

Implementation Of Event Management Website Using CodeIgniter Framework

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Abstract

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Event management is a part of organizing activities that are professionally, efficiently, effectively, and systematically. Event management includes concept planning, implementation of activities, and control over the expected organizers. The success of organizing events, it is necessary to have good event management. In order to have an information system that can assist in the implementation of the event. The event management information system that will be implemented utilizing web-based information technology, aims to facilitate the event organizing committee in processing event data, participant data, attendance data, and event activity reports. This event management information system uses the PHP programming language, MySQL as the database, and CodeIgniter as the framework. The method used in this research is the grounded method (grounded research), a prototype model uses for system development. The designed procedures include event publication procedures, registration, payment, and attendance. The result of this research is a web-based event management information system. The designed system, it is hoped that it can help the event committee solve problems that often occur and provide better procedures for participants and the organizing committee.

Keywords: Chilli, Expert System, Forward Chaining, Oreste

1. Introduction

Currently, event activities has become a way of life in human culture, it is simple events or large events. Each event could be developed by anyone, as governments, companies, communities, universities, or a combination of several, or an institution. The number of people who attend an event is a good indicator of its success. Like an exhibition event, it would be a great success if the visitors were full every day. Likewise, organizing seminars, weddings, conferences, and other events will greatly satisfy the event organizers if the participants are enthusiastic about participating until the end of the event. The problems that often occur in every event implementation include the registration process, scheduling, participant data processing, and activity reports, with the main factors ranging from cost, time, and distance to information.

There are also those who have used online forms, but there is no attendance confirmation data. It will make it difficult to find data when data is needed again. Therefore, we need a system design that can help overcome the problems outlined above. In a previous study conducted by Khamil Aryansyah in 2020 at UNIKOM Bandung with the title "Designing Information Systems for Organizing Workshops and Seminars Events". In this study, the information system is still local, which only specializes in students from the internal environment as participants and committees, and only focuses on workshop and seminar events [1]. While conducting this research, the author hopes to create an information system that can be used publicly by various parties, such as governments, businesses, communities, or institutions.

The purpose of this research is to build a web-based event management information system that will help various parties who want to hold events. Participants will register online by accessing the website, as well as by contacting the committee, who will process data through the website and archive storage in an online database that allows users to access the system flexibly anywhere and anytime, as well as reduce archival documents in the form of paper that require storage. extra. A barcode (QR) will be used to confirm attendance, making it more efficient.

2. Literature Review

The research approach must be related to the research objectives. Researchers use reference materials from various sources, including relevant research that has been done.

Management Information System

A management information system (MIS) is an integrated human or machine system to present information to support management operations functions and decision making in an organization. organization. Management is the science and art of regulating, controlling, communicating, and utilizing all existing resources within an organization by utilizing management functions (planning, organizing, actuating, and controlling) so that the organization can achieve its goals effectively and efficiently.

An event is an activity such as cultural arts performances, music group performances, national seminars, food exhibitions, and others that attracts visitors with the aim of making an economic income. An event is a commemoration of a certain event agenda that shows and celebrates with the aim of commemorating or informing the public of important things that are carried out within a certain time frame with the aim of disseminating the contents of the event or message to visitors [2], [3].

Event management, according to the author, is the process of planning activities, discussions, and human participation in organizing an activity or event that has the purpose of introduction, promotion of a product or service, and education, originating from a company or organization, so that implementation can run in accordance with the aim of providing a wider introduction to event participants [4], [5].

Code Igniter Framework

The author uses the CodeIgniter Framework because to do program development there is no need to create code from scratch so that the work process feels faster. Codeigniter is a framework for making application development programs (application development framework) using the PHP programming language. Developers can immediately generate programs quickly, by following the framework for creating that has been prepared by the codeigniter framework [6].

Website

The website is an information page provided via the internet so that it can be accessed throughout the world. It contains multimedia documents such as text, images, sound, animation, and video and can be accessed worldwide as long as it is connected to the internet network [7].

