

DESIGNING AN INFORMATION SYSTEM FOR WEDDING ORGANIZER RENTAL SERVICES USING THE FCFS ALGORITHM AT ASSYIFA STUDIO

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ABSTRACT

Assyifa studio Assyifa Studio, Muara Sabak Timur District is a service provider business to organize an event that is already professional. Assyifa Studio has encountered problems with the system that is running, including frequent errors in data collection of booking schedules that cause schedule collisions between customers so that rental services often occur. the wedding organizer was booked at the same time. Because the administration is still recording bookings using tickets or notes. The purpose of this study is to analyze the system that is running, in order to overcome the problems faced at Assyifa studio, by designing a wedding Organizer rental service information system design using the FCFS algorithm on Assyifa studio, to provide convenience in conducting online transactions and help book the Wedding Organizer schedule and improve services in receiving orders for Wedding Organizer services.

Keywords: Design, Informatics Engineering, Wedding Organizer Rental Services

INTRODUCTION

Current technological developments affect the use of software that is always evolving. Many agencies, organizations, companies, and institutions both government and private have implemented information systems to simplify and improve performance. Along with the development of technology, the world of trade and the world of business is also developing. Currently, the most recent development, in transactions, a business transaction model appears that follows technological advances in the field of communication and information media, namely internet technology, which connects connections between computer networks so as to create rapid information transformation throughout the world network through international computer networks.

“Services are basically activities or benefits offered by one party to another and are essentially intangible and do not result in ownership of anything.”[1]. While the service "service" is something that is intangible and refers to activities in meeting needs. So the definition of service quality is an activity that is carried out continuously (consistency) in meeting the expectations of consumers” [2]. “Service is an activity carried out by companies to consumers after they buy their products” [3].

Assyifa Studio is a service provider business to organize a professional wedding party or called a Wedding Organizer. The main task of the Wedding Organizer is a service business that is officially appointed by the client to organize a series of events, from the creative side, preparation, implementation to completion, in order to help the Customer succeed and realize the expected goals through a series of events. As one of the service businesses that has quite a number of customers.

Assyifa Studio encountered problems with the system that was running, including frequent errors in data collection of booking schedules which caused schedule collisions between customers so that wedding organizer rental services were booked at the same time. Because the administration is still recording bookings using tickets or notes. Not optimal marketing services, business transactions and competition in service trade. This is because the business transaction system in this business is not yet running online, so the limited space and time to find out the latest information on prices and events provided is a major problem for customers. If any of the customers ask questions about how to make transactions, product info and so on, Assyifa Studio explains in detail and most of the customers don't understand with just one explanation, so Assyifa Studio requires that Assyifa Studio explain many times how to do transactions for each different customer.

Similar research states that the benefits of a wedding organizer information system are that it can be available whenever needed by stakeholders, so that customer satisfaction, and the comfort of employees, as well as business owners are maintained. [4], Payment can be selected via cash or bank by showing a photo of proof of payment [5]. Can be selected via cash or bank with the right payment calculation because the system calculates automatically [6]. Make it easier to search for the desired wedding package data and according to the

criteria for the needs of suit usersa [7]. It is considered safer than fraud because it contains a clear company profile [8]. To overcome these problems, an information system that utilizes the internet is needed and is made according to the needs of Assyifa Studio. So, the writer is interested in doing research and putting it in the form of a final project with the title "Designing a Web-Based Wedding Organizer Rental Information System at Assyifa Studio, Muara Sabak Timur District Using Lock-free and wait-free algorithms"

RESEARCH METHODOLOGY

Research Stages

To assist this research, it is necessary to have a clear framework of the stages. This framework is the steps that will be taken in solving the problems discussed. Based on the research framework described above, the discussion of each stage in the research can be described as follows:

- Identification of problems

At this stage the authors identify problems in the system that is running in order to find out the needs that must be met. By observing, researching, and examining more deeply what problems are faced by Assyifa Studio, Muara Sabak Timur District. So that the authors can conclude the formulation of the problem from this research.

