

Web-Based Information System for Rental and Asset Data Collection on Wedding Organizer using Laravel Framework

Nuranisyah


Software Engineering
Technology, Agriculture
Polytechnic of Samarinda,
75242, Indonesia
nuranisyahrani1998@gmail.com

Yulianto 

Software Engineering Technology,
Agriculture Polytechnic of
Samarinda, 75242, Indonesia
yulianto.javacom@gmail.com
**Corresponding Author*

Emil Riza Putra 

Software Engineering
Technology, Agriculture
Polytechnic of Samarinda,
75242, Indonesia
emiliriza92@gmail.com

 Submitted: 2021-10-05; Accepted: 2022-08-14; Published: 2022-09-01

Abstract— The background of this research is Alya's Bridal House which rents wedding packages offline (requires to come directly to the place to order), this is still less effective and efficient. This study also discusses asset data collection on the Wedding Organizer which can help facilitate ordering transactions, scheduling, and making it easier for admins to check available stock. The purpose of this research is to create a web-based rental information system and Asset Data Collection using the Laravel Framework programming language and MySQL as the database. The results of this study indicate that the trials generated on the respondent's test that the application used can facilitate asset data collection and optimize wedding package rental scheduling and can order wedding packages online properly.

Keywords— Laravel, PHP, Website, Information System, and Wedding Organizer.

I. INTRODUCTION

The development of information technology today has greatly influenced many aspects of people's lives, this influence has made many lifestyle changes and people's perspectives in the era of technology. This makes many businesses trade or rent, sell or rent their goods over the internet.

High human mobility requires the world of commerce to be able to provide services and goods instantly according to consumer demand. To overcome this problem, transactions are now emerging that use the Internet to connect service providers and consumers.

Nowadays people are faced with problems in arranging weddings and sometimes it becomes an obstacle. The problem that often occurs is the adjustment of the funds that will be spent on the wedding. In the observations of researchers, the wedding package was chosen by some prospective couples because it was considered practical. Wedding Organizer is a service that functions personally to assist the bride and groom and their families in planning and supervising the implementation of a series of wedding events according to a predetermined schedule and budget.

Alya's Bridal House is one of the wedding services in Samarinda City that provides several types of wedding services and wedding packages whose orders are still manually. This causes the problem that the bride and groom are often unable to meet the owner because they are not in place, while the bride and groom must come directly to the Wedding Organizer to order or just find out information on the services provided at the Wedding Organizer. With the whole process causing some problems in time efficiency and difficulty in booking wedding packages.

The process of collecting data on assets at Alya's Bridal House is also still done manually, so there are often problems with data collection of available goods and accurate scheduling for assets to be rented. Because of the difficulty of sorting the schedule of leased assets manually, this research also discusses asset data collection on the Wedding Organizer which can help facilitate ordering transactions, scheduling, and making it easier for admins to check available stock.

Based on the description of the background above, the researchers took the title "Information System for Rental and Asset Data Collection on Web-Based Wedding Organizer Using Laravel Framework.". So the formulation of the problem that can be taken in this study is how to design and build a rental information system and asset data collection at the Wedding Organizer. Does the asset data collection information system at the Wedding Organizer facilitate the rental process and asset data collection?

The purpose of this research is to design and build a rental information system and asset data collection at the Wedding Organizer. To simplify the process of asset data collection and rental at the Wedding Organizer.

The expected result of this research is the availability of information system applications that can facilitate rental and scheduling so that the bride and groom can find the desired wedding concept and provide quick information in making decisions.

II. LITERATURE REVIEW

A. Literature Study

(Aminuzal et al., 2018) entitled Application of

Wedding Equipment Rental Services Based on the Destam Case Study Website. The purpose of this study is to accommodate the bride and groom to make it easier to choose their wedding accessories. Therefore, a web-based wedding equipment rental service application is needed to be able to accommodate this information, and make it easier for consumers to find the wedding accessories they want. The research methodology in developing this system uses RAD (Rapid Application Development) with a rapid analysis and design process, software development, testing and implementation. Model design using UML (Unified Modeling Language) includes use case diagrams, activity diagrams, sequence diagrams and class diagrams.

(Pangesti & Hasti, 2019) entitled Design of Wedding Organizer Rental Information Systems at Wahyu Dinar in Rembang. The purpose of this study is to design an information system to facilitate rental and scheduling. This design uses the object method and prototype development. The results of this study are expected to facilitate or maximize the services of the wedding organizer revelation dinar.