Programming Language And Database

PHP (Hypertext Preprocessor) is a programming language that allows developers to paste code in HTML using the same language as Perl and UNIX shells, which are run using a web server [8]. The database is data that is interconnected and related to certain subjects for certain purposes as well. The relationship between these two data can be seen by the presence of fields or columns. One of the databases is MySQL (My Structured Language), which has a DBMS Management System function that supports the PHP programming language [9], [10].

3. Method

The research method used by the researcher is the grounded method (grounded research), which is a research method based on facts and using analysis in the field with the aim of knowing the data processing process carried out. First, the research begins by identifying primary and secondary needs. Interviews and field observations are primary data collection methods, while for secondary data, literature studies are carried out on documents such as event activity documents, participant data, attendance data, etc. The system began to be designed after the primary data and secondary data had been obtained. Furthermore, system development is carried out after the design is complete. After system development is complete, the system begins to be built using the PHP programming language, the CodeIgniter framework, and MySQL as the database[11], [12]. Only then does system testing take place after all the design and development are completed. The picture of the flow of the research stage can be seen in Figure 1.

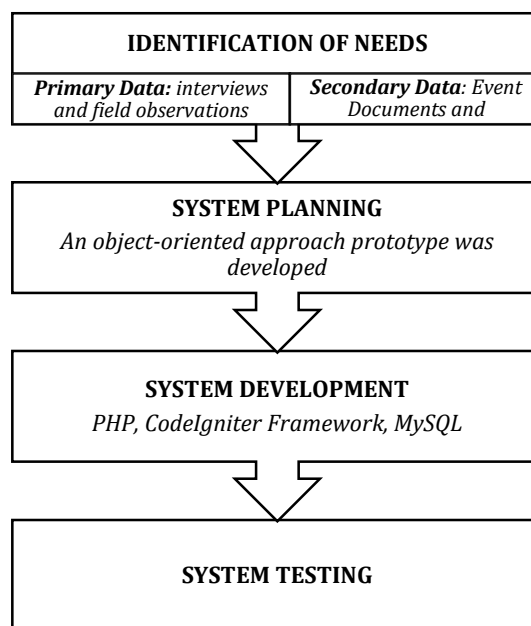


Figure. 1. Research Method

The system procedures that are running include:

Publication Procedure

1. The committee can login to the website with an account that has already been registered.
2. The committee makes and fills in the details of the event data to be published.
3. The committee publishes the event by distributing a QR code or event link to social media in order to expand the publication media.

Registration Procedure

1. Participants create an account or login via the web, then select the event to be followed.
2. Participants register for the selected event.
3. Participants will receive confirmation via email.

Payment Procedure

1. Participants pay if the event is paid for.
2. Participants upload proof of payment.
3. Payment confirmation committee.
4. Participants get a confirmation of the QR code.

Attendance Procedure

1. Committee login on the web.
2. Participants show the QR code to the committee to be scanned.
3. Participants enter the room.

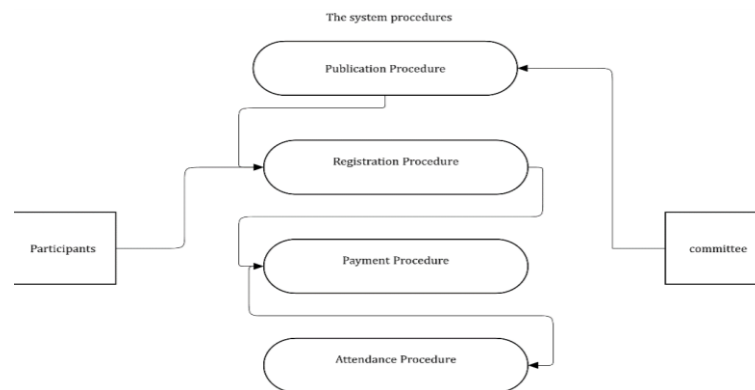


Figure. 2. System Procedure

The system consists of two parts. The front-end includes registration, payment, and attendance procedures. While the back-end event publication, the existing access rights in the system consist of the committee as admin and participants as users. There are two parts to registration, account registration and registration as an event participants. Registration as a participant can be done if you already have an account. In the online payment process, participants need to upload proof of payment (transfer) if they make online payments. Attendance is done by showing the QR code at the entrance to be scanned by the committee.