- Formulation of the problem

At this stage it can be stated as the scope of the problem to be studied. In the formulation of the problem, the author asks several things related to a study, where later the answer to this question will be the result of research at Assyifa Studio, Muara Sabak Timur District.

- Data collection

At this stage, the writer collects data using observation, interviews and direct documentation with Assyifa Studio, Muara Sabak Timur District, which is related to the research that the author does, such as interviews and observing the work system that takes place at Assyifa Studio, Muara Sabak Timur District.

- Data analysis

At this stage the author analyzes the data that has been collected previously, to be used as a reference for designing an appropriate system.

- System planning

At this stage the author designs a system using the waterfall method by first analyzing the needs that Assyifa Studio, Muara Sabak Timur District, adjusts to the system that the author will design, whether it is in accordance with what is needed, then proceeds with application design to the system testing stage.

- Preparation of reports

At this stage the author summarizes the results of research that has been carried out into a final project report starting from problem identification to the development stage of the system that has been designed.

Database

Ramon Mata toledo [9] explains: "Database is a collection of logically related data and has several interrelated meanings". Meanwhile, Yudhy Wicaksono [10] explained: "The database is a collection of interconnected data so that we can get data information back quickly".

Table 1. WO . Ordering Table Design”

Field Name	Type	Length	Note
id_pemesanan	varchar	15	id_pemesanan
kode_transaksi	varchar	50	kode_transaksi
tanggal_pemesanan	date		tanggal_pemesanan
total_bayar	int	10	total_bayar
nama_bank	varchar	30	nama_bank
rekening	varchar	50	rekening
tujuan	varchar	100	tujuan
tanggal_upload_bukti_pembayaran	date		tanggal_upload_bukti_pembayaran

Field Name	Type	Length	Note
foto_bukti_pembayaran	varchar	100	foto_bukti_pembayaran
no_telepon_penerima	varchar		

RESULTS AND DISCUSSION

Muhammad Muslihudin dan Oktafianto [11] states: "UML stands for (Unified Modeling Language) which means standard modeling language". Meanwhile, Feri Sulianta and Fajri Rakhmat Umbara [12] explained: "UML is a collection of diagrams that already have standards for object-based software development".

Running system

- a. The customer contacts the Wedding Organizer via cellphone based on the Assyifa Studio contact number, Muara Sabak Timur District on Instagram, to make transactions, generally, the customer will hold a meeting directly.
- b. The Wedding Organizer proposes the day and time of the meeting and the Customer agrees with the specified time.
- c. After meeting, the customer tells the event plan that will be held, along with the concept that will be carried out and what tools are needed. For concept ideas, it can be from the Wedding Organizer and it can also be from the Customer, according to the Customer's approval.
- d. After the event plan is set, then the wedding organizer charges a fee based on what tools are used and the distance of the location in organizing the event.
- e. If the Customer agrees with the pricing, then the Customer is required to pay an advance of 30% of the total cost of organizing the Event
- f. Then the Wedding Organizer will hand over the initial payment receipt
- g. Then after one day the event is completed, the customer is obliged to pay 70% of the remaining transactions.
- h. The Wedding Organizer provides proof of payment receipts, and prepares reports on activities that have been carried out to be submitted to the leadership.

Usecase

Indrajani [13] explained: "Use case diagram is a diagram that contains use cases, actors and the relationship between them". Meanwhile, Feri Sulianta and Fajri Rakhmat Umbara [12] explained: "Use case diagrams are diagrams that must be made first when modeling object-oriented software is carried out".

a. Use case Diagram for Admin

The Use case diagram presents the interaction between the Use case and the Admin in the system to be developed. Use case The following diagram illustrates how the Admin as a user can interact with the system, and operate the system as shown in the following figure:

