

# Implementation of Cloud Accreditation as Accreditation Assessment Simulation in Lancang Kuning University

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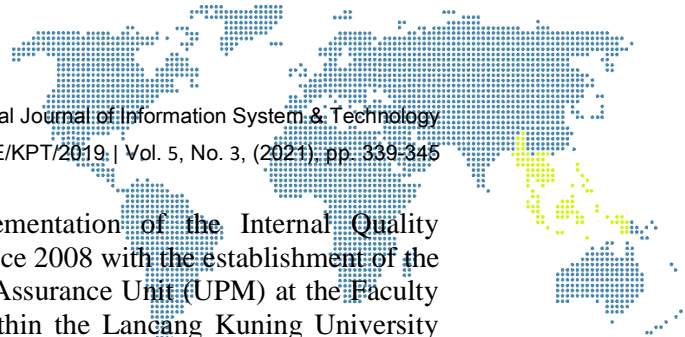
## Abstract

*SIM Accreditation Cloud is a media accreditation simulation facility that is used by the Study Program and BPM in implementing and monitoring the feasibility of the study program whether it is in accordance with the standards that should be in creating a quality culture. In the face of the Regulation of the Minister of Education and Culture (PERMENDIKBUD) No. 5 of 2020 and the regulation of the National Accreditation Board for Higher Education (BANPT) No. 1 of 2020, related to the mechanism for extending the accreditation of universities and study programs that already use the Higher Education Accreditation Instrument (IAPT 3.0) and Study Program Accreditation Instrument (IAPS 4.0), so We need a system that can help Lancang Kuning University in the preparation and implementation of accreditation assessment simulations for both universities and study programs in order to be able to adjust the implementation and preparation of the mechanism for extending the validity period of accreditation for colleges and study programs. However, the fact is that until now there has been no study program that has proposed an extension of the accreditation period using the Study Program accreditation instrument. Lancang Kuning University has 21 Study Programs consisting of 9 Faculties, in implementing an internal quality assurance system, Lancang Kuning University has a Quality Assurance Agency in charge of managing a quality culture, but in the implementation of accreditation with IAPS 4.0 this has not been effective, this is proven to be absent from the study program. who are ready to apply with IAPS 4.0, because there are still obstacles in the preparation of accreditation instruments, while the need for accreditation ratings is very much needed by study programs so that they are able to compete and realize the vision and mission of the study program.*

**Keywords:** Information System, Accreditation, Lancang Kuning University.

## 1. Introduction

In the face of the Regulation of the Minister of Education and Culture (PERMENDIKBUD) No. 5 of 2020 and the regulation of the National Accreditation Board for Higher Education (BANPT) No. 1 of 2020, related to the mechanism for extending the accreditation of universities and study programs that already use the Higher Education Accreditation Instrument (IAPT 3.0) and Study Program Accreditation Instrument (IAPS 4.0), so We need a system that can help Lancang Kuning University in the preparation and implementation of accreditation assessment simulations for both universities and study programs in order to be able to adjust the implementation and preparation of the mechanism for extending the validity period of accreditation for colleges and study programs. Determination of quality assurance (quality assurance) for all universities through the Higher Education Quality Assurance System (SPM Dikti) has long been announced by the government. Based on Law no. 12 of 2012 concerning Higher Education, this SPM Dikti includes the Internal Quality Assurance System (SPMI) and the External Quality Assurance System (SPME) or better known as Accreditation. At



Lancang Kuning University Mapping and Implementation of the Internal Quality Assurance System (SPMI) has been implemented since 2008 with the establishment of the Quality Assurance Agency (BPM) and the Quality Assurance Unit (UPM) at the Faculty level with the aim of creating a quality culture within the Lancang Kuning University Academic Community..

