Mara Mara Mara Mara Mar	Mini Tanan Pendardang Mini Tanang Wal Antana Gada Antana Mila Makalasa Gada Antana Ad Apilasan Mi Panu Mila Davi	Drien feerbesten Toosis Supura Washimma ST Jul 1 Gede Supura Washimma ST Jul 19 - Hypernan Stangia, MT.	

Figure 5: Dashboard Students.

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IC Dosen Pernbimbing	Data	Dosen Pembimbing			
	No	Nama Dosen	Mox Membimbing	Terpilih	Status
	1	Drs. I Nyoman Sangka, MT.	2	2	Penuh
	2	i Gede Suputra Widharma, ST.MT.	2	2	Penuh
	3	Putu Gde Sukarata, ST.MT.	4	0	Masih Tersedia

Figure 6: Checking Lecturer.

Y MATERIALPRO		🙆 Markam Doe
<ul> <li>Dashboard</li> <li>L' Mahasitwa</li> </ul>	Dosen Pembimbing Home > Dosen Pertoimbing	
II) Dosen Pernbimbing	Filh Dosen Filh Dosen NM Musikarin RM anta Namo Muhatiswo	8
	Masukaan karna Mahaaliwa	
0 <b>n</b> 0		

Figure 7: Choosing Lecturer.

Framework is a set of structures and conceptual guidelines, which are used to build something useful. So it can be said that the framework is a software to make it easier for programmers.

Within the framework there is software, the software framework is a structure that can be used to build something. Software Frameworks allow you to use different types of components, communicate with external APIs, and define the structure of your application.

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år Mohasiswa	Home 7 h				
IC Dosen Pembimbing	Data	Mahasiswa			
	Doser	n telah berhasil di pilih!			
		ch Mahasiewa Cek S	Rotus Dosen Pernbimbing		
	No	NIM	Nama Mahasiswa	Dosen Pembimbing	
	1	1715323027	Putu Arva Gotama	Putu Ode Sukarata, STMT.	
	2	1815323040	I Komang Widi Antara	I Gede Suputra Widharma, ST.MT.	
	3	18/53230/2	Gede Ananda Adi Apriliawan	I Gede Suputra Widharma, ST.MT.	
	4	1815323013	Ni Putu Mira Dewi	Drs. i Nyoman Sangka, MT.	
0 <b>m</b> 0	6	1875323008	Ni Wayan Diah Astuti	Drs. I Nyoman Sangka, MT.	

Figure 11: Choosing Lecturer Success.



Figure 9: Full Quota of Lecturer.



Figure 10: Try to Choosing Another Lecturer.

Figure 13: Form Input Lecturer.

		Markam Doe
Dashboard ± Mahasiswa	Dosen Pembimbing Home > Dosen Pembimbing	
C Dosen Pernbimbing	Nama Dolan Pulu do Isalanta 11.47. Mas Mondonbing 4	
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Figure 14: Maximum Input Quota.

## 4 CONCLUSIONS

From the research that we have done, it can be concluded that by providing a maximum limit in guiding students in each lecturer will make students no longer scramble to choose a lecturer as a supervisor. As a control of this system, the student who first contacts the lecturer to be the supervisor of the final project and gets approval, the student will get a quota from the supervisor. By using the Laravel framework, the appearance of the website will be simpler and easier to access. While the suggestion on this system is to provide information to users by pulling the NIM from the student and the NIDN from the supervisor, so that the system is not inputted manually.

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## REFERENCES

Adi Kusrianto, (2006), Macromedia Flash Profesional 8, Surabaya, PT. Elexmedia Komputindo

- Arista Prasetyo Adi, (2012), Web Makin Dahsyat Dengan jQuery, Semarang, PT. Elexmedia Komputindo
- Chandra, (2003), Menggambar Kartun Dengan Freehand MX, CV. Maxikom.
- Deni Sutaji, (2011), Mini Market Dengan PHP & jQuery, Yogyakarta, Lokomedia
- F.H. Zanzad, (2005), Dreamweaver MX, Surabaya, INDAH
- Harianto Kristanto. Ir, (2004), Konsep dan Perancangan Database, Yogyakarta, ANDI
- Janner Simarmata dan Imam Paryudi, (2006), Basis Data, Yogyakarta, ANDI
- Pendit, Putu Laxman.(2008). *Perpustakaan Digital A sampai Z.* Jakarta: Karya Cipta Aksara.
- Pusat Penelitian dan Pengabdian Kepada Masyarakat Politeknik Negeri Bali, (2017), *Rencana Induk Penelitian (RIP) Politeknik Negeri Bali.*