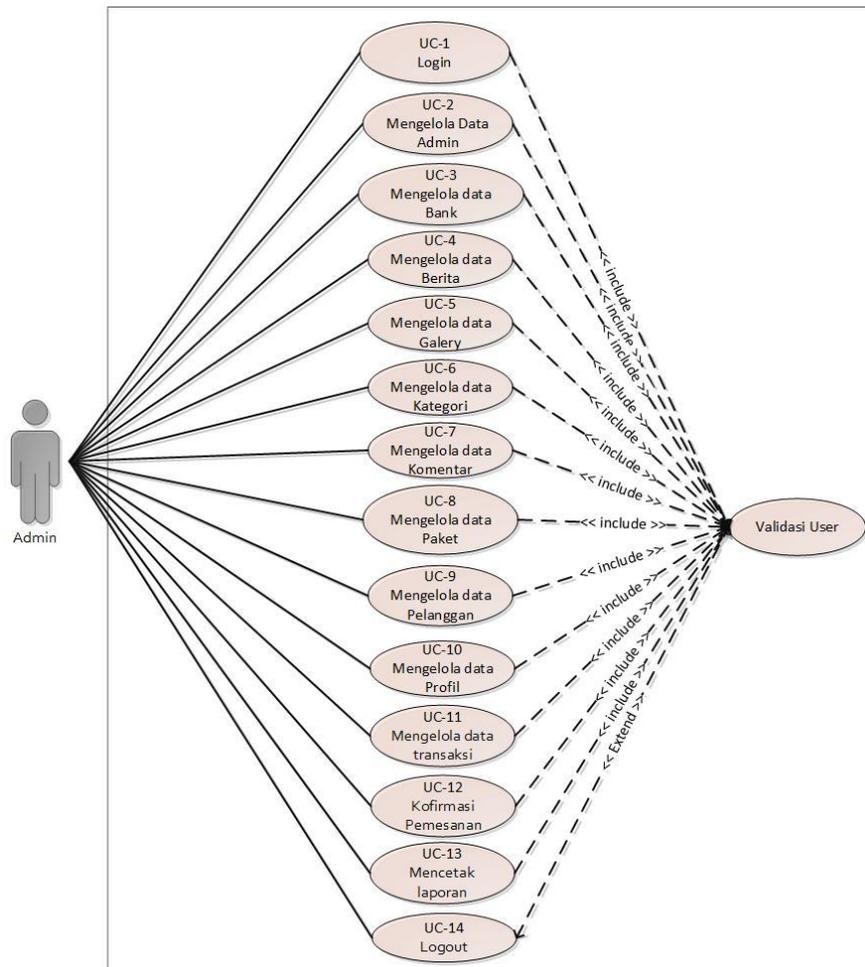


Figure 1. Usecase Admin

a. Use case Diagram For Customers

The Use case diagram presents the interaction between the Use case and the customer in the system to be developed. Use case The following diagram illustrates how the Customer as a user can interact with the system, and operate the system as shown in the following figure:

