Data Basic Information System Based On Accreditation Based On Trunojoyo Madura University

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ABSTRACT

The accreditation program of undergraduate study is an evaluation process which is done periodically by a body that has the authority i.e. the BANPT. The implementation of the process of preparing the accreditation program of study form of some organizations which play a role in manage and supply the data needs of the accreditation form. The data used by the program to study the process of preparation of the accreditation form is historical data collected periodically from time to time in order to give an overview of the activities/information. The process of collecting the scattered data from each of these organizations require great resources and time briefly. The system used a course at University in conducting the Madura Trunojoyo gathering historical data accreditation by searching, collecting and recording the data in its own separate list and yet maximally computerized and centralized yet most of the management and the management of its data. So it developed a system that can muster such data i.e. Information System Database-based Accrediting University Trunojoyo Madura .

Keywords: Database, Accreditation of Degree, Accreditation Forms, Information Systems, Systems Of Accreditation.

1. Introduction

Accreditation of undergraduate study programs is an evaluation process that is carried out periodically by bodies that have the authority in the research and evaluation process namely BAN-PT so that undergraduate study programs can carry out educational programs in accordance with established standards. [1] Accreditation preparation activities, involving Educational Institutions Association which refers to the accreditation forms that have been established by BAN PT. In addition, the implementation of the process of drafting accreditation forms for study programs cannot be separated from several organizations that have a role in managing and supplying data on accreditation forms needs. The accreditation process based on these forms requires a lot of historical data and the preparation process takes a very long time. Historical data is data that is collected periodically from time to time with the aim later can provide information from an activity. [2] Historical data required for accreditation forms involves data from at least three years prior to the submission of accreditation. Historical data is very vulnerable to availability. In order to avoid losses such as data redundancy, data errors, the accuracy of the information presented, a long and long process, involving enormous resources, loss of data, and the difficulty of data management. The system used in collecting historical accreditation data from several related organizations at the University of Trunojoyo Madura by searching, collecting and recording data in their own separate lists. Based on this, a system that can manage historical data can be developed so that it becomes a data that can support the accreditation process. it is easy for the relevant agencies namely the undergraduate study program at the University of Trunojoyo Madura so that the system to be developed is expected to be able to further optimize and reduce the need for large resources in the process of collecting the accreditation historical data distribution.

2. Literature Review

Eka Kusmayadi (2008) explained in his research entitled Access and Utilization of Scientific Journal Data Base, that the database is called / called a system that can perform data collection management, whether processed manually or automatically using a computer and organized and stored in digital storage media or archive. [3] In the Academic Paper for the Accreditation of Undergraduate Study Programs (BANPT: 2008) it is explained that the Accreditation of undergraduate study programs is the process of evaluating and evaluating the quality and capacity of study programs in the organization of tertiary education programs. The assessment process to determine the feasibility of study programs in the implementation of each program is carried out by a team of colleagues who understand in detail the implementation of the study program.

An accreditation assessment element is a standard that has been set and used as a benchmark in assessing undergraduate study programs. The study program must meet each element of the assessment so that its quality can be guaranteed. The initial requirement for the assessment to be processed is to have to complete and fulfill a permit to hold a undergraduate study program from an authorized official. Accreditation assessment standards consist of seven assessment standards, namely:

1. Vision, Mission, Objectives and Targets, and Achievement Strategies
2. Governance, Leadership, Management System and Quality Assurance
3. Students and Graduates
4. Human Resources
5. Curriculum, Learning and Academic Atmosphere
6. Financing, Facilities and Infrastructure, and Information Systems
7. Research, Services / Community Services and Collaboration

3. Design

System development model that uses the Waterfall model. The development method using Waterfall Diagram is worked out coherently for each process. If there is a process that is lacking or incompatible it will return to the previous process and so on.
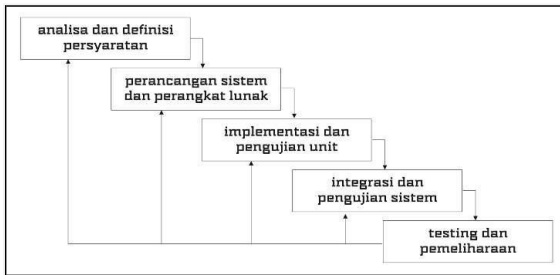

Figure 3.1 System Overview
System Overview

Overview of the System In the general description of the system there are three devices used in this study. The device consists of the following:
1. Client computer, whose function is to access the needs of accreditation data, besides that it is also used to CRUD on the server side.
 2. Web Server, which is used to provide web services from the server to the client.
3. Server computer, functions as a service provider for every request or request that enters the client-server. For more details about the tasks of each device can be seen in Figure 3.1 below.
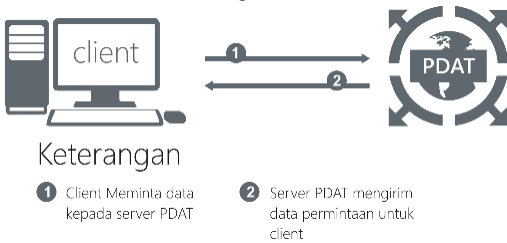

Keterangan

① Client Meminta data kepada server PDAT
② Server PDAT mengirim data permintaan untuk client

Figure **3.2** System Overview

User matrix is used to describe and describe the type and access rights of each actor involved in the system being built. Matirks user expectations can facilitate a brief explanation of the rights or limitations of each actor in the system being built. The following is a matirks table that explains each access right in each accreditation form for undergraduate study programs

Data Akreditasi	Dosen	Prodi	Fakultas	LPPM	BAUK	BAAK
Visi Program Studi	E	CRUD	E	E	E	E
Misi Program Studi	E	CRUD	E	E	E	E
Tujuan Program Studi	E	CRUD	E	E	E	E
Sasaran dan Strategi Pencapaian Program Studi	E	CRUD	E	E	E	E

Figure 3.3 System Overview

Information:
C: Create data
R: Read data
U: Update data
D: Delet data

4. RESULTS AND DISCUSSION

Implementation of the Database Information System for Accreditation Based Study Program of the University of Trunojoyo Madura requires a hardware that can be used as the main server to hold all data (centralized server). Implementation of the system is distinguished based on two portal accesses namely the Accreditation Portal and the Academics Portal. Academic portal for Lecturer / Academic user group and accreditation portal for institutional / organizational user group.

No	Jenis User	Berlaku di Sistem
1	Dosen	Portal Akademisi
2	Program Studi	Portal Akreditasi
3	Fakultas	Portal Akreditasi
4	BAAK	Portal Akreditasi
5	BAUK	Portal Akreditasi
6	LPPM	Portal Akreditasi
7	Administrator/PJM	Portal Akreditasi

Figure 4.1 User Access Matrix Portal

Academic portal is a portal used by lecturers / academics in managing data related to Lecturers as Human Resources who also play an active role in supporting the accreditation data. The following is the login screen and home on the academics portal:
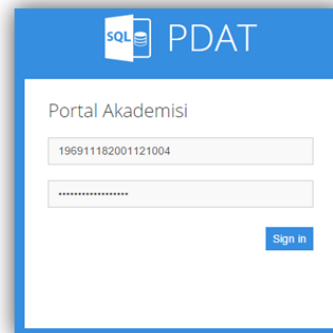

Figure 4.2 Academic Portal Login Page

The accreditation portal is accessed by organizations / institutions other than related study programs as the main stakeholders in the preparation of accreditation forms which cannot be separated from the role of the preparation of accreditation forms including the Faculties, LPPM, BAUK, BAAK and the University Quality Assurance Center. The supporting data for the compilation of accreditation forms is owned by each agency / organization so that the data collection process cannot be separated from each agency / organization related to the accreditation. Each instance / organization has different access rights to the system, referring to the explanation on the access rights table previous user.

In this research, the system trial uses analysis and verification of the system design of the system that has been developed. Process features offered in system implementation towards system design design. The process refers to the user matrix which is a description of the features and access rights of each user group whether the system implementation is in accordance with the system design.

5. CONCLUSIONS

research has result in two system portals, namely a portal for Academics which includes Lecturers and a portal for organizations / institutions which include Study Programs, Faculties, LPPM, BAUK, BAAKPSI and the Trunojoyo University Madura Quality Assurance Center.

Database system built in this research can manage historical data to report presentation process to support the accreditation process.provided as part of the figure. Figures should be placed at the top or bottom of a page wherever possible, as close as possible to the first reference to them in the paper. Please ensure that all the figures are of 300 DPI resolutions as this will facilitate good output.

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