(Mulyati & Hisyam, 2018) entitled Design and Build a Web-Based Wedding Organizer Rental Information System With Php And Mysql On Kiki Rias. An online wedding package booking information system. The system uses the waterfall method. This system uses black box testing to find out whether the data entered is correct or not and how the output results are in line with expectations or not.

(Wiwit & Harjunawati, 2017) entitled Design of Wedding Organizer Rental Transaction Information System at CV Denis Citra Mandiri Bekasi. Researchers tried to design a wedding organizer rental transaction system at CV Denis Citra Mandiri using web programming. By using this design, it is hoped that a program can solve the problems that exist in this company. In addition, using this design is expected to achieve an effective and efficient activity so that company profits will increase.

(Maiyana, 2019) entitled a web-based Wedding Organizer information system. This application is designed using the PHP programming language and MySQL database. The purpose of this research is to design a web-based Wedding Organizer information system so that the bride and groom can find the desired wedding concept.

B. Theoretical Foundation

Information Systems According to (O'Brian, 2005) quoted from (Rosidah,., 2018) in the book "Introduction to Information Systems" explains that information systems are a regular combination of people, hardware (hardware), software (software), communication networks, and data resources that collect, transform, and disseminate information within an organization.

Hutahaean J. (2014, p.13) quoted from (Pradipta et al., 2016) states that Information Systems (IS) is a combination of information technology and the activities of people who use that technology to support operations and management. In a very broad sense, the term information system is often used to refer to the interactions between people,

algorithmic processes, data, and technology.

From the explanation above, the definition of the information system itself is a set of components that are interconnected with each other to achieve a goal, namely processing data into accurate information.

Leasing comes from the basic word rent which gets the addition of the word and the ending. Leasing is an activity that serves lending services without ignoring a provision or agreement and conditions that apply within the organization in order to achieve a common goal (Apriliani et al., 2019).

According to Bahtiar (2011) quoted from (Nurdiansyah, 2020) in his journal, renting is an agreement or an agreement in which the tenant must pay or provide rewards and benefits to the object or goods owned by the owner of the lent goods. The law of leasing is permissible or permissible. examples of renting in our daily lives, for example, contracts for contracting office buildings, house contracts, renting land for agriculture, renting / chartering vehicles, renting futsal fields and others.

From the above definition Lease is an agreement in which a payment is made for the temporary use of an item or property by another person.

Wedding Organizer according to Ulung, G. (2010, p.7) quoted from (Pradipta et al., 2016) states that Wedding Organizer is a service that is provided to prospective brides as a whole from planning the event concept, budgeting funds, to working with various vendors exactly according to demand.

Wedding Organizer is a special service that helps provide information on various kinds related to weddings including catering service, make-up and clothing, florist and decoration, building, photography, and video shooting, MC and entertainment as well as invitations and souvenirs needed in weddings (Mulyati & Hisyam, 2018).

From the explanation above, the definition of Wedding Organizer itself is a special service that personally helps the bride and groom and their families in planning and implementing a series of wedding events according to a predetermined schedule.

MySQL stands for "My Structured Query Language" is the most favorite database today. This program runs as a server that provides multi-user access, accesses a number of databases both multithreaded and multi-user, and has been installed by about 6 million times worldwide. MySQLAB is free, under the GNU General Public License (GPL), but there is also a paid MySQL (Y. Yudhanto dan H.A. Prastyo, 2019).

Xampp is a compilation of the most popular free application programs among developers/programmers that are useful for developing PHP and MySQL-based websites. With this one application, we will get a complete software package that can be run on Windows or Linux so that programmers can easily perform simulations on a local computer before uploading it to the internet. Xampp software is created and developed by Apache Friends and can be downloaded at <https://www.apachefriends.org/>.

This software has the advantage that it acts as an Apache web server for simulating website development. This web development tool supports popular web technologies such as PHP, MySQL, and Perl. Through this

program, web programmers can test developed web applications and present them to other parties directly from a computer, without the need to be connected to the internet. Xampp also features the PhpMyAdmin database management feature just like on a real hosting server so that web developers can easily develop database-based web applications. Besides XAMPP, there are also LAMP, WAMP, and MAMP. (Y. Yudhanto dan H.A. Prastyo, 2019) From this explanation, xampp is an application that makes it easier to create a website.