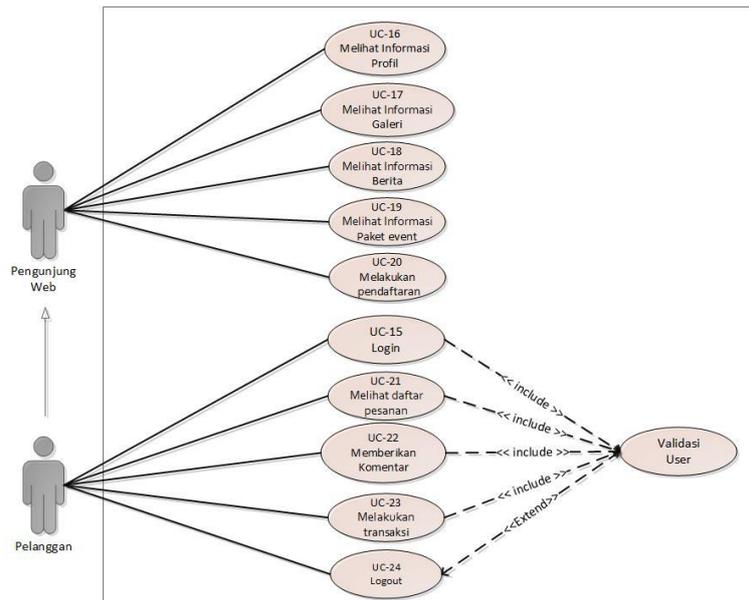


Figure 2. Web Visitors

Activity Diagram

Evi Triandini [14] states: "Activity diagram is a workflow diagram that performs each activity, and the sequential flow of these activities". Meanwhile, Adi Nugroho [15] explained: "The activity diagram is the starting point for the design stage which will be implemented immediately after the analysis stage is completed".

a. Activity Diagram Add

The following is an added Activity diagram that illustrates the flow of activity in adding data:

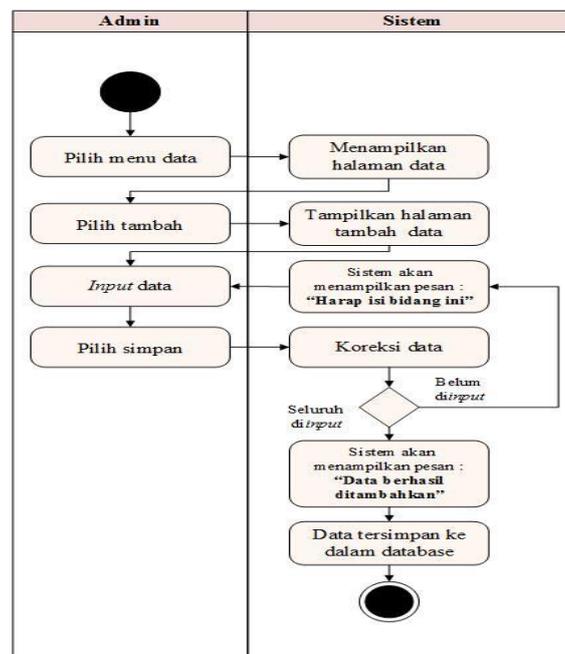


Figure 3. Activity Diagram Add

b. Activity Diagram Delete

The following is a delete activity diagram that illustrates the flow of activity in deleting data:

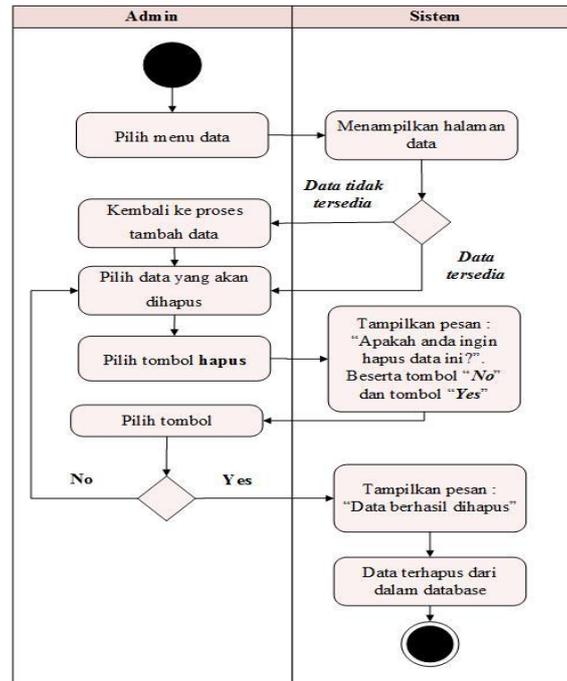


Figure 4. Activity Diagram Delete

ERD (Entity Relationship Diagram)

Indah full moon said, "ERD is modeling data or systems in a database. The function of ERD is to model the structure and relationships between relatively complex data. The existence of an Entity Relationship Diagram system is very important for companies in managing their data." [16]. Muhammad Rusli explained, "ERD (Entity Relationship Diagram) or entity relationship diagram is a diagram used to design a database and shows the relationship between objects or entities and their attributes in detail." [17]. Hendra Bhakti, et al explained, "ERD (Entity Relationship Diagram) or entity relationship diagram is a diagram used to design a database and shows the relationships between objects or entities and their attributes in detail.." [18].

