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Website Based Student Activities Budgeting and Proposal Information System at Student Affairs and Alumni Administration Bureau of Petra Christian University

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Abstract

Every student activities has budget plan and report. The good budget plan and report can be achieved by synchronize with the applicable regulation and tax. But the reality in the activity committee is find it difficult when making the budget plan especially to determine which rule and tax correspond to the proposed budget.

Because of the problems, author designed the proposal submission system and the budget plan along with the accountability report which integrated with the applicable rule of Student Affairs and Alumni Administration Bureau of Petra Christian University. So that when the committee input the data, they can get the right information and warnings if the entered data doesn't match with the applicable rule.

The final result of the development is an information system that can give information about the applicable rule when the committee input the proposal, budget plan, and budget report. The result of this application testing show that it can answer the need of applicable rule information.

Keywords-information system;proposal;budget planning;accountability report;activities

1. Introduction

Each activity has its budget planning and reporting activities. Planning and reporting of good activity budget can be done if in accordance with provisions and rules apply [1].

The reality that occurs on the committee is the difficulty in making budget plans, especially when determining the amount of tax to be borne and the rules that bind to the proposed budget. This resulted in a miscalculation of the calculation of taxes on the plan and the budget report that

ultimately led to losses at Christian University

Therefore the Budget Information System and Student Activities at the Student Affairs and Alumni Administration Bureau of Petra Christian University Based Website is made to answer the problem. The existence of budget planning features in this application can assist the committee in making plans and budget reports because the calculation of taxes that are automated and also there are checks of the budget against applicable rules. All budget inputs and activities of this committee will be directly integrated with the Student and Alumni Administration Bureau.

2. Theory

2.1. Type of Fund Allocation

Types of allocation of income funds consist of plafonds, contributions of participants, sponsors, and other sources [2].

2.2. Budget Number

The example of budget number that has been set by Petra Christian University can be seen in Table 1 [2].

Table 1. Provisions of Activity Budget

No	Name
513300	Speaker, Moderator
535300	Field Rental
523150	Taxi, Fuel, Parking, Toll, etc

2.2. Provisions of Activity Budget

Some budgets have certain provisions regarding the size of the budget covered by Petra Christian University. Some examples of the provisions of the budget can be seen in Table 2 [2].

Table 2. Provisions of Activity Budget

No	Name	Maximum Percentage
523130	Accommodation	75%
535300	Field Rental	75%
523150	Taxi, Fuel, Parking, Toll, etc	75%

2.3. Tax Provisions

Some specific budget are also taxed. The amount of taxes by each budget is not the same and based on spesific criteria. It can be seen in Table 3 [2].

Table 3. Tax Provisions

Category	Activity	Tax	Notes
Salary	Coach, Speaker, Moderator	2.5%, 3%, 5 %, 6%	2.5% for Petra Staff that has ID tax number 3% for Petra Staff that doesn't have ID tax number 5% for non Petra Staff that has ID tax number 6% for non Petra Staff that doesn't have ID tax number
Rent/Service	Sound System, Tent, Decoration	2%, 4%	2% for who owns ID tax number 4% for who doesn't own ID tax number
Building & Land Rent	Field, Building, Retreat House, Exhibition Hall	10%	

3. Analysis And Design System

Analysis, interface design, and system design is an early stage done before the encoding. It aims to make the applications that are created can be well structured.

3.1. Application Programming

This application programming using PHP programming language [4], Java Script [5], and jQuery Ajax [7]. For database storage using SQL server [6]. And for the interface using Bootstrap [10]. The server used is owned by BAKA.

3.2. Preparation Process Student Activities

In Fig 3 below is a flow of preparation process of the activity from the beginning determined the chairman of the activity to the task of each committee in charge. Parties involved in the preparation of activities of the organization, the head of activities, secretary activities, treasurer activities, division coordinator and divisional members.