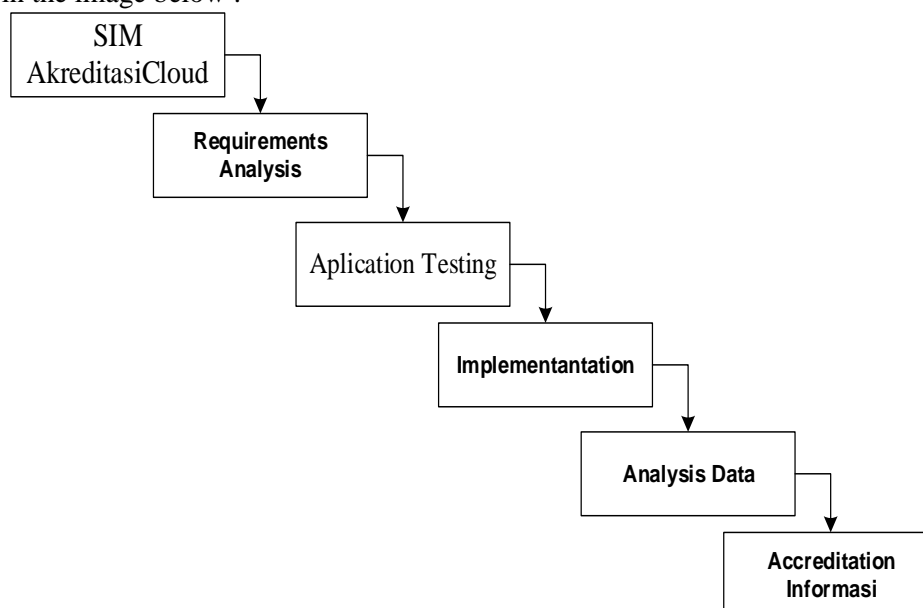
SIM Accreditation Cloud is an accreditation simulation media that is used by the Study Program and Quality Assurance in the implementation and monitoring of the feasibility of the Study Program whether it is in accordance with the standards that should be in creating a quality culture. Lancang Kuning University has 21 Study Programs consisting of 5 Faculties, in implementing an internal quality assurance system, Lancang Kuning University has a Quality Assurance Agency in charge of managing a quality culture, but in the implementation of accreditation with IAPS 4.0 this has not been effective, it is proven that there is no study program who are ready to apply with IAPS 4.0, because there are still obstacles in the preparation of accreditation instruments, while the need for accreditation ratings is very much needed by study programs so that they are able to compete and realize the vision and mission of the study program.

Based on the description above, the author tries to utilize the available resources and the application of information technology in the application of accreditation management information system applications to assist Lancang Kuning University in managing study programs for preparation of accreditation preparation and assessment simulations. The formulation of the problem in this study is as follows:

- a) How to design and model an accreditation management information system as a medium in the preparation and preparation of accreditation instruments for universities and study programs at Lancang Kuning University?
- b) How to design and model an accreditation management information system (Sim Akreditasi Cloud) as a media for simulating the results of accreditation assessments for universities and study programs at Lancang Kuning University?

## 2. Research Methodology

Research methodology and research framework used in the completion of this research. This framework is the steps that will be taken in order to solve the problems that will be discussed. The stages in the modeling used are Waterfall modeling, and can be seen in the image below :



**Figure 1.** Stages of the Waterfall Model



a) Sim Akreditasi Cloud

This modeling begins with the completion of the Sim accreditation cloud application that will be implemented. This is very important, reminding the software must be able to interact with other elements such as hardware, databases, and so on. This stage is often referred to as project definition. The system begins by conducting research beforehand on the elements of the system requirements in question and defining these needs.

b) Requirements Analysis

The need search process is intensified in the software. To know the nature of the program to be made, the software engineer must understand the information domain of the software. By collecting data needs by application users in the development of the archiving system to be built, in this case the developer collects accreditation data with the team of preparation of the Lancang Kuning university accreditation instrument.

c) Application Testing System AkreditasiCloud

Input Data	Expeted Result	Conclusion
Users enter the information technology-based Cloud SIM Accreditation SIM website link	The browser automatically displays the main information technology-based Cloud SIM Accreditation web page	Succes
User presses menu about	Showing the about page	Succes
The user presses the Accreditation Menu menu	Displaying the accreditation page	Succes
The user presses the Papers menu	Show papers page	Succes
The user presses the Registration menu	Displays the registration page and users can register for the seminar	Succes
The user presses the Schedule menu	Show schedule page	Succes
The user presses the Sponsor menu	Show sponsors page	Succes
The user presses the Gallery menu	Show gallery page	Succes
The user presses the Venue menu	Showing the venue page	Succes
The user presses the Download Template menu	Automatically download seminar template	Succes
The user presses the Download Poster menu	Automatically download poster	Succes

System Testing is the decomposition of a system when it will be implemented, with a view to identifying and evaluating problems, opportunities, obstacles, that occur and the expected needs so that improvements can be proposed. Something that is made must be tested and the results must really match the needs that have been defined previously.