Context Diagram

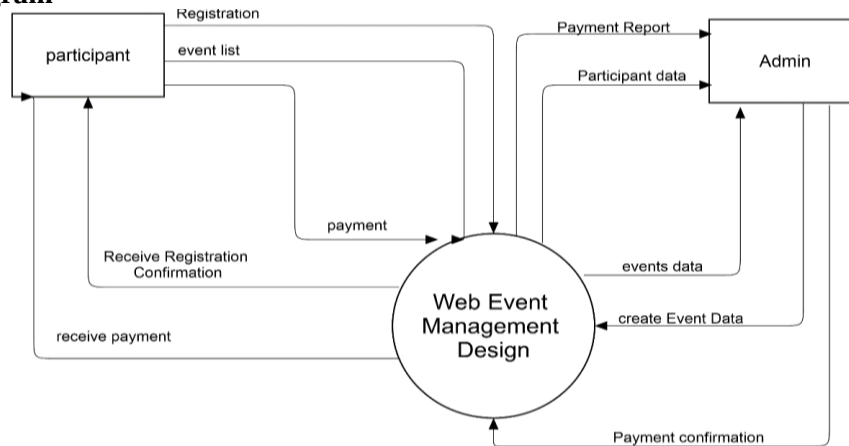


Figure. 3. Context Diagram

The context diagram above describes what is happening in the system to be designed and the relationship between these systems.

4. Results And Discussion

Problem Analysis

The problem that often occurs in event implementation is that the registration process is less effective and efficient, participants have to register manually at the place, which causes long queues and takes time in the event scheduling process. Manual processing of participant data makes it difficult

for the event committee to collect participant data, especially if the event being held has a lot of participants, procedures that are not integrated with each other cause the committee to find it difficult to make event reports. This also makes it difficult for the committee to search for data when it is collected. They need it again because they have to check it one by one sheet of paper at random. For some events that still apply on-site payment procedures, it creates difficulties for participants, especially participants who come from outside the city and must come to the event location to make payments. The attendance procedure takes a long time because the search for data is still manual and random, causing queues for the attendance process.

From the problems above, the authors take alternative solutions, including:

1. Design and build a registration procedure that can be accessed online so that it can be accessed anywhere online, especially for participants who come from outside the city, as well as make it easier for prospective participants to follow and choose information for the event to be held.
2. Build a data processing information system where all data between procedures is integrated with each other, which makes it easier for the committee to process participant data, activity data, and attendance.
3. Make online payment procedures so that payments can be made anywhere and anytime, especially for participants who come from outside the city.
4. Designing a system that can provide access to participant data search that is useful for the attendance confirmation process and decision-making.

Implementation

User Interface of login Form



Figure. 4. User Interface of Login Form

User interface of login form is the interface for login into the system, both for participants and committee, enter email and password registered.

User Interface Of Publish Event

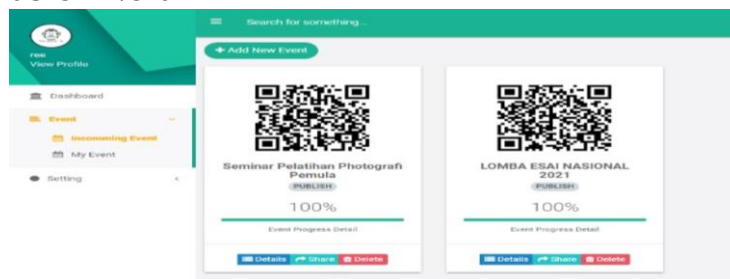


Figure. 5. User Interface of Publish Event

User interface of publish event is interface contained in the Event-Incoming Event menu. It contains a list of events to be held as well as a menu for admins to create new events to be published. Admins can choose the event to be followed on this page. This is in accordance with the event date that has been determined previously.