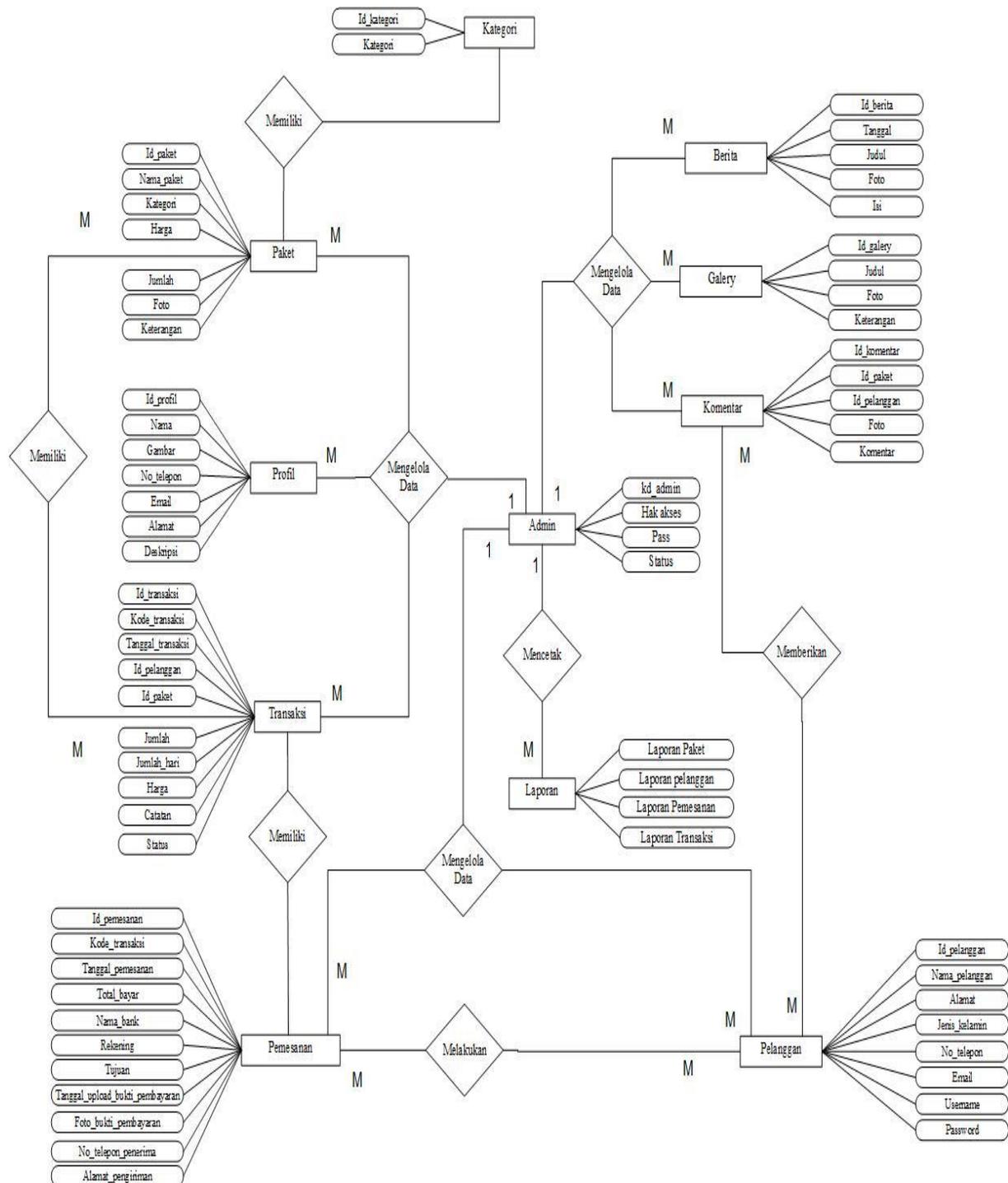


Figure 5. ERD (Entity Relationship Diagram)

Implementation

Program implementation is the result of a design that was previously made or the process of translating the design into a display result that can be enabled using a programming language. The implementation of the program can be described, namely:

a. Main Menu Display

The menu display is the result of a basic plan or framework that the author designed previously. At this stage the menu has been given a programming language so that it can function, with the hope that this menu is in accordance with what has been designed previously.