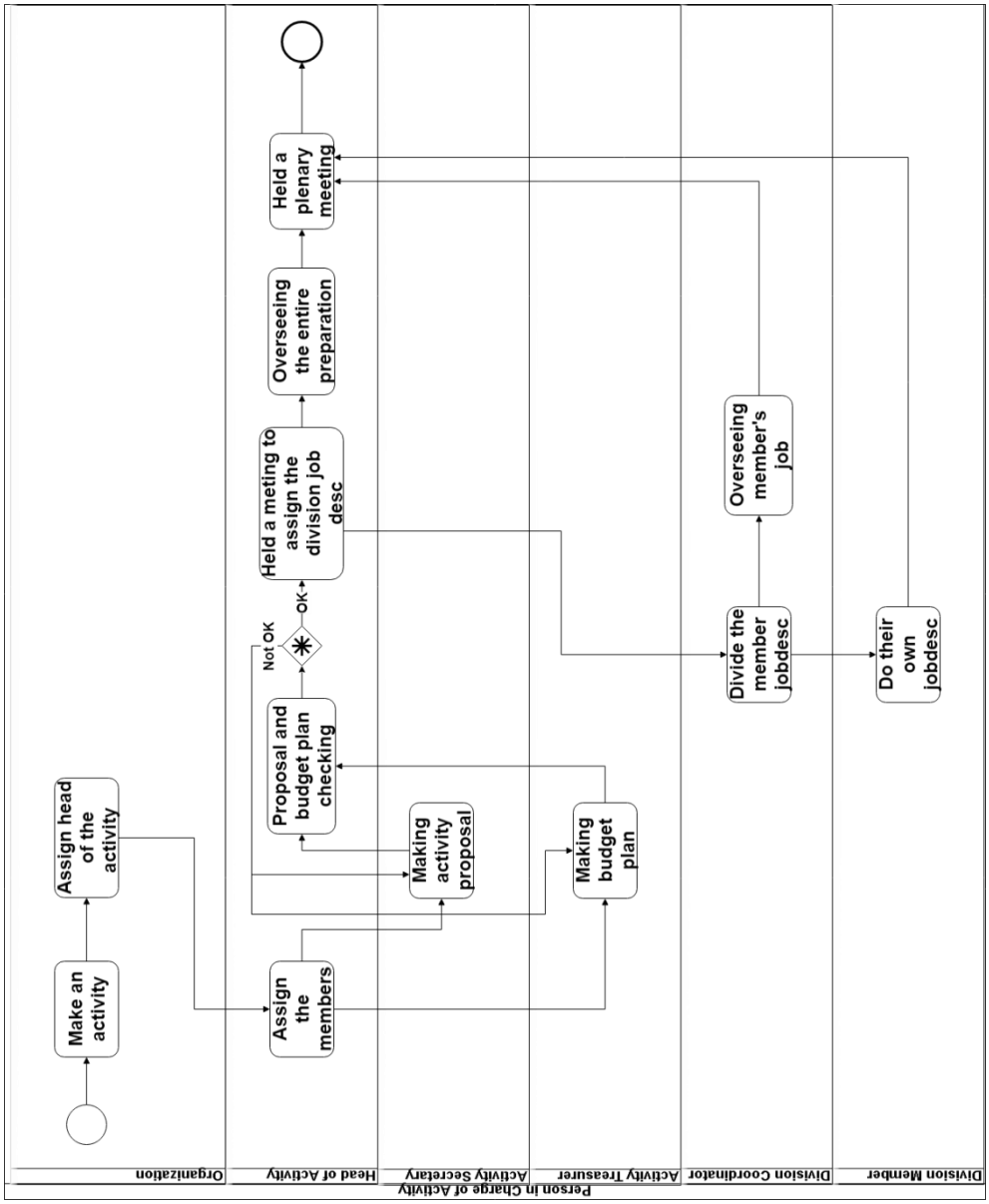

Fig 3. BPMN Process Activity Preparation

Activities are planned by certain student organizations. The organization will elect the head of activity as the main responsibility of the activity. After that the head of activities will determine the members of the committee either through close recruitment or open recruitment. The Chairman of the activity with the secretary of the next activity will make a proposal of activities.

While the treasurer with the chairman will make a budget plan

3.3 Provisional Bill (Bonsem)

In Fig 4 the following is a display of provisional bill submissions on the website of Adminsitration Bureau of Student Affairs and Alumni now [3]. The committee need to input the login username, password, handphone number, organization, activity name, activity date, total bill, detail of the bill. The activity name inputted manually by the committee and not integrated with the activity master data.