User Interface Of Event Details

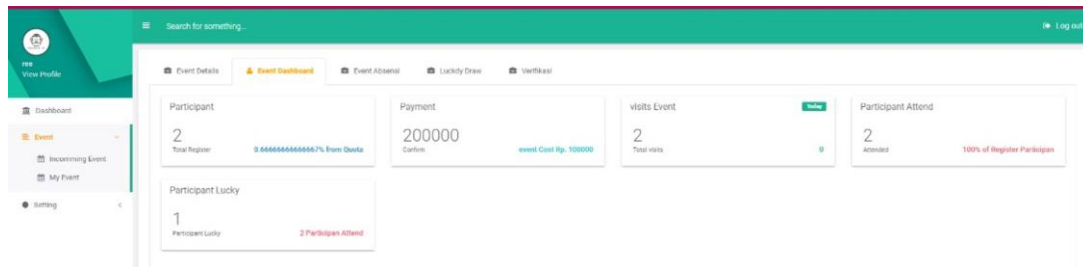


Figure. 6. User Interface Of Event Details

User interface of event details contains information about the event, which includes information about the event date, event location, contact, type of event, cost (if the event is paid) and the number of participant quotas. On this page, participants can be register for the event to be followed by clicking "event list".

User Interface Of Event Dashboard

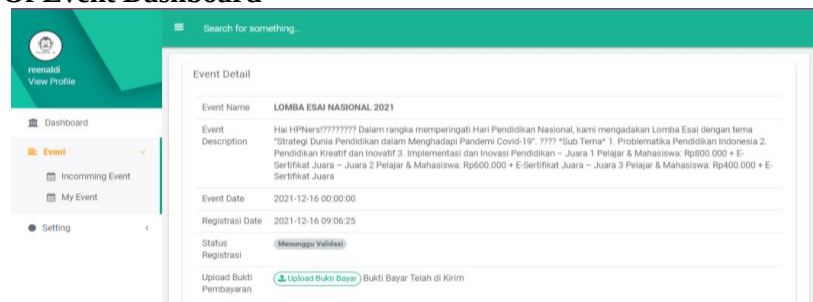


Figure. 7. User Interface Of Event Dashboard

User interface Of event dashboard is interface of information, participant data, payments information, event visits, number of participant attending and lucky information if the event has lucky draw.

User Interface Of MyEvent

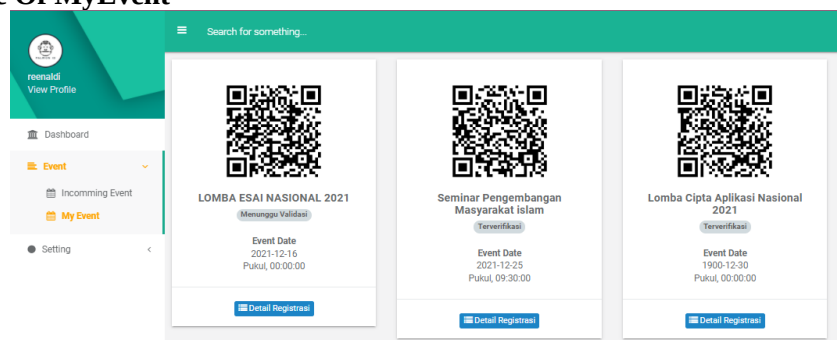


Figure. 8. User Interface Of MyEvent

On the interface, it contains a history of events that have been registered.

User Interface Of Payment

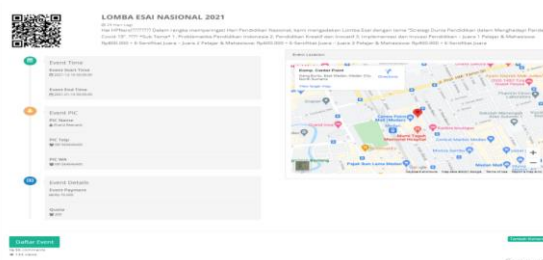


Figure. 9. User Interface Of Payment

On the payment page, participants upload proof of payment if the event is paid, and waiting for validation by the event creator to get an attendance ticket. The event creator validates participants who have uploaded proof of payment as shown in Figure 10.

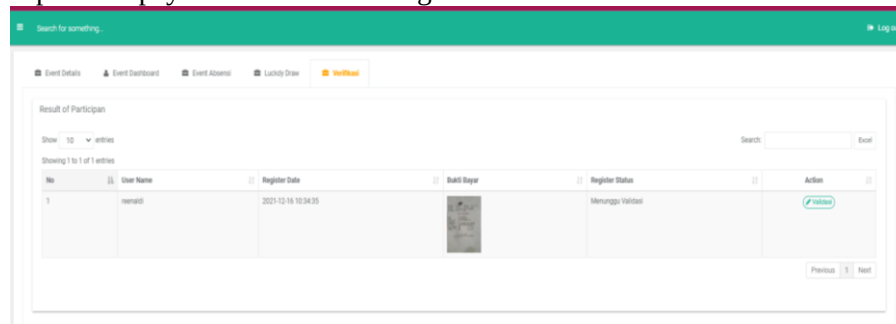


Figure. 10. User Interface Of Payment Validation.

After the event creator validates the payment, an attendance ticket will be automatically appear and can be downloaded to the participant's account on the upload proof of payment page for the event that was previously registered, as shown in Figure 11 below.



Figure. 11. User Interface Of Attendance Ticket.

User Interface Of Attendance

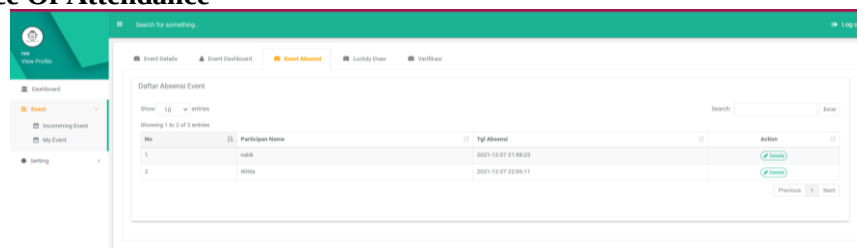


Figure. 12. User Interface Of Attendance.

User Interface Of Attendance , participants who have scanned a barcode or attendance ticket by the committee, attendance data will be automatically enter in the system as shown in Figure 12. The barcode only be used for one time attendance so as not to be misused by potential participants.

System Testing

Tests are carried out to see the results of the system design that was built to match the expectations, as well as to find out the errors that occurred so that further system improvements can be made.

Table 1. System Testing

No	Functional	Input Data	Indicator	Status
1.	Account registration by the committee and participants	input of committee and participant data to the system (<i>username, email, password</i>)	participant and committee data was successfully added to the system	“Succeed”
2.	Event Publish by committee	Input event data into the system	Event data was successfully added to the system	“Succeed”
3.	Change and edit event data by organizers	Update event data on the system	Event data was successfully updated	“Succeed”
4.	Delet event data by committee	Delete event data in the system	Event data was successfully delete	“Succeed”
5.	Events registration by participants	Log in to the system and event registration	Event participant registration data successfully entered into the system	“Succeed”
6.	Participants make payments	Input payment data to the system	Payment data successfully entered into the system	“Succeed”
7.	Payments validation by the committee	display incoming payment data	Payment data was successfully confirmed by the committee and entered into the system.	“Succeed”
8.	Display attendance tickets (QRcode) by the system	Download QRcode / attendance ticket by participant	Attendance ticket data successfully downloaded in jpg format.	“Succeed”
9.	Display attendance tickets (QRcode) by participants	Input (<i>Scan</i>) attendance ticket (QRcode) by the committee	Attendance data successfully entered into the system	“Succeed”
10.	Print absentee data by the committee	Print attendance data in .xlsx (<i>excel</i>) format	Participant attendance data was successfully printed in .xlsx (<i>excel</i>) format	“Succeed”

5. Conclusion

Based on the results of the analysis on the background and the purpose of this research, the authors conclude that the designed information system has produced an information system that is more efficient and effective than the previous system. This can be proven based on test results that provide solutions related to problems in the process of publication, registration, payment, and attendance that are often experienced by event organizers and participants.

This information system, the event organizer is assisted in managing activities and providing operational support in the data processing process. This system is user friendly so that the user has no difficulty for using it.

It is hoped that further research will strengthen the choice of private events such as weddings, only certain people that can register and see the event.

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