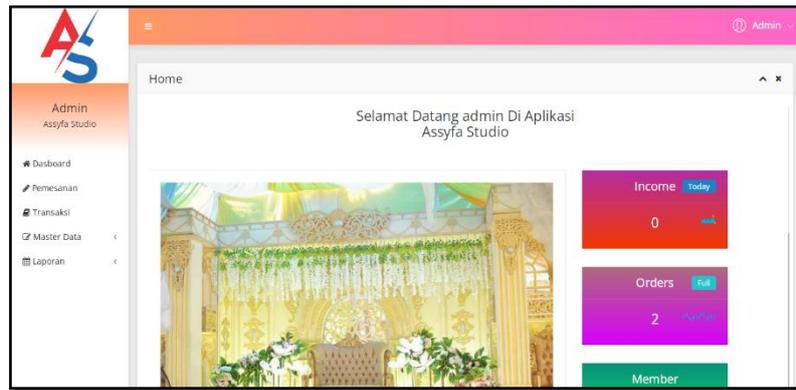


Figure 6. Main Menu

b. Order Form Display

The order page display displays the results of the previously designed basic plan or framework, the menus contained in the system are the news menu, the order data add menu, the ordering data edit menu, the order form input display in the picture below is an implementation of the ordering design:

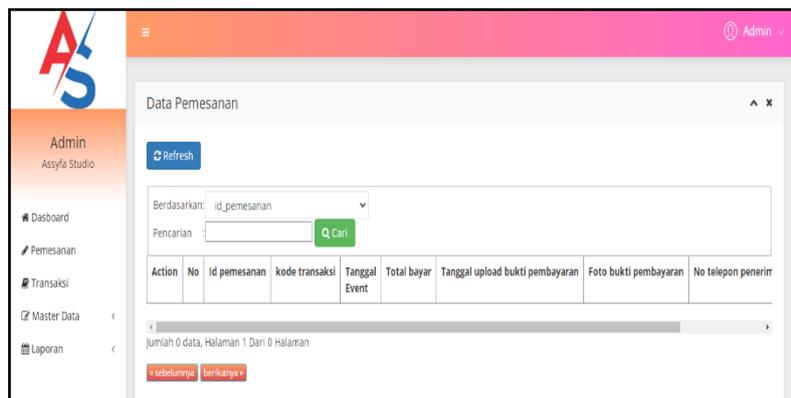


Figure 7. Discussion Points

c. Report

This data report is used as information so that the admin can print the overall data report. The Population report can be seen in the following picture:

Assyfa Studio										
LAPORAN PEMESANAN										
Jl. Sultan Taha No.01, Lambur II, Kec. Muara Sabak Timur,										
No	id pemesanan	kode transaksi	tanggal pemesanan	total bayar	nama bank	rekening	tanggal upload bukti pembayaran	foto bukti pembayaran	no telepon penerima	alamat pengiriman
1	PEM001	20220723030749	31 Juli 2022	Rp.43.000.000	Mandiri	00112233445566	23 Juli 2022		822875648	Jambi
2	PEM002	20220723065210	31 Juli 2022	Rp.18.000.000			00 0000		822875648	Jambi

Jambi, Sabtu 23 Juli 2022
TTD
admin

Figure 8. Report

d. Application Testing

Page testing involves testing performed to ensure that no changes made during the development process have led to new bugs. It is also used to ensure that no old bugs arise from adding new software modules over time.