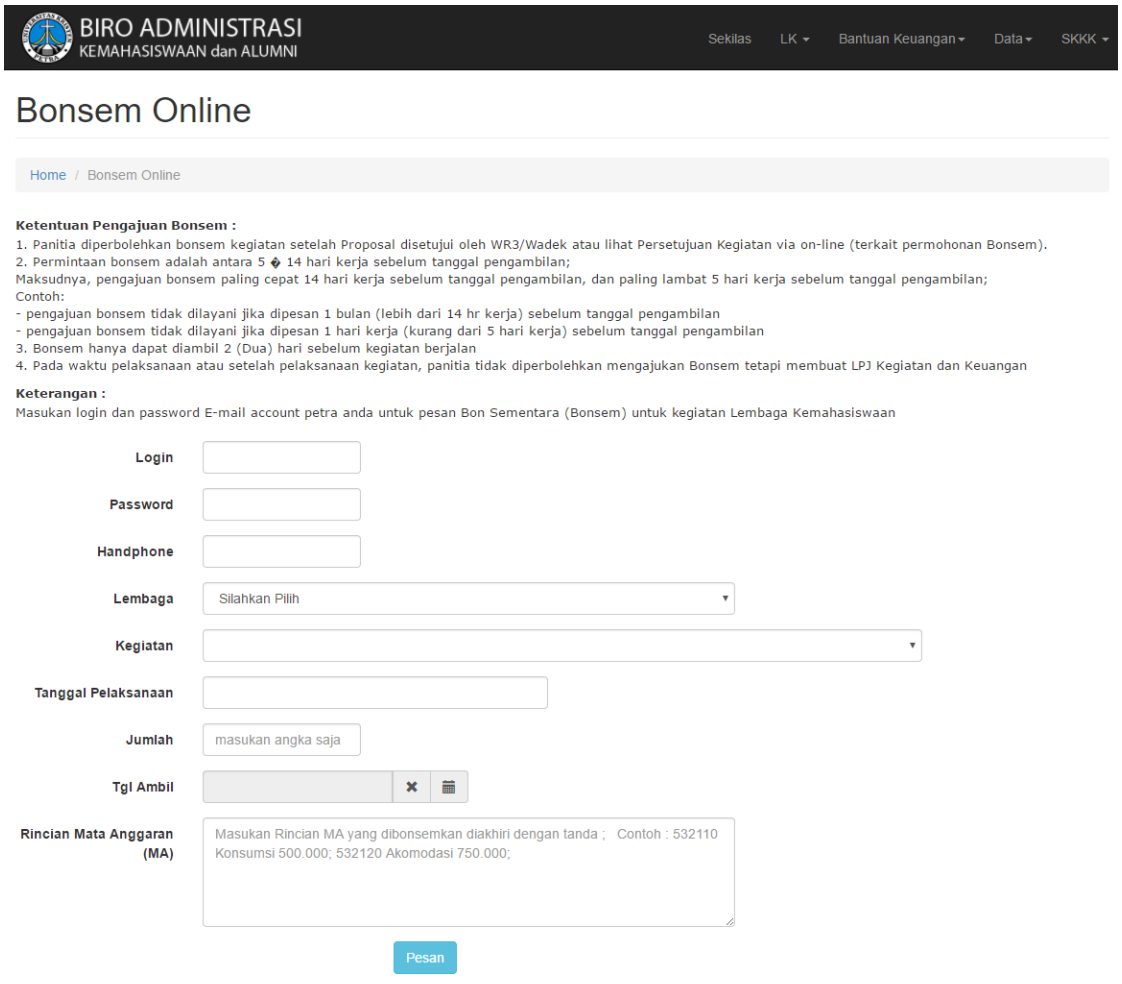

Fig 4. Provisional Bill

Lembaga = Organization; Kegiatan = Activity; Tanggal Pelaksanaan = Implementation Date; Jumlah = Total; Rincian Mata Anggaran = Detail of Budget Number

3.3. Context Diagram

Design stage begins with the design of the entire system using Data Flow Diagrams (DFD) [8] that describes the process of the system. Context diagram [9] design can be seen in Fig 5.

Based on Fig 5, it can be seen that the external parties of the system are:

• Student and Alumni Administration Bureau, as external entities in Petra Christian University who hold master data.

• Vice Dean and Vice Rector 3, as external entities that receive activity information and provide access to revised proposal and activity budget plan.

• Committee, as an external entity providing proposal data, budget plan, activity and financial accountability report, provisional bill.

