WEB-BASED EVENT SEMINAR REGISTRATION INFORMATION SYSTEM APPLICATION

*1Rizky Febryan, 2Rogape Iansen Euclerr, 3Yulia Wardaningsih, 4Fajar Masya

1,2,3,4 Program Studi Sistem Informasi
Universitas Mercu Buana Jakarta
www.mercubuana.ac.id
1rizkyfebryan21@gmail.com, 2euclerr160@gmail.com, 3yulia.wn13@gmail.com,
4fajar.masya@mercubuana.ac.id
(*) Corresponding Author

Abstrak

Informasi daftar event seminar dan pendaftaran seminar yang masih dilakukan secara manual, mengakibatkan akses informasi yang disampaikan kepada para peserta seminar terbatas, selain itu proses pengolahan data yang dilakukan oleh panitia menjadi kurang efektif dan efisien. Untuk menyelesaikan permasalahan tersebut, diperlukan sebuah sistem informasi yang terkomputerisasi secara online yang dapat memberikan informasi terkait pendaftaran peserta seminar, pengelolaan data dan pelaksanaan acara seminar. Dengan diterapkannya sistem ini, diharapkan dapat mempermudah akses informasi mengenai jadwal event seminar dan mengurangi resiko kesalahan pencatatan dalam pendaftaran peserta seminar. Sistem ini juga diharapkan dapat lebih mempercepat proses pembuatan laporan yang pada akhirnya dapat membantu kinerja panitia seminar. Metode penelitian yang digunakan adalah metode survei yang melibatkan beberapa orang tertentu khususnya mahasiswa. Sedangkan untuk metode pengembangan sistem (SDLC) dilakukan dengan menggunakan metode waterfall.

Kata kunci: Pendaftaran Seminar, Sistem Informasi, Aplikasi Berbasis Web

Abstract

Information on the list of seminar events and seminar registration which is still done manually results in limited information access being given to the seminar participants, besides the data processing process carried out by the committee becomes less effective and efficient. To solve these problems, an online computerized information system is needed that can provide information related to seminar participant registration, data management, and seminar events. With the implementation of this system, it is expected to facilitate access to information about the seminar event schedule and reduce the risk of recording errors in seminar participant registration. This system is also expected to further accelerate the process of making reports which in turn can help the performance of the seminar committee. The research method used is a survey method involving certain people, especially students. Whereas the system development method (SDLC) is carried out using the waterfall method.

Keywords: Registration Seminar, Information Systems, Web Based Applications

INTRODUCTION

The system comes from Latin (Systema) and Greek (Sustema), which is a unit consisting of components or elements that are linked together to facilitate the flow of information, material, or energy. This term is often used to describe a set of entities that interact. According to (Mulyadi, 2016) The system is a group of elements that are closely related to others, which function together to achieve certain goals. A system has characteristics that are inseparable from one characteristic to another.

The word seminar comes from the Latin word "seminarium" which means "land where to plant seeds" (Ibeng, 2020). The seminar is a deliberate meeting held to be general learning on a particular topic through problem-solving that is carried out with a question and answer interactions between participants and the process is led by a moderator. These seminars are sometimes held by academics from institutions or

professional and commercial organizations (Saranailmu, 2019).

In seminars, discussions usually originate in papers or working papers that have been prepared and prepared in advance by the speakers, and the theme of the discussion must be following the request of the organizing committee (Utama, 2017). he seminar departs from the worksheets which are a discussion of theories about the main problem that can also begin with a general view by people who are considered to be competent to lay the lines of thought further (Barlian, 2014). Participating in people who are experts in their fields. The seminar on marketing a product, certainly attended by experts in marketing. Educational seminars are naturally attended by experts in education (Damanik, 2018). The seminar involved two parties, namely presenters and participants. Both parties must be able to complement each other and develop beneficial interactive relationships in terms of the aims and objectives of the seminar. Some of the requirements for running a seminar with the seminar room, participants, and moderators.

A seminar event can be used as an example in the use of technology, a seminar event is an activity planned to provide experience to seminar participants in conducting a thorough study of a particular topic with problem-solving. To attract seminar participants' interest, an advertisement/information about the list of activities is needed that can provide ease in registration and the latest schedule information regarding the list of seminar events.

To make it easier for participants to find information on seminar event registration, an interesting and applicative computerized information system is needed online. This is a motivation for writers to make a seminar event registration information system application that can help the performance of the seminar committee in accelerating the process of recording data and making reports. The research method used was a survey method. In surveys, information is collected from respondents using a questionnaire. Generally, survey research is limited to studies whose data are collected from a sample of the population to represent the entire population (Adiyanta, 2019). The system development model in this study is the waterfall model (Aediyansyah, 2018). The purpose of this research is to facilitate seminar participants in finding various types of seminar events, online registration processes, good data management by the system, making data reports more efficient and valid, and how to pay.

RESEARCH METHODS

1. Type of Research
This type of research used by using survey methods in the form of data collection using a questionnaire and looking for a literature study.

2. Research Location
The research location is where the research is conducted to obtain data. The study was conducted by the writer randomly in several places around the campus and offices with the target subject being students. Problems that will be faced include the limitations of cost, manpower, time, for what the research is done, and who the researchers are carrying out.

3. Data Collection Techniques
The following data collection techniques are used by the author in developing information systems for seminar event list:
a. Questionnaire
Collecting data by giving multiple-choice questions to respondents to obtain data on perceptions from respondents.
b. Literature Review
Collecting data by examining various kinds of documents that have to do with problems that must be solved for analysis material. Research carried out by examining and comparing literature sources to obtain theoretical data.

4. System Development Model
The stages carried out for the development of this application with the waterfall method are divided into five stages, namely:
a. Needs Analysis/Requirements Analysis
At this stage is the process of gathering needs for the use of the system both functional and non-functional requirements for this application.
b. Design
The stages of designing a system that includes application design and UML design.
c. Coding (Implementation)
At this stage is the process of writing program codes with WordPress CMS using HTML and PHP languages and MySQL as DBMS.
d. Testing
Stages that focus on ensuring a smooth application. Testing in this study uses black-box testing.
e. Maintenance (Support)
This stage is the stage of system maintenance that has been made. Maintenance is carried out by rearranging the database and backing up data.

RESEARCH RESULTS AND DISCUSSION

A. Requirements Analysis
1. Functional Requirements Analysis

In making the application system registration information web-based seminar event has three levels of users, namely members, seminar owners, and admins. The following are details of 3 user levels, namely:

a. **Member**
1) See the seminar list available on the website application
2) Register an account on the website application as a seminar registrar using an email account (recommended to use an active email account)
3) Manage profile/update profile
4) Register the seminar that has been made by the seminar owner
5) View the seminar history that has been registered
6) Make changes to payment photo uploads

b. **Seminar Owner (*Pemilik Seminar*)**
1) Register an account on the website application as the seminar owner using an email account (it is recommended to use an active email account)
2) Manage profile/update profile
3) Create a new seminar
4) Conduct seminar management that has been created (edit and delete)
5) See the seminar list that has been created
6) See the list of seminar registrants who have registered at the seminar owned by the seminar owner
7) End (*selesai*) the seminar that has finished/complete the seminar that has been confirmed by the seminar owner so that the Admin can transfer the money from the seminar that has been allocated to the seminar owner
8) Export seminar data so that the data becomes more organized for the analysis process
9) See the results of seminar transfer evidence that has been accumulated by the admin

c. **Admin**
1) Conduct user management (member and seminar owner)
2) Conduct seminar registration management (validation of registration) so that seminar participants who have been confirmed can be seen by the seminar owner
3) See the list of seminar applicants who have been verified by the admin

4) Conduct seminar management that has been completed (*selesai*) by the seminar owner so that the accumulated results (profit sharing) of seminar costs owned by the seminar owner will then be transferred to the seminar owner

2. Nonfunctional Requirements Analysis

Non-functional requirements analysis describes the system requirements specification in the form of software and hardware requirements as material to analyze the needs and shortcomings that must be met to build this system.

a. Software Requirements k
Minimum Operating System Windows 7; Web Browser (Google Chrome/Mozilla Firefox); Apache Webserver; PHP script language, MySQL Database
b. Hardware Requirements
CPU: 1.2 GHz; Memory (RAM): 512MB; GPU RAM: 1GB; HDD: 50GB

3. Business Process Analysis

In making the Web-Based Event Registration Information System Application, a business process analysis is needed to make it easier for the user system to carry out all activities and achieve goals. The following is an analysis of the proposed business process :
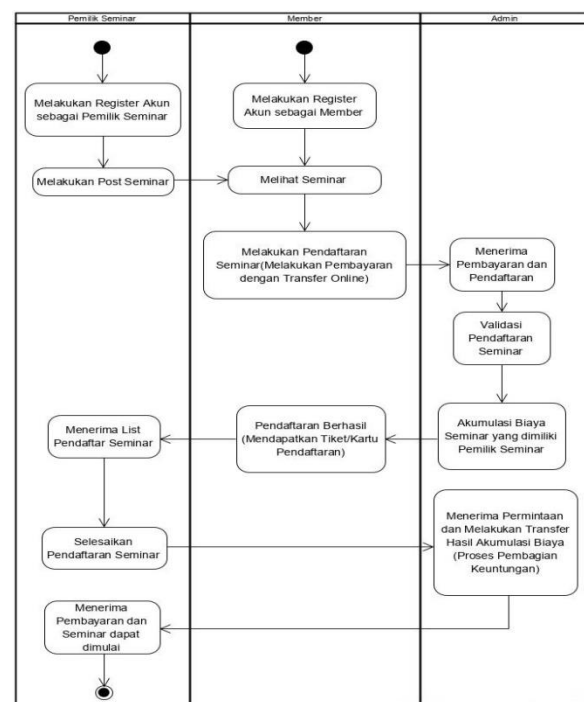

Figure 1 Business Process Analysis

In Figure 1 the analysis phase of this business process, the Seminar Owner will register an account as the seminar owner then can make/post new seminars.. Furthermore, in the

Member section will also register an account as a member (registrant seminar) and then can see the results of the seminar that has been made by the Seminar Owner so that Members can register for the seminar. After the Member has successfully registered, the Admin will receive the results of the registration from the Member so that the Admin can validate the registration and accumulate the total seminar costs held by the Seminar Owner. The results of the validation conducted by the Admin will be received by the Member and the Member will get a notification of successful seminar registration and a ticket/registration card. Then the Seminar Owner will receive a list of seminar attendees and can see the results of the accumulated costs that will be the benefit of the Seminar Owner. After several Members have

registered at the seminar that was made by the Seminar Owner and have passed the date on the seminar registration, the Seminar Owner can conduct an "end seminar" (*selesai*) so that the Admin can transfer the total seminar cost. Admin receives the transfer request for the results of accumulated costs (profit sharing between the Seminar Owner and Admin) and then transfers the fee to the Seminar Owner. At the end of this business process, Seminar Owners will receive the results of transfer fees from the Admin so that the seminar can begin.

B. Design
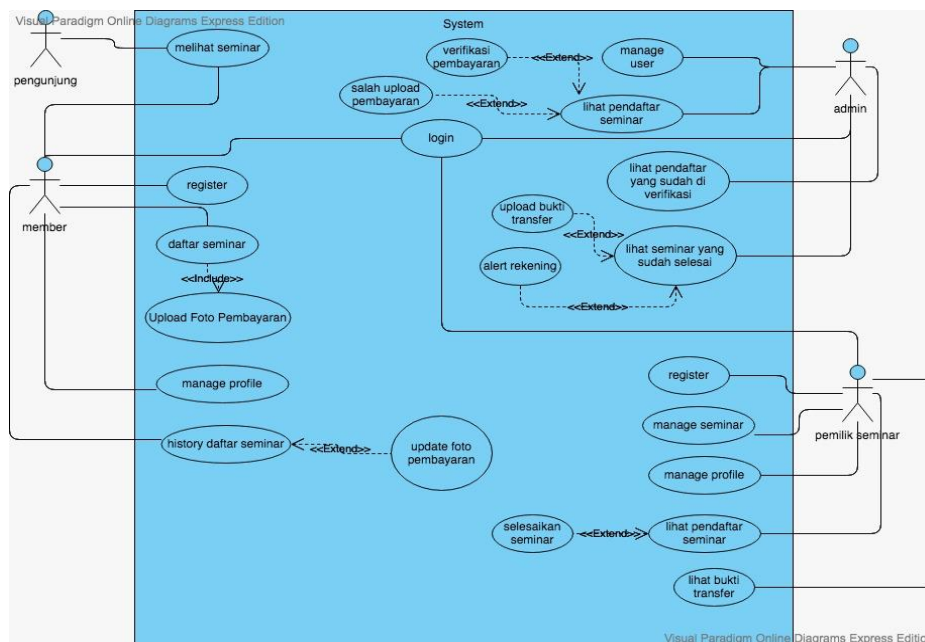**1. Application Design**

a. Use Case Diagram

Figure 2. Use Case Application Diagram

Figure 2 explains that Visitors can view the seminar. Members can also view seminars, members must register to be able to log in, then login to register for seminars, upload payment photos, manage profiles, view seminar list history, and update payment photos. The Seminar Owner must also register to be able to log in, then login as well to be able to see proof of transfer, see the seminar registrant, end (*selesai*) the seminar, manage the seminar, and manage the profile. Whereas an Admin must log in to be able to

manage users, view seminar registrants, verify payments, upload payment errors, view verified registrants, view completed/end seminars, upload proof of transfer, and account alerts.

b. Activity Diagram
In this activity diagram, the focus is more on the seminar registration section conducted by Members and the registration relationship between Members and Admin.
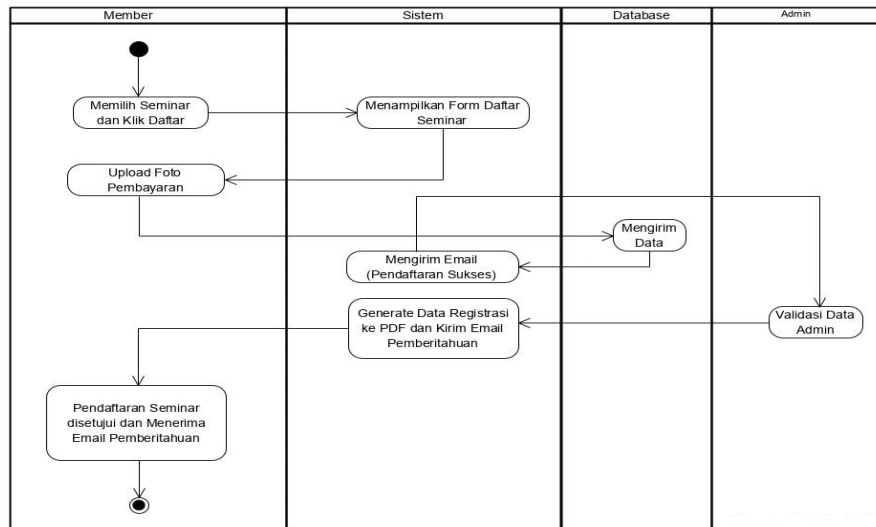
Figure 3. Activity Diagram Registration Seminar

Explanation of Figure 3 that when wanting to register the Member will select the seminar to be registered then click on the seminar list and the system will display a form containing the registrant data. At this stage, it is assumed that the Member has seen the registration requirements as well as the Admin bank account information to transfer the registration fee. On the registration form, the system will automatically input the registrant's name and email registrant so that the registrant (Member) only needs to upload a payment photo and the seminar registration process is complete. After registration is complete, members will get an email notification "successful registration" and wait for the validation notification from the Admin. If the validation has been received by the Admin, the Member will receive email notification of successful verification and get a ticket/registration card.

2.   Interface Display

a.   Form Create Seminar Display
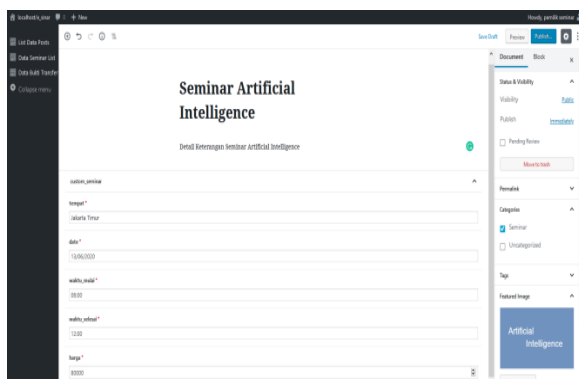
Figure 4. Form Create Seminar Display

Figure 4 is a display form of making a new seminar that can be done by the Seminar Owner. In this picture the Seminar Owner fills in the seminar title form, details of the seminar's information, place, date, time, cost, uploads the seminar display photo, and selects the seminar category for the seminar choice.

b.   Page Seminar List Display

Figure 5. Page Seminar List Display

163

Figure 5 is the initial page display of the application after the Member has logged in which displays all seminar lists that have been created by all Seminar Owners.

c.   Form Registration Seminar Display

Figure 6. Form Registration Seminar Display

Figure 6 shows the seminar registration form. In this form Members only need to upload payment photos with a maximum file size of 1MB.

d.   Seminar   Registrant   Display   (Seminar Validation)

Figure 7 Seminar Registrant Display

Figure 7 is a list of seminar applicants for all available seminars. At this stage, the Admin validates the matching proof of payment upload.

e.   Seminar Registration History Display

Figure 8. Seminar Registration History Display 1

Figure 8 is a display of the seminar history that has been registered by the Member. Displays seminar status to find out whether the registration has been verified or not.

Figure 9. Seminar Registration History Display 2

Figure 9 is a display of seminar history that has verified the status of the seminar by the Admin.
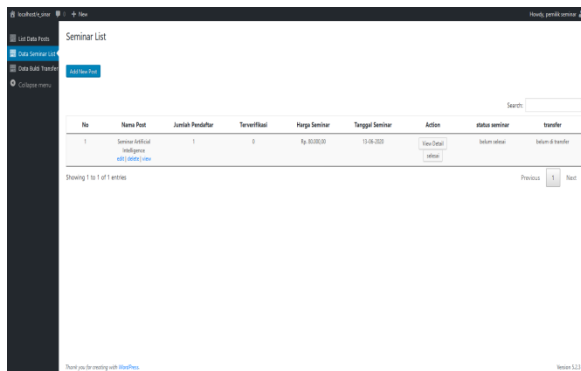
f.   Seminar List Data Display (end seminar)

Figure 10. Seminar List Data Display

Figure 10 shows the seminar list data display. The Seminar Owner can view the financial details of the seminar and the seminar registrant if the seminar registration time has ended, the Seminar Owner can "finish" so that the accumulated costs by the Admin can be passed on to the Seminar Owner.
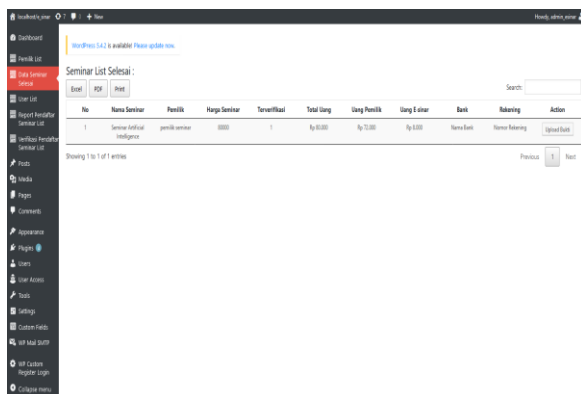
g.   Seminar Data Completed/Ended Display

Figure 11. Seminar Data Completed/Ended Display

Figure 11 is a list of completed/ended seminars. Admin will transfer seminar fees (accumulated fees) as stated in the "owner's money" section and upload proof of payment.

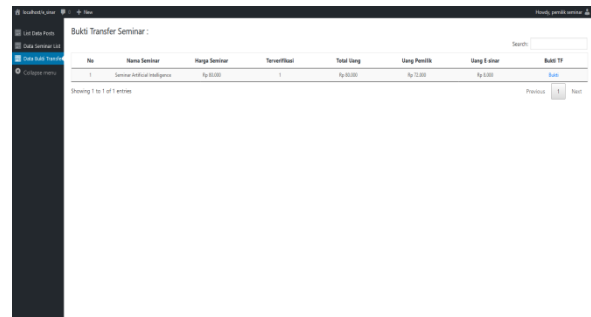h.   Data Transfer Receipt Display

Figure 12. Data Transfer Receipt Display

Figure 12 is a display of proof of transfer data owned by the Seminar Owner. On this page, the Seminar Owner can see proof of the transfer that has been done by the Admin.

C.   Application Coding
At the coding stage of the Web-Based Event Registration Information System Application, the writer cannot show it because the source code of the program is very large. For this reason, the writer will mention the programming language used to build this application. The programming languages used are HTML, PHP, CSS, and using Wordpress's CMS (Content Management System) type.

D.   Application Testing
Testing on making Web-Based Event Registration Information System Application using the black-box testing method can be seen in table 1, table 2, and table 3 below.

Table 1. Member Testing Table

No	System Components	Test Item	Expected Results	Test Result
1	Register	Access the form register	Display a pop up (register form) after clicking the register button	Successful
		Register form validation	Display form validation if there are errors in filling out the form	Successful
		Register account/register button	Successfully registered as a member after filling out the form correctly	Successful
2	Login	Access the login form	Displays a pop up (login form) after clicking the login button	Successful
		Login form validation	Displays form validation if there are errors in filling out the form	Successful
		Account login/log in button	Successfully logged in as a member	Successful

No	System Components	Test Item	Expected Results	Test Result
3	Seminar detail page	Access the details of the selected seminar	Displays the details page of the selected seminar	Successful
4	Register seminar	Register (*Daftar*) seminar button	Access the seminar list page	Successful
		Seminar list form validation	Displays error validation if the uploaded photo is more than 1 MB	Successful
		Button Register	Successfully register for the seminar if the form is correct and send an email notification that registration	Successful
5	Logout	Logout	Logout from account successfully	Successful

Table 1 is a testing table of member actors. This stage of testing involves registering an account (as a seminar registrar), logging in an account, accessing the seminar details page, conducting a seminar list, and account logout.

Table 2. Seminar Owner Testing Table

No	System Components	Test Item	Expected Results	Test Result
1	Register	Access the form register	Displays a pop up (register form) after clicking the register button	Successful
		Register form validation	Displays form validation if there are errors in filling out the form	Successful
		Register an account	Successfully registered as the owner of the seminar after completing the form correctly	Successful
2	Login	Access the login form	Displays a pop up (login form) after clicking the login button	Successful
		Login form validation	Displays form validation if there are errors in filling out the form	Successful
		Account login	Successfully logged in as seminar owner	Successful
3	Enter the dashboard	Owner's dashboard button	Displays the owner's dashboard page	Successful
4	Create a seminar	Button add a new post	Displays the seminar creation page	Successful
		Publish button	Publish seminars that have been made	Successful
5	View seminar details	Detail view button on the seminar list data page	Display data in detail (financial & registrant list) at selected seminars	Successful
6	Complete/ended the seminar	Button finishes (*selesai*) on the seminar list data page	Complete (ended) the seminar & change the status of the seminar to be completed at the selected seminar	Successful
7	Proof of data transfer menu	Access the proof of data transfer page	Displays proof of transfer data page	Successful
		Button proof (*bukti*)	See photo of proof of transfer from the E-Sinar	Successful
8	Logout	Logout	Logout from account successfully	Successful

Table 2 is a testing table of the seminar owner actors. This stage of testing consists of registering an account (as a seminar owner), logging in an account, accessing the dashboard of the seminar owner, making seminars, viewing details of the seminar that was created, executing the seminar completion/ended seminar, accessing the proof of transfer menu, and logging out of the account.

Table 3. Admin Testing Table

No	System Components	Test Item	Expected Results	Test Result
1	login	Access the login page on the link http://localhost/e_sinar/wp-admin	Displays the login page	Successful
		Login button	Enter the admin dashboard page of the form is filled incorrectly	Successful
2	List seminar owner page	Access the menu page of the list seminar owner	Displays the list seminar owner page	Successful
3	Seminar registration report page	Access the seminar list registrant report page	Displays the seminar list registrant report page	Successful
		Payment photo	Showing photos of payment from members	Successful
		Verification (*verifikasi*) button	Verifying member registration at the seminar, changing the registration status and sending a verified email to the member email	Successful
		Incorrect proof (*salah bukti*) button	Change the registration status to upload incorrect evidence and send a member alert containing error uploading evidence	Successful
4	Seminar data page complete/ended	Accessing completed/ended seminar data page	Displaying the seminar data page that has completed/ended	Successful
		Button upload proof (*upload bukti*)	Display the proof upload form page	Successful
		Validate upload form	Displays an error message if the uploaded photo is more than 1 MB	Successful
		Button sends proof (*kirim bukti*)	Successfully upload proof of transfer and changed status to completed transfer	Successful
		Button transfer complete	See the upload of evidence	Successful
		Account alert button (*alert rekening*)	sending email alerts containing incomplete owner account data to owner email	Successful
5	logout	Logout	Logout from account successfully	Successful

Table 3 is a testing table from the admin actor. The stages of this test are doing an account login (admin account login), accessing the seminar owner list page, accessing the seminar registration report, accessing the completed/ended seminar page, and account logout.

CONCLUSIONS AND SUGGESTIONS

Conclusions

The seminar is needed by some people, especially students. There are several obstacles to being able to take part in the seminar, one of which is information about the seminar. In helping to solve these problems, a Web-Based Seminar Event Registration Information System Application was made. This application can be accessed at any time, making it easier for seminar participants to find various types of seminar events, online registration processes, good data management by the system, making data reports more efficient and valid, and how to pay.

Suggestions

Payment for seminar events can be done through OLP (Online Payment) so that if there is a problematic network the seminar participants can make payments by other methods.

REFERENCE

Adiyanta, F. C. . (2019). Hukum dan Studi Penelitian Empiris : Penggunaan Metode Survey sebagai Instrumen Penelitian Hukum Empiris. *Adminitrative Law & Governance Journal.*, *2*(4), 697–709. https://ejournal2.undip.ac.id/index.php/alj/article/view/6604

Aediyansyah, A. (2018). PERANCANGAN SISTEM INFORMASI PENJUALAN DAUR ULANG BOTOL BEKAS (PET) BERBASIS WEB. *Jurnal Riset Informatika*, *1*(1), 11–16. https://doi.org/10.34288/jri.v1i1.5

Barlian, E. (2014). Seminar dan Karya Ilmiah. In *Sukabina Press* (1st ed.). Penerbit Sukabina Press. https://osf.io/preprints/inarxiv/jt2by

Damanik, E. (2018). DAMPAK SEMINAR DAN WORKSHOP ACCURATE TERHADAP MINAT

BELAJAR SOFTWARE AKUNTANSI. *Jurnal Teknik Informasi Dan Komputer (Tekinkom)*, *1*(1), 41–46. https://doi.org/10.37600/tekinkom.v1i1.50

Ibeng, P. (2020). *Pengertian Seminar*. Pendidikan.Co.Id. https://pendidikan.co.id/pengertian-seminar/

Mulyadi. (2016). *Sistem Akuntansi*. Salemba Empat; Penerbit Salemba Empat. https://www.gramedia.com/sistem-akuntansi-edisi-4.html

Saranailmu. (2019). *Seminar : Pengertian, Definisi, Ciri Ciri, Susunan, Fungsi dan Pihak yang Terlibat*. Weschool.Id. https://www.weschool.id/seminar-definisi-ciri-ciri-susunan-fungsi-dan-pihak-yang-terlibat/

Utama, I. W. A. M. (2017). Hakikat Seminar Pendidikan. In *ResearchGate* (Vol. 1). https://www.researchgate.net/publication/315054343_Hakikat_Seminar