Php MyAdmin is a web application to easily manage MySQL databases and MariaDB databases through a free interface. This web application is written using the PHP programming language. Like other applications for the web environment (applications that are opened or run using a browser), PhpMyAdmin also supports HTML/XHTML, CSS, and JavaScript code (Y. Yudhanto dan H.A. Prastyo, 2019)

This web application is intended to facilitate the management of MySQL and MariaDB databases by presenting a complete and attractive web interface. The existence of phpMyAdmin which is considered very important and also its open nature makes it one of the applications that is always included in cPanel (a popular application for controlling websites). This shows that the web hosting provider places great trust in phpMyAdmin as one of the web applications installed (installed) on the server. The advantage with the presence of phpMyAdmin can not only be enjoyed by web hosting providers, we can also install phpMyAdmin on our own server (local server) as long as the minimum requirements have been met.

From the above explanation phpMyAdmin is a free software based on the PHP scripting language which aims to make it easier for us to manage MySQL databases.

Laravel Framework is one of the best PHP frameworks developed by Taylor Otwell, the Laravel project started in April 2011. Initially, this project was created because Otwell himself did not find an up-to-date framework with the PHP version. Developing an existing framework is also not a good idea due to resource constraints. Due to some of these limitations, Otwell created its own framework with the name Laravel. Therefore, Laravel requires PHP version 5.3 and above (Y. Yudhanto dan H.A. Prastyo, 2019).

Laravel is a PHP framework released under the MIT license and built on the MVC (model view controller) concept. Laravel is an MVP-based website development written in PHP designed to improve software quality by reducing maintenance costs, as well as to enhance the experience of working with applications by providing an expressive, clear, and time-saving syntax. As a PHP framework, Laravel is present as an open source web development platform. What's interesting about Laravel is that its syntax is expressive and elegant, and it's specially designed to simplify and speed up the web development process. From Google Trend data, it shows that Laravel is the most searched and read.

From the above explanation Laravel is a framework that serves to assist in maximizing the use of PHP in the website development process.

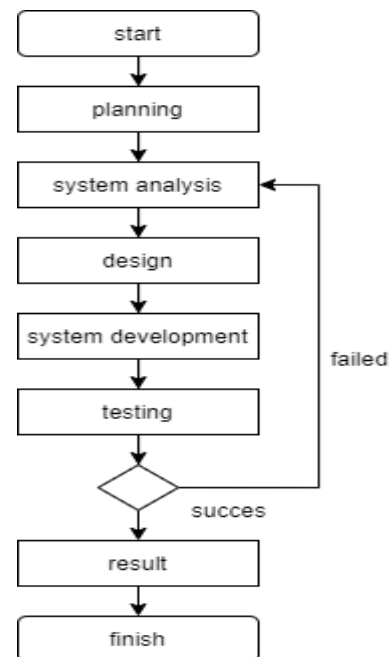
Flowchart is a graphical depiction of the steps and sequences of procedures of a program. Flowcharts help the analyst to break down the problem into smaller segments and help in analyzing other alternatives in operation. Flowcharts usually make it easier to solve a problem, especially a problem that needs to be studied and evaluated further. The process in the organizational environment is generally a series of repetitive activities. Each cycle of these activities can usually be broken down into several small steps. From the description of these steps, we can find which steps we can improve (improve) (Ridlo, 2017).

UML according to Rosa and Salahuddin (2010, p.137) quoted from (Pradipta et al., 2016) in their journal suggests the Unified Modeling Language or commonly abbreviated as UML is a visual language for modeling and communicating about a system using diagrams and supporting texts. . UML only serves to do the modeling. So the use of UML is not limited to a particular methodology, although in fact UML is most widely used in object-oriented methodologies. Like other languages, UML defines notation and syntax/semantics. UML notation is a set of special forms for describing various software diagrams. Each form has a specific meaning, and the UML syntax defines how these forms can be combined.

III. RESEARCH METHODS

A. Research Procedure

The research procedure is a series of activities carried out to achieve the results, objectives and conclusions in a systematic and standardized manner. This research procedure was carried out in several stages, as shown in picture 1.



Picture 1. Research Procedure

The stages in making the Rental Information System and Asset Data Collection at this Wedding Organizer are as follows:

1. Stages of System Planning

At this stage the researcher held a meeting with the owner of the Wedding Organizer to identify the problem and the purpose of the application or system to be made. Researchers also collect data by means of interviews and observations.

a) Interview

Interview is a method of data collection which is done by asking questions directly to the resource persons in the company being researched.

b) Observation

Observation is a method of observing directly in the field on the object of research with the aim of obtaining a description of the conditions that occur based on the perception of the researcher.

c) Documentation

Apart from interviews and observations, information can also be obtained through facts stored in letters, and photo archives. Data in the form of documents like this can be used to explore information that occurred in the past.

2. System