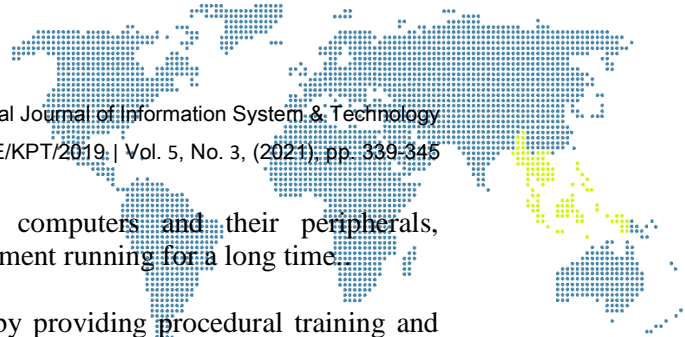
d) Implementasi Systems

System implementation is implementing an application that describes how a system is formed in the form of drawing, planning and sketching or arrangement of several separate elements into a unified whole and functioning, involving the configuration of software and hardware components of a system..

e) Implementation

The implementation stage is the stage where all system elements and activities are put together with the following steps:

- 1) Preparing Physical Facilities



The physical facilities provided include computers and their peripherals, including physical security to keep the equipment running for a long time.

a) App User Socialization

Users are prepared in advance, namely by providing procedural training and tutorials on information systems according to their task functions. The goal is that users understand and master the operating system and how the system works and what is obtained from the system.

b) Doing Simulation

Simulation activities are in the form of real system testing involving real personee.

2) Analysis Data

Data Analysis is an analysis of the activities of implementing the cloud accreditation sim application from study program and university data which will simulate the accreditation value in the application. So that the data is ready to produce information.

### 3. Results And Discussion

#### 3.1. Implementasi SIM Akreditasi Cloud

The following is a list of study programs that will fill in study program data and accreditation simulations on the Cloud Accreditation Sim:





















Tahun Akademik	Program Studi	Panduan	Progres	Pengisian	Dokumen Pendukung	Status	Aksi
2019/2020	Universitas Lancang Kuning	IAPT Versi 3.0	0,00 %	Terisi: 0 dari 43 butir	Terunggah: 0 dari 0 dokumen	Belum Ada Status	 
2019/2020	S1 - Ilmu Administrasi Niaga	IAPS Versi 4.0	0,00 %	Terisi: 0 dari 36 butir	Terunggah: 0 dari 0 dokumen	Belum Ada Status	 
2019/2020	S1 - Sastra Indonesia	IAPS Versi 4.0	0,00 %	Terisi: 0 dari 36 butir	Terunggah: 0 dari 0 dokumen	Belum Ada Status	 
2019/2020	S2 - Ilmu Hukum	IAPS Versi 4.0	0,00 %	Terisi: 0 dari 34 butir	Terunggah: 0 dari 0 dokumen	Belum Ada Status	 
2019/2020	S2 - Manajemen	IAPS Versi 4.0	0,00 %	Terisi: 0 dari 34 butir	Terunggah: 0 dari 0 dokumen	Belum Ada Status	 
2019/2020	S1 - Sastra Inggris	IAPS Versi 4.0	2,78 %	Terisi: 1 dari 36 butir	Terunggah: 0 dari 0 dokumen	Belum Ada Status	 
2019/2020	S1 - Agribisnis	IAPS Versi 4.0	5,56 %	Terisi: 2 dari 36 butir	Terunggah: 0 dari 0 dokumen	Belum Ada Status	 
2019/2020	S1 - Arsitektur	IAPS Versi 4.0	5,56 %	Terisi: 2 dari 36 butir	Terunggah: 0 dari 0 dokumen	Belum Ada Status	 
2019/2020	S1 - Ilmu Perpustakaan	IAPS Versi 4.0	5,56 %	Terisi: 2 dari 36 butir	Terunggah: 0 dari 0 dokumen	Belum Ada Status	 
2019/2020	S1 - Sastra Daerah	IAPS Versi 4.0	5,56 %	Terisi: 2 dari 36 butir	Terunggah: 0 dari 0 dokumen	Belum Ada Status	 

Figure 2. Sim Accreditation Cloud Application Study Program

a) Cloud Accreditation Sim Login Page

The login page for the Cloud Accreditation Management Information System application can be seen in Figure 3 below.

