Design of quality assurance filing system

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Abstract. Filing or filing system is a system to find out how to store data from certain files and file organization used. Access system is a way to retrieve information from a file. Data representation consists of two, namely logical data that represents data at the conceptual level as well as physical data, namely data that has been prepared which is the final result of logical data and usually stored in storage media. Case studies taken on the filing of quality assurance in the study program environment that cover the fields of academics, student affairs and infrastructure.

1. Introduction

In accordance with the directives of the Directorate General of Higher Education regarding higher quality assurance consisting of internal quality assurance and external quality assurance, the study program that produces human resources with good competence must realize these directives. For this reason, a good filing system is needed in the study program so that internal quality assurance can be implemented.

As a quality assurance tool the study program functions to carry out the quality assurance process for the Tridarma program of activities of the University which includes Teaching, Research and Community Service. There are also general quality assurance tasks, namely: Developing tools and guidelines for quality assurance of academic education, research and community service programs, as well as general non-academic programs and activities. Coordinating the implementation of academic and non-academic program quality assurance activities in the study program.

Carry out studies of the results of the implementation of quality assurance carried out by all fields in the study program, namely the Academic field, Student Affairs, Infrastructure, Delivering the results of the study to the Assistant Dean I who oversees the academic field. Arrange quality and activity standards in study programs in collaboration with the Chair of the Study Program.

By looking at the general tasks of quality assurance as above, a good filing system that covers the fields of academics, student affairs, infrastructure needs to be done so as to facilitate the administrative work of the study program and the appropriate decision making by the Chair of the Study Program.

The purpose of this study is the formation of a filing system which includes monitoring and evaluating lectures, lecturer performance and infrastructure facilities that are part of the study program quality assurance.

Higher education quality assurance systems are carried out on the basis of internal quality assurance, external quality assurance, and licensing for program implementation. Explanation of the three elements as follows.
1.1. Internal quality assurance
Internal quality assurance is quality assurance carried out by higher education institutions in the manner established by implementing universities. Parameters and methods of measuring results are determined by the university according to its vision and mission. By running internal quality assurance, higher education institutions should conduct internal evaluations called periodic self-evaluations. Self-evaluation is intended to strive for continuous quality improvement.

1.2. External quality assurance
External quality assurance is quality assurance carried out by accreditation bodies such as BAN-PT or other institutions in a manner determined by the accreditation institution that carries out. Parameters and methods of measuring results are determined by the accreditation institution that conducts. Accreditation institutions represent the community so that they are independent. Accreditation by accreditation institutions is intended to conduct external evaluations to assess the feasibility of programs of higher education institutions. In addition to assessing the feasibility of the program, accreditation is also intended to provide suggestions for improvement in seeking continuous quality improvement. External quality assurance is hereinafter referred to as accreditation.

1.3. Program implementation permit
Licensing for implementing the program is given by the Directorate General of Higher Education for educational units that meet the requirements for implementing education programs. The procedures and parameters used are set by the Directorate General of Higher Education in accordance with existing provisions. Licensing is not only intended as an external evaluation but also to assess the feasibility of compliance with the implementation of the program. Thus, higher education quality assurance as a whole is intended to improve the quality of higher education institutions on an ongoing basis.

Study Program Quality Assurance Model. The quality assurance process itself is based on:
- Indicators of program performance and study program activities for a certain period of time have been determined at the study program meeting.
- Quality assurance for quality programs and activities is carried out thoroughly at the stages: input, process, output, outcome.
- Quality assurance refers to the approach that has been practiced at other institutions with adaptation to the conditions of study programs.
- Quality assurance pay attention to proportionally the qualitative and quantitative aspects that have been achieved by work units and individuals on the quality target set for a certain period of time.
- Quality assurance is carried out through the development of a quality assurance system that includes MAE (Monitoring, Assessment, and Evaluation) processes for quality and accountable programs and activities to achieve stakeholder satisfaction.

Some of the studies that became references in this study include how to design and use research databases [1], Schema profiling of document-oriented databases [2], Administrative databases [3], Reverse engineering database queries from examples: State-of-the-art, challenges, and research opportunities [4], Efficient In-Database Patient Similarity Analysis for Personalized Medical Decision Support Systems [5].

2. Material and methods

2.1. Research location
The research was conducted in the Study Program of Computer Science, Mathematics and Mathematics Education by analyzing the needs and documents and records that exist.
2.2. Object study
The object of study is the object of research which is the focus of research. The object of research
collected is the management of filing important files using a computerized system.

2.3. Source data
Data collection is done by reading literature books related to filing Management Systems.

2.3.1. Primary data. The primary data in this study is to look directly at the things related to filing
systems, especially at the administrative level in storing important data that supports quality filing.

2.3.2. Secondary data. Secondary data in this study are documents relating to filing systems and their
benefits in improving computerized systems in study programs. This data is obtained from the method
of documentation and literature.

2.3.3. Data types. Qualitative data contains an explanation of quality filing which is an instrument in
the form that contains data and information used to evaluate and assess the quality of a study program.

2.3.4. Data collection method. To obtain relevant data, the authors use data collection methods
including the following:

a) Observation method
The reason the researchers conducted observations was to present an overview of the filing system that
could facilitate the rediscovery of the data needed. Observations are made directly on matters relating
to filing management. The data needed in the observation method is data about records management and
some information about making standards to support the quality assurance of study programs.

b) Interview method
This interview activity was conducted through question and answer directly to one of the study program
administrators.

- System Development Life Cycle (SDLC)

![System Development Life Cycle (SDLC)](image)

**Figure 1.** System development life cycle [6].
3. Results and discussion
Mockup of quality assurance filing system

Figure 3. Mockup form login. 

Figure 4. Mockup form menu.

4. Conclusion
Based on research and discussion on the design of the quality assurance filing system, conclusions can be drawn as follows:

- Quality assurance archive filing system is better to use a good computerized database.
- Making filing systems using software applications that make it easier for users to operate and store archives, especially quality assurance files that include monitoring and evaluation of
lectures, lecturer performance and infrastructure facilities that are part of the quality assurance of study programs.

- Archive filing system can ensure the security of the existence of the archive is stored, so as not to worry about archives damaged by termites or even lost.

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