• Student Affairs Institution, as an external entity providing activity data and receiving proposal information, budget plan, activity and financial accountability report, provisional bill.

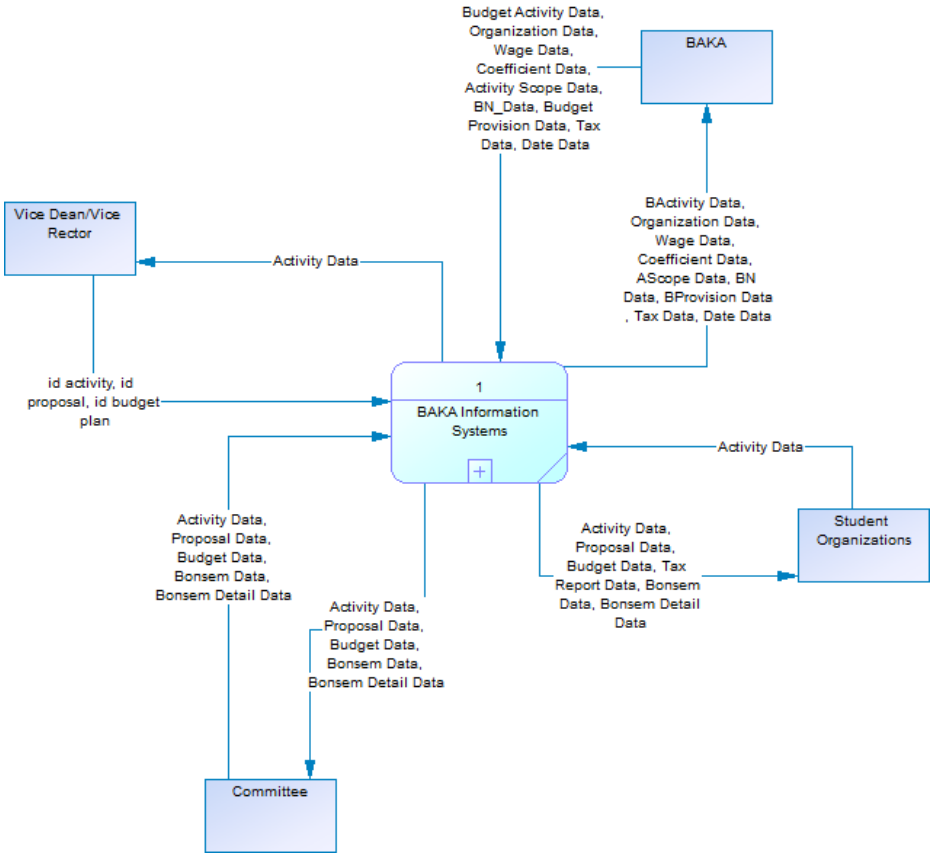

Fig 5. Context Diagram

3.4. App Designs

In this section will be explained the design of the application display which consists of the view of the login page, the layout of the master view, layout display of each feature on the application.

3.4.1. Application Primary View

The main view of the application consists of four parts, namely header, menu, content, and footer. The header contains a user role and a logout button (marked with the number 1 in Fig 6). The menu contains a list of modules contained within the application (marked with number 2 in Fig 6). Content is the location to display the view file (marked with number 3 in Fig 6). The footer is the bottom of the layout containing only the copyright application (marked with the number 4 in Fig 6). The main view design can be seen in Fig 6.