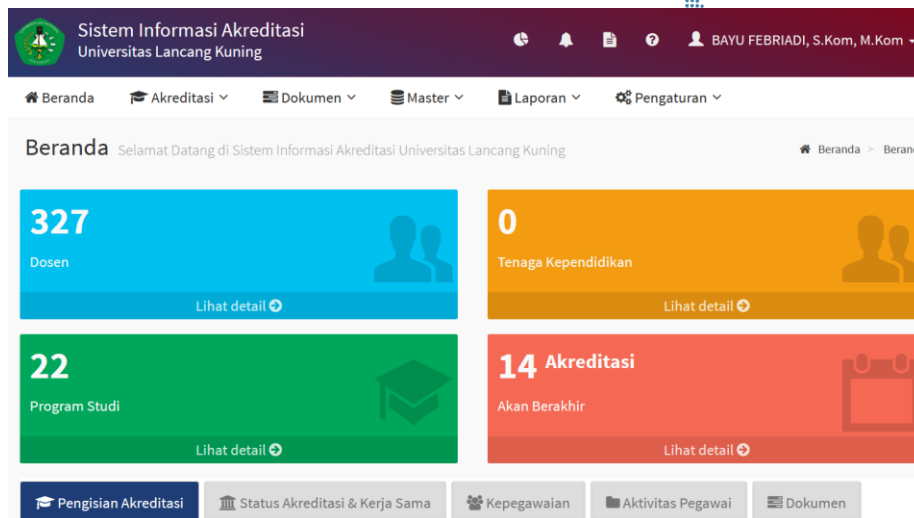


Figure 3. Sim Accreditation Cloud Application Login Page



b) Cloud Accreditation SIM home page

The login page for the Cloud Accreditation Management Information System application can be seen in Figure 4 below:



**Figure 4.** Cloud Accreditation SIM home page

c) Cloud Accreditation Sim Charging Results

Results of Filling in Accreditation Sim C The results of filling in cloud accreditation by 21 study programs within the Lancang Kuning University can be seen from Figure 5 below.



**Figure 5.** Cloud Accreditation Sim Charging Results

It can be seen from the implementation of filling out documents and simulations of accreditation assessment at the Lancang Kuning University Cloud Accreditation Sim in 2020, with details of 17 study programs that have filled out, and there are 4 study programs that have not filled out.

#### 4. Conclusion

After conducting research activities at the University of Lancang Kuning, the authors conclude that:

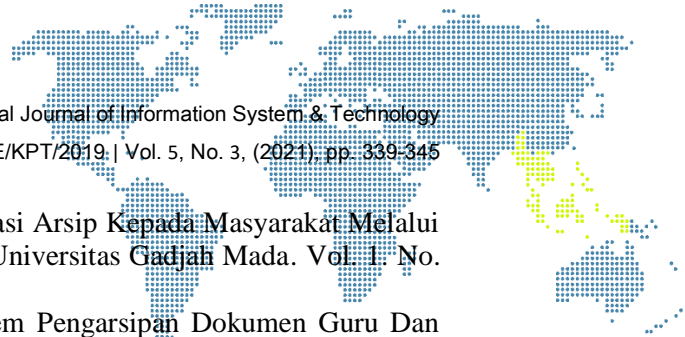
- a) The Cloud accreditation SIM application that has been implemented is very helpful for study programs and institutions at the Lancang Kuning University in

preparation for management and accreditation simulation in providing information technology-based information.

- b) In the implementation of the Cloud accreditation SIM implementation in 2020, it can be seen that it has a direct effect on the readiness of study programs in the accreditation simulation, so that 17 study programs have filled out accreditation data on the Cloud accreditation Sim, there are 5 study programs that do not apply in data document preparation and accreditation simulation.

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