Scholarship Monitoring Information System at Ar-Raniry Islamic University

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Abstract: The aim of this research is; 1) Able to design an information system for monitoring bidikmisi scholarships at Ar-Raniry State Islamic University Banda Aceh, and 2) Knowing the quality of the information system monitoring bidikmisi scholarships at Ar-Raniry State Islamic University Banda Aceh in providing information about bidikmisi scholarships based on ISO 9126 on functionality aspects, usability, efficiency, reliability, maintainability and portability. The design of an information system for processing scholarship monitoring data at the Ar-Raniry State Islamic University based on a website that the author designed consists of several stages, namely input design, output design, process design, control design, labor design, and cost design, while the application development uses a model prototyping. Based on the results of research and testing of the student monitoring information system at UIN Ar-Raniry Banda Aceh that has been carried out by the author, several conclusions can be drawn, namely; 1) This study succeeded in creating a student monitoring information system at UIN Ar-Raniry Banda Aceh, and 2) This research succeeded in collecting and reporting data on scholarships and orphaned students.

Keywords: Information Systems; Monitoring; Scholarship; Ar-Raniry State Islamic University.

1. Introduction

In Indonesia, there are various kinds of scholarships, one of which is the Bidikmisi scholarship. This scholarship is a tuition assistance program provided by the government through the Directorate General of Higher Education (Dirjen Dikti) of the Ministry of Education and Culture [1,2]. This scholarship is given starting in 2010 to students who have adequate academic potential and are economically disadvantaged. Bidikmisi scholarships are given to recipients from the time they enter college and graduate with a record that the recipient meets all the requirements and conditions given [3]. The scholarships provided consist of tuition assistance (SPP per semester) and living expenses assistance [4,5,6]. This bidikmisi scholarship is given for 8 semesters for Diploma IV and S1 programs, and 6 semesters for Diploma III programs.

In granting the bidikmisi scholarship, there are requirements that must be met by scholarship recipients [7]. These requirements determine whether their scholarship status is safe or not [8,9]. For this reason, it is necessary to monitor the students receiving the Bidikmisi scholarship. The monitoring carried out includes several aspects of the requirements that must be met by students [10]. These aspects include GPA, number of credits and study period. From the results of this monitoring, it can be concluded how the status of students receiving the Bidikmisi scholarship is. According to one of the student staff of the Ar-Raniry State Islamic University (UIN) Banda Aceh, so far the existing monitoring system tends to be manual. With the current system, the monitoring process for students receiving Bidikmisi scholarships is considered less effective. For this reason, it is necessary to have an information system that helps the monitoring process of students receiving Bidikmisi scholarships.

In addition to assisting the monitoring process, it is also necessary to have an information system to provide various kinds of information regarding bidikmisi scholarships to students. This information is necessary because it is to make it easier for students who are recipients of the Bidikmisi scholarship to get information about the Bidikmisi scholarship. The objectives of this research are; 1) Able to design an information system for monitoring bidikmisi scholarships at Ar-Raniry State Islamic University Banda Aceh, and 2) Knowing the quality of the information system monitoring bidikmisi scholarships at Ar-Raniry State Islamic University Banda Aceh in providing information about bidikmisi scholarships based on ISO 9126 on functionality aspects, usability, efficiency, reliability, maintainability and portability.

2. Research Method

The design of an information system for monitoring scholarship data processing at the Ar-Raniry State Islamic University based on a website that the author designed consists of several stages, namely input design, output design,

process design, control design, labor design, and cost design. The author hopes that this design will make it easier for every user, especially the Ar-Raniry State Islamic University. This input design consists of several program files, namely; 1) Student Data Entry Program, 2) Faculty/Prodi Data Entry Program, 3) Study Program Data Entry Program, 4) Parent Data Entry Program, 5) Caregiver/Guardian Data Entry Program, 6) Bank Data Entry Program, 7) Program Validate Student Data, 8) User/Admin Data Entry Program, and 9) Study Program Operator Data Entry Program. Design The output of the student scholarship data collection process system at the Ar-Raniry State Islamic University consists of several program outputs, namely; 1) Recap of student scholarships, 2) recap of student scholarships per-study, 3) recap of student scholarships per-faculty, 4) graph of student scholarships per-study, 5) graph of student scholarships per-faculty, 6) student scholarship reports per-child , 7) Student Scholarship Reports per Study Program, 8) Student Scholarship Reports per-Parent, 9) Student Scholarship Reports per-Bank, and 10) User List. The data processing process in the student scholarship processing system at Ar-Raniry State Islamic University is basically very different from the old system, the difference being the media and equipment used. In inputting student scholarship data and other data, a new design system uses a computerized application. The way the system performance obtains the results of inputting the data listed in a file. In the design process using data flow diagrams, while in application development using a prototyping model [11], which is a software development method that uses an approach to make designs quickly [12] and gradually so that it can be immediately evaluated by potential users/clients [12]. 13,14].
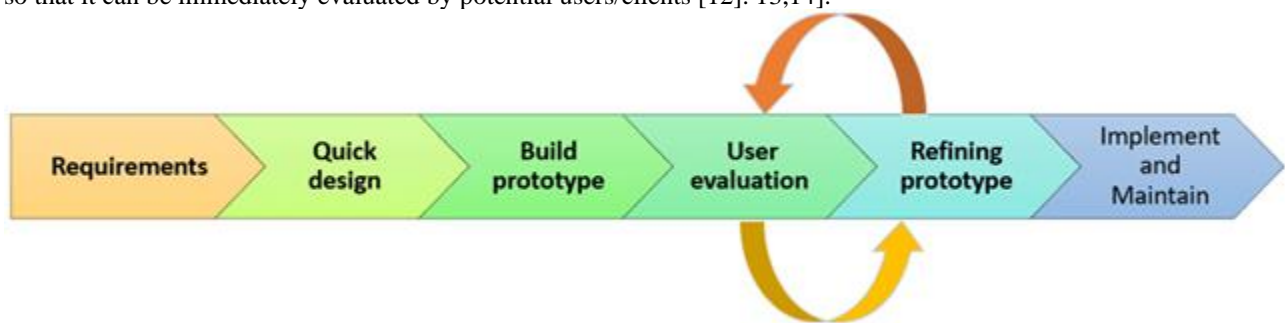