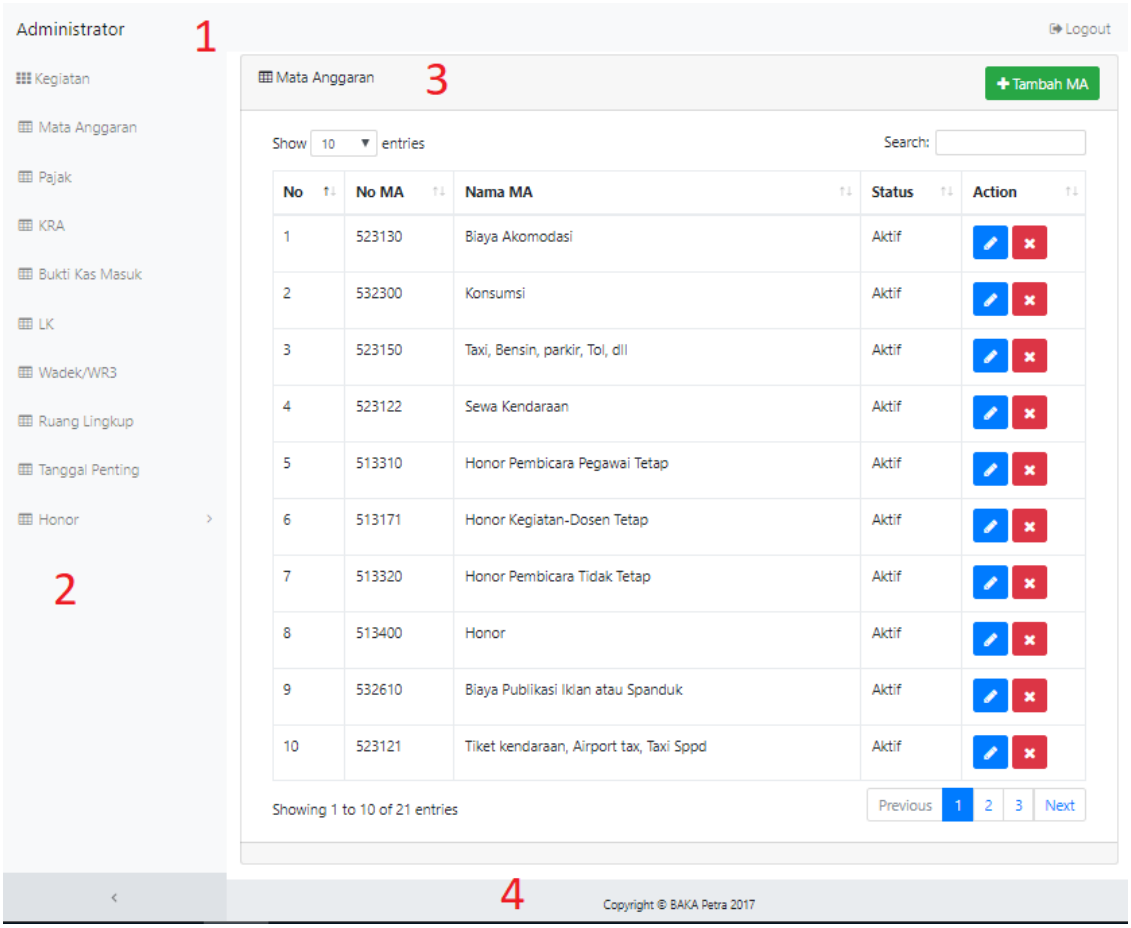

Fig 6. App Main View

3.4.2. Activity Details Page

Activity Details page is a list of icons of activities that can be filled. The green color indicates that the data is already filled and cannot be changed again. While the red icon to indicate that the data has not been filled. The design of the Activity Details page view can be seen in Fig 7.

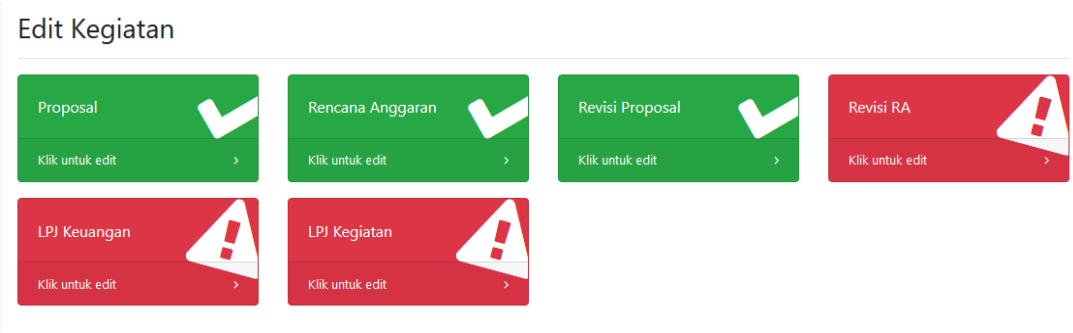

Fig 7. Activity Detail Page

Edit Kegiatan = Edit Activity; Rencana Anggaran = Budget Plan; Revisi = Revision; RA (Rencana Anggaran) = Budget Plan; LPJ Keuangan = Budget Report; LPJ Kegiatan = Activity Report

3.4.3. Budget Input Display Plan

The proposal input page contains two parts: income and expenditure. In the income section there are inputs of plafond and other sources. The add source button serves to add the import details. Then on the expenditure section there is budget input, tax, description, price, quantity, total, total pay, ceiling allocation, other allocation, along with a table containing the details of the budget that has been included. Also available are two buttons namely the save button and the validation button. Page Design Input Proposal can be seen in Fig 8.

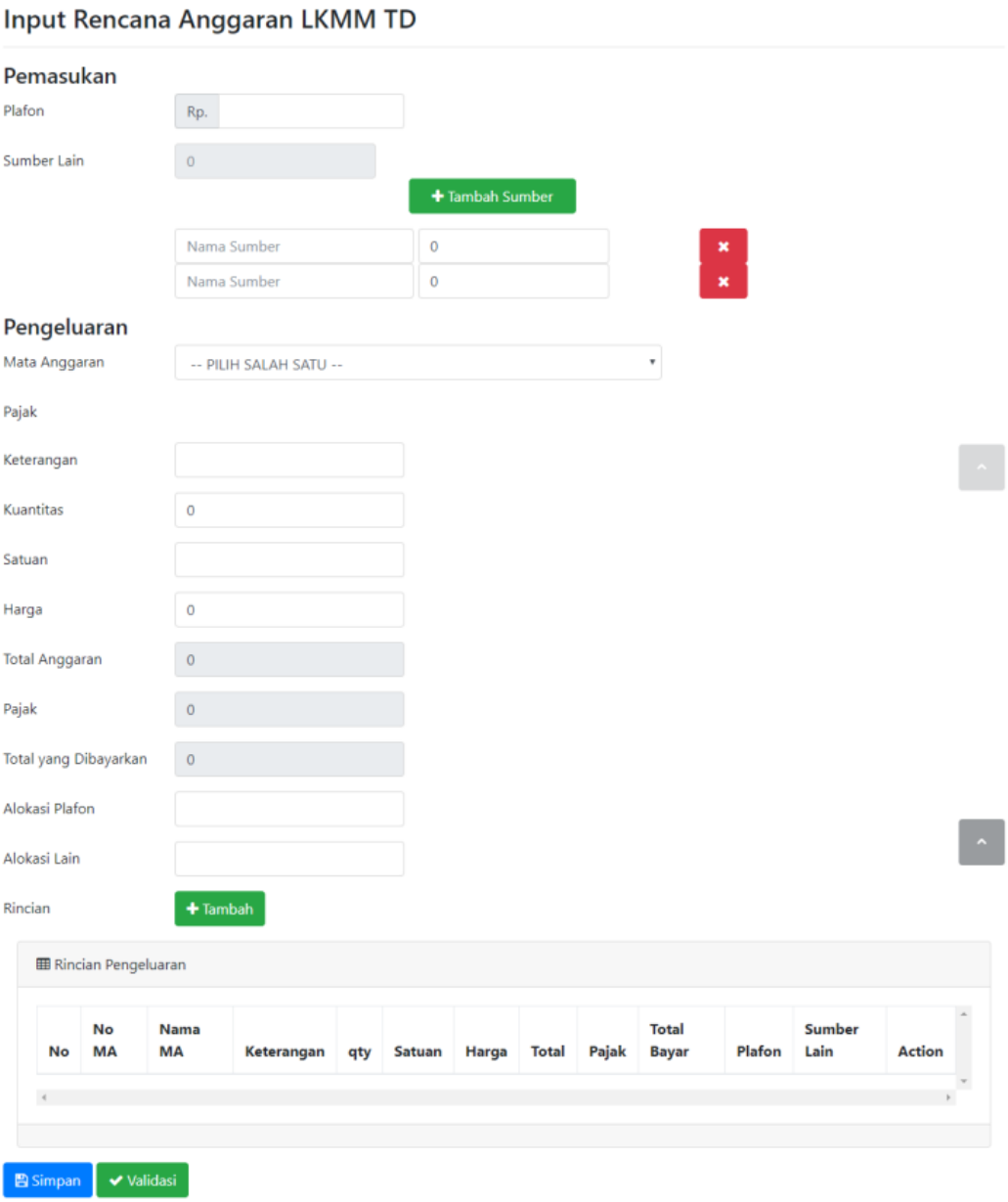

Fig 8. Display Proposal Input

Pemasukan = Income; Plafon = Plafond; Sumber Lain = Other Sources; Pengeluaran = Expense; Mata Anggaran = Budget Number; Pajak = Tax; Keterangan = Notes; Kuantitas = Quantity; Satuan = Unit; Harga = Price; Total Anggaran = Total Budget; Total yang Dibayarkan = Total Paid; Alokasi Plafon = Plafond allocation; Alokasi Lain = Other Allocation; Rincian = Detail

4. Result

This application has to be tested to find out the end result and its ability to respond to the existing needs. This test consists of two parts, namely the test section based on a case study and questionnaire to several parties involved in the process of submitting the document of this activity.

4.1. System Testing Input Budget Plan

An example of a case study of student organizations HIMANIFRA wishes to conduct a work meeting activity with budget as follows:

- Budget Currency: Accommodation
- Description: Lodging
- Price: Rp. 2,000,000, - / night
- Duration of use: 1 night
- Type of accommodation: Villa, villa owners do not have NPWP

For villa including type of accommodation not hotel. Therefore this budget is taxed at 10%. So the tax to be paid is Rp. 200.000, - and the budget paid to the villa at the initial price minus the tax. In this case means the villa will receive the money of Rp. 1.800.000, -. In addition the budget of the accommodation has a provision should only take the budget ceiling as much as 75% of the total price. This calculation is done precisely on the system and there is also information that can be seen in Fig 9.

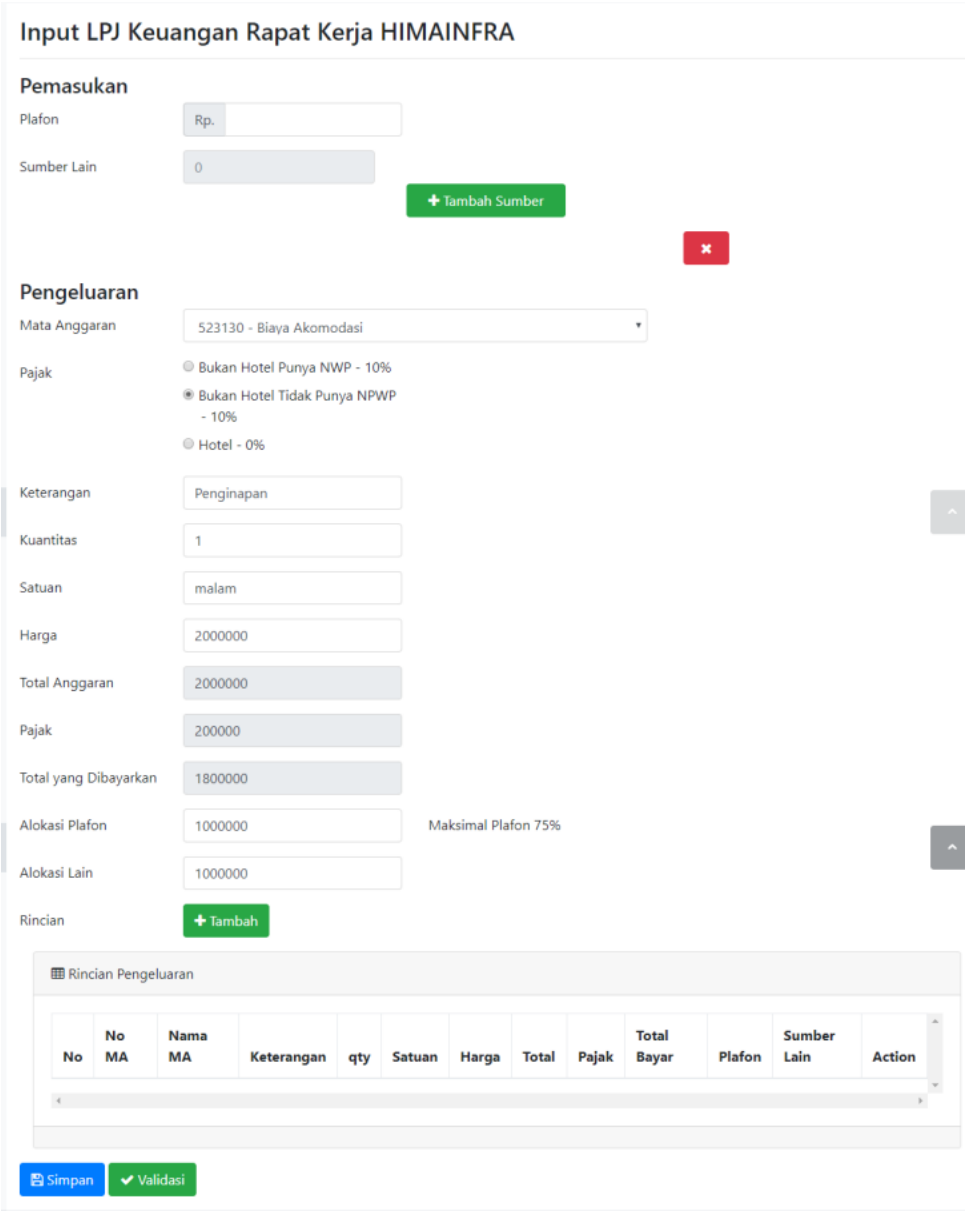

Fig 9. Input Testing Budget Plan

Pemasukan = Income; Plafon = Plafond; Sumber Lain = Other Sources; Pengeluaran = Expense; Mata Anggaran = Budget Number; Pajak = Tax; Keterangan = Notes; Kuantitas = Quantity; Satuan = Unit; Harga = Price; Total Anggaran = Total Budget; Total yang Dibayarkan = Total Paid; Alokasi Plafon = Plafond allocation; Alokasi Lain = Other Allocation; Rincian = Detail

4.2. Questionnaire Results

To know the user's assessment of this application, conducted research on the use of this application. Samples of this assessment are the parties involved in the process of submitting activities, among others:

1. Raymond Arif, S.Kom. as Programmer Staff of the Student and Alumni Administration Bureau

2. Tanti Octavia, S.T., M.Eng. as Vice Dean of Industrial Technology Faculty

3. Amanda Tanari as Treasurer of Informatics Engineering Student Association 2017/2018.

To collect data, distributed questionnaires containing assessment indicators of completeness of the menu, application interface design, ease of use of the application, ability to address user needs, and overall application. From the results of questionnaires that have been collected, the calculation of the percentage of user satisfaction in using this application can be seen in Table 2.

Table 2. Appraisal Table on Application Usage

Indicator	1	2	3	4	5
Completeness of the menu available			1		2
Application interface design				2	1
Ease of Use				1	2
Answering applications needs			1		2
Entire application				2	1

Description of rating scale:

• Value 1: Very bad

• Value 2: Bad

• Value 3: Fair

• Value 4: Good

• Value 5: Very good

The percentage of user ratings for completeness of the menu available is as follows:

• Value 3 = (1/3) * 100% = 33.33%

• Value 5 = (2/3) * 100% = 66.67%

The percentage of user ratings for the application interface design is as follows:

• Value 4 = (1/3) * 100% = 66.67%

• Value 5 = (2/3) * 100% = 33.33%

The percentage of user ratings for ease of use is as follows:

• Value 4 = (1/3) * 100% = 33.33%

• Value 5 = (2/3) * 100% = 66.67%

The percentage of user ratings of the ability to answer answering applications is as follows:

• Value 3 = (1/3) * 100% = 33.33%

• Value 5 = (2/3) * 100% = 66.67%

The percentage of user ratings for the entire app is as follows:

• Value 4 = (2/3) * 100% = 66.67%

• Value 5 = (1/3) * 100% = 33.33%

5. Conclusion

• The developed application provides the main features of proposal input, budget plan, activity and financial accountability report and its revision.

• Applications that have been made are in accordance with the budget and tax provisions applicable to the Student Affairs Administration Bureau and Alumni Petra Christian University

• The features provided by the application are useful for the activity committee and student organization because this application provides a forum for the activity committee to input the proposal and budget plan as well as the provision of applicable information.

• Application users judge 100% good app display, 100% good ease of use, 66.67% good and 33.33% completeness of the menu is fair, application ability answer 66.67% good and 33.33% fair, and the entire application is 100% good. This shows that the developed application has benefits for BAKA officers, vice deans and vice rector 3, and the activity committee.

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