CONCLUSION

Based on the results of the discussion that has been described in the previous chapters, here the author can draw the following conclusions:

1. The wedding organizer ordering information system that is integrated with the website makes it easy for customers to order products and services online.
2. Produce a wedding organizer ordering information system that provides a detailed price list for consumers.
3. With a web-based wedding organizer ordering information system, wedding organizer bookings can help accommodate customers who make online bookings.

REFERENCES

- [1] S. Sutejo, "Pemodelan UML Sistem Informasi Pemesanan Wedding Organizer," *Digit. Zo. J. Teknol. Inf. dan Komun.*, vol. 7, no. 2, pp. 89–99, 2016.
- [2] R. S. Wahyudin, I. Baihaqi, and D. S. Ardiantono, "Evaluasi Kualitas Layanan pada Unit Pengembangan UMKM: Studi Kasus Community Development Center Telkom Witel Surabaya Selatan," *J. Tek. ITS*, vol. 9, no. 1, pp. 72–77, 2020.
- [3] W. D. Savitri, "Pengaruh Harga, Produk Dan Kualitas Pelayanan Terhadap Kepuasan Konsumen Dwi Jaya Furniture," *Ilmu dan Ris. Manaj.*, vol. 6, 2017.
- [4] E. Nurpatonah, "Sistem Informasi Pemesanan Wedding Organizer Berbasis Web Pada Java Exist Management," *J. E-KOMTEK*, vol. 3, no. 2, pp. 1–20, 2015.
- [5] E. R. Muhammad Yogi Saputra, "Sistem Informasi Pelayanan Paket Pernikahan Pada Nirwana Organizer Bekasi," *Bekasi J. Bina Insa. ICT*, vol. 3, no. 2, pp. 360–369, 2016.
- [6] Normah, "Sistem Informasi Administrasi Wedding Organizer Sanggar Widya Jakarta," *Bina Insa. ICT J.*, vol. 4, no. 2, pp. 161–168, 2017.
- [7] D. Permata, Ee. Tasrif, and I. P. Dewi, "Perancangan Sistem Informasi Pemesanan Wedding Organizer di Kota Padang," *J. Vokasional Tek. Elektron. Dan Inform.*, vol. 6, no. 1, pp. 2–7, 2018.
- [8] Fandhilah, D. Pratmanto, and A. Fatakhudin, "Rancang Bangun Sistem Informasi Pemesanan Paket Pernikahan dan Prewedding Berbasis Web," *Softw. Eng.*, vol. 3, no. 2, pp. 68–76, 2017.
- [9] R. M. Toledo, *Dasar dasar database relasional*. Jakarta: Erlangga, 2014.
- [10] Y. Wicaksono, *Mengelola Database Eksternal Menggunakan Excel*. Jakarta: PT. Elex Media Koputindo, 2014.
- [11] M. muslihudin dan Oktafianto, *Analisis dan Perancangan Sistem Informasi menggunakan model terstruktur dan UML*. Yogyakarta: Andi, 2016.
- [12] F. S. R. Umbara, *Teknik Hebat Merancang Aplikasi Instan Dan Berkualitas*. Jakarta: PT. Elex Media Koputindo, 2015.
- [13] Indrajani, *Database design*. Jakarta: PT. Elex Media Koputindo, 2015.
- [14] E. Triandini, *Step Step Desain Proyek Menggunakan UML*. Yogyakarta: Andi, 2012.
- [15] A. Nugroho, *rekayasa perangkat lunak berorientasi objek dengan metode USDP (Unified software development process)*. Yogyakarta: Andi, 2013.
- [16] I. P. Sari, *Rekayasa Perangkat Lunak*. Medan: Umsu Press, 2022.
- [17] M. Rusli and E. Triandini, *Memodelkan sistem informasi berorientasi Objek (Konsep dasar, prosedur dan implementasi)*. Yogyakarta: Andi, 2022.
- [18] H. Bhakti, B. I. Setiawan, and Wisudanto, *Sebatik*. Samarinda: P3M, 2021.