Fig 1. Prototyping Stage

3. Result and Discussion

The use of the design of the student scholarship processing system at the Ar-Raniry State Islamic University Based on the Website, seen from the design of the application into the form of an application display.
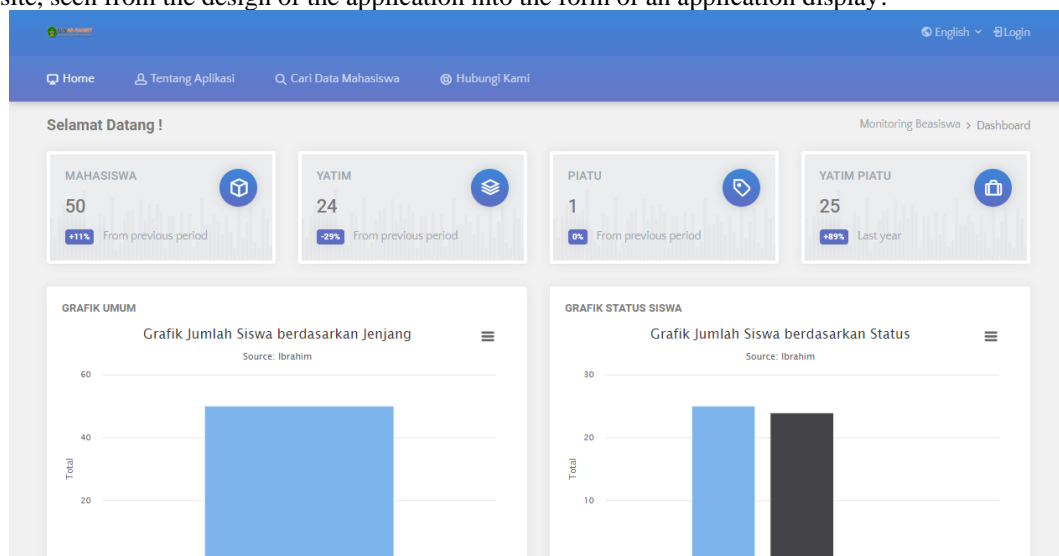

Fig 2. Public Page

A public page is a page that can be accessed by anyone, both parents and guardians. The public page consists of 4 (four) menus consisting of home, about the application, search for student data, and contact us. At the beginning of this page information is displayed in the form of graphs about student scholarship data such as; student scholarship data based on study program level, student origin, student scholarship status or by gender.

Fig 3. Search Student Data Page Display

The student data search page is a page for parents/caregivers and study programs to view student scholarship data which is useful for viewing student information from biodata, study programs, parents, caregivers/guardians, and student accounts. The login form is used as system security from abuse of access rights, so data security can be guaranteed. Here the user is asked to enter a username and password to be able to access further data. For more details on the login process can be seen in the image below.

Fig 4. Login Page

As explained earlier that at the user level the application consists of 2 (two) parts, namely the admin or what is called the operator and someone who is responsible for managing the application for collecting student scholarship data later and the Chancellor. In the form below is the main menu form for admin which contains the student scholarship master display, recap, graphs, reports and extra pages which are user addition pages. Computer users just click the desired menu icon to see what is in the file. The main menu also provides information in the form of graphs and some other important information such as total student scholarships, total orphaned students, total orphaned students, total student scholarships, graphs of student scholarships per grade, graphs of student scholarships by gender, and graphs of student scholarships by gender district.
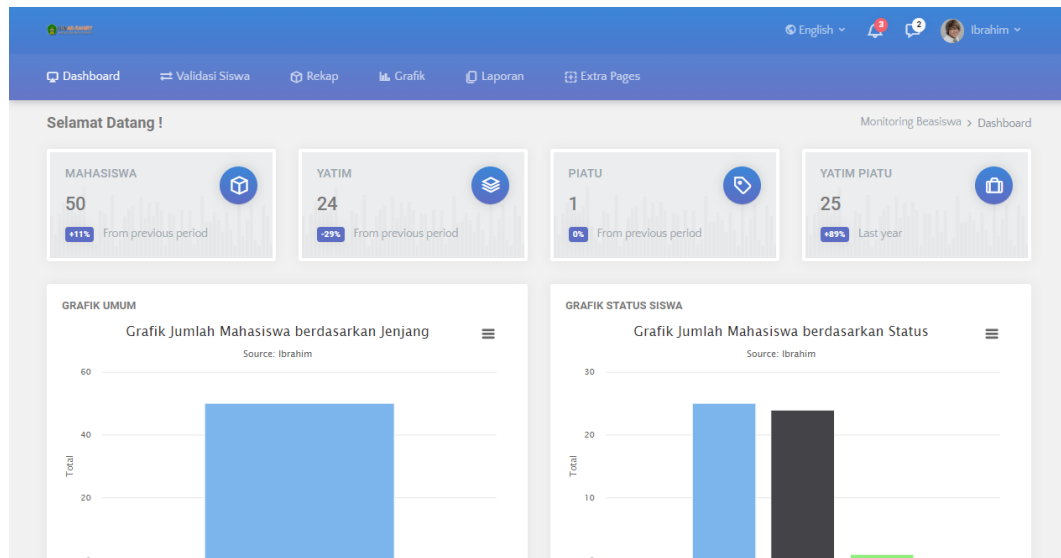
Fig 5. Main Menu Page

The student scholarship input menu is a page where the user can input student data, in this case the student scholarship is inputted by the study program and other student information data.

Fig 6. Scholarship Page
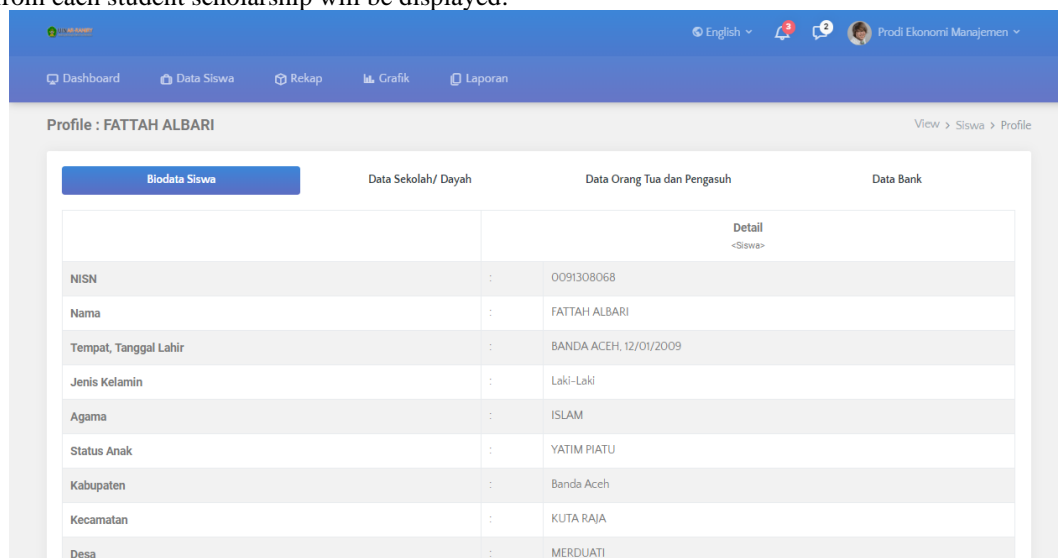

Fig 7. Scholarship Validation Page

The student scholarship validation form is a data validation process that has been inputted by the study program operator, which will then be entered by the student scholarship faculty operator. Validated student scholarship results will be included in the list of valid student scholarships.

Fig 8. Public Page

The student scholarship list menu is information that contains student scholarships that have been previously recorded or inputted and on this list you can also edit and delete student scholarship data. The student scholarship report menu on a per-child basis is different from the previous student scholarship reports. The student scholarship report based on children contains detailed information on student scholarships that have been previously recorded. Before entering the scholarship details page, students will be faced with a start page, namely a list of students and then click the view icon and data from each student scholarship will be displayed.

Fig 9. Scholarship Detail Report

4. Conclusion

Based on the results of research and testing of the student monitoring information system at UIN Ar-Raniry Banda Aceh that has been carried out by the author, several conclusions can be drawn, namely; 1) This study succeeded in creating a student monitoring information system at UIN Ar-Raniry Banda Aceh, and 2) This research succeeded in collecting and reporting data on scholarships and orphaned students.

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