

Scheduling And Absence Information Systems For Discipline of Lecturers in Teaching (Case Study: Pos Indonesia Polytechnic Lecturer)

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Abstract

Pos Indonesia Polytechnic is a higher education institution established by the Bhakti Pos Indonesia Education Foundation (YPBPI). The discipline of staff and lecturers are very much taken into account this can be seen from the existence of a sanctioned point system applied. Calculation of attendance and sanctions is applied by looking at the time of the lecturer's delay. In calculating the presence of administrative sanctions, it still does it manually, with the data source coming from the fingerprint-based attendance system. In addition, scheduling substitute teaching hours when lecturers are unable to attend have not been organized. The creation of a management information system (SIM) and schedule that will make the calculation of the attendance of lecturers automatically. This application is built using the programming language PHP (Hypertext Preprocessor) by following the Codeigniter (CI) and MySQL as the database. The results of the trial on this application can be used to perform attendance calculations and view lecturers' schedules. Which of these applications can be used at the Pos Indonesia Polytechnic.

Keywords: Design, Discipline, Management Information System, Scheduling.

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1. Introduction

Human resources are one of the elements. Without a good management presence in managing human resources there are operational activities that will not work well. Therefore, good management is needed so that human resources are maintained.

Pos Indonesia Polytechnic is one of the higher education institutions established by the Bhakti Pos Indonesia Education Foundation (YPBPI), which is directly under the supervision of PT. Pos Indonesia (Persero). In carrying out the working process, it has several human resources including experts and support staff. One of the management's efforts to ensure that its human resources are maintained in its work discipline, the campus applies a attendance counting system to daily attendance, especially to lecturers. Where before teaching, lecturers will attend attendance first at BAAK. In addition to managing attendance, BAAK also manages scheduling in the course.

The problem that occurs is that it still performs the attendance calculation process manually. The process of calculating the presence of lecturers takes a long time. Besides scheduling that has not been organized, such as the presence of conflicting course schedules. So that a system is needed to make attendance and scheduling calculations that are currently running quickly and precisely.

Therefore based on this reason the author tries to take the theme in writing this thesis with the title "Information System Scheduling and Attendance for the Discipline of Lecturers in Teaching".

2. Related Works

2.1. Designing

Designing is an election process and thought that connects facts based on assumptions relating to the future by describing and formulating certain activities that are believed to be needed to achieve certain goals and describe how they are achieved.[1]

2.2. Management

Management is the process of planning, organizing, directing, and controlling activities to achieve organizational goals effectively and efficiently by using organizational resources.[2]

2.3. Discipline

Discipline is the awareness or willingness of someone to obey all organizational or company regulations and prevailing social norms.[3]

2.4. Scheduling

Scheduling is a design activity in the form of allocating resources both machinery and labor to run a set of tasks according to the process in a certain period of time.[4]

2.5. CodeIgniter

According to Hakim (2010: 8) CodeIgniter is a PHP framework that can help speed up developers in developing PHP-based web applications rather than writing all program code from scratch.[5]

2.6. Database

The database is an arrangement of complete operational data records of an organization or company, which are organized and stored in an integrated manner using certain methods in the computer so that they are able to fulfill the optimal information needed by users of many human activities that use computers as a means of processing data needed a database software.[6]

2.7. MySQL

MySQL is an implementation of a relational database management system (RDBMS) that is distributed free under the GPL (General Public License).[7]

2.8. UML (Unified Modeling Language)

Is a standard specification language for documenting, specifying, and building software systems. Unified Modeling Language (UML) is a set of structures and techniques for modeling Object Oriented Programming (OOP) designs and their applications. UML is a methodology for developing an OOP system and a group of tools to support the development of the system.[8]

2.9. Research Methods

In writing the project report II this stage of research is carried out with data collection techniques that will be carried out to complete data or information.

2.10. System Analysis

An Analysis is a process to determine the shape of the needs of a tool application system in the form of a need at the time of construction or during implementation.

3. Result and Analysis

From the results of the analysis that has been done, the paths that are running on the Information System Scheduling and Attendance for the Discipline of Lecturers in Teaching are as follows:

3.1. Analysis of BPMN in progress

The depiction system that is running by using BPMN is an analysis system that is used in general. This process can be described as follows:

3.1.1. BPMN is running

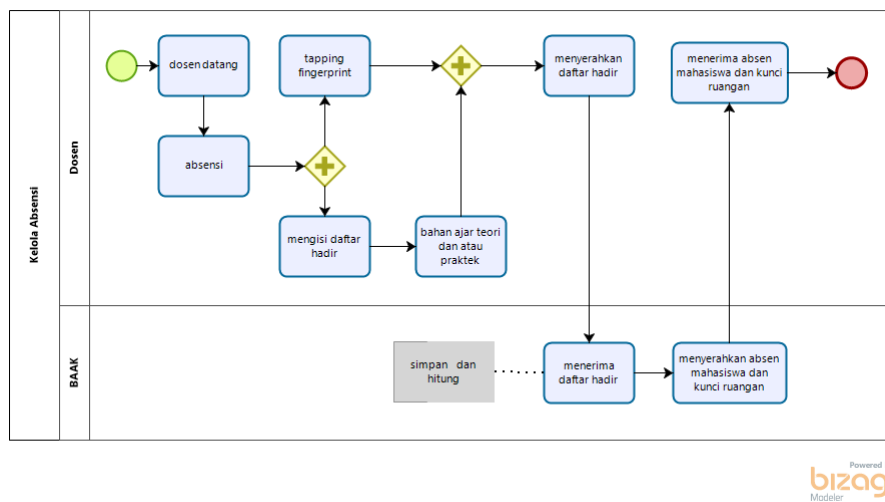


Figure 1. BPMN is running

3.1.2. BPMN will be built

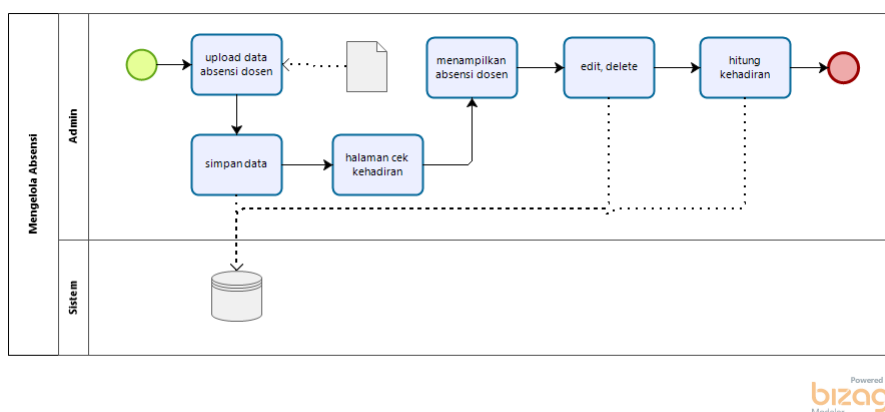


Figure 2. BPMN will be built

4. Implementation and Testing

4.1. Admin Page And Schedule Page

Inside the admin page, there are Master Pages, Reports, Utilities, and Scheduling. And in the menu looking at the lecturer schedule, there is a schedule of lecturers who log in. Starting from courses, rooms, time and date.

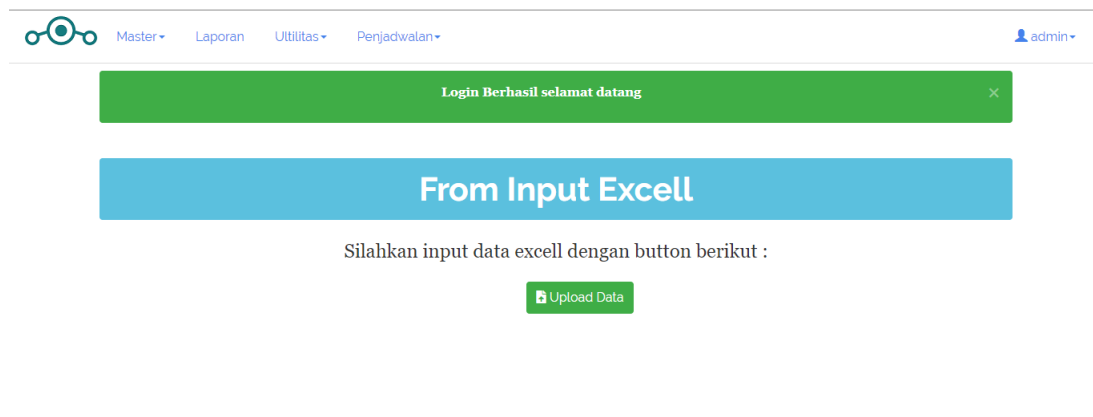


Figure 3. Admin Page

The screenshot shows the Schedule Page interface. At the top, there is a navigation bar with a link: Penjadwalan. A user profile 'Roni Habibi' is visible on the right. The main content area is titled 'Data Users' and contains a table with the following data:

NO	NIK	Nama Dosen	Id Spesialis	Id Matkul	Nama Matkul	SKS	Id Jurusan	Id Prodi	Nama prodi	Kelas	Ruangan	Waktu	Tanggal	Status
1	11524	Roni Habibi	IF	1	Keamanan Jaringan	1	1	1	TI	D4T13B	320	13:00:00	2019-01-25	sudah ada jadwal

Figure 4. Schedule Page

5. Conclusion

The conclusions that can be drawn from making the application for managing attendance and scheduling are as follows:

1. This application can facilitate the process of managing attendance and attendance calculations for lecturers.
2. Systems that are designed and built as simply as possible to make it easier for users to operate them. This application also provides scheduling and report printing features from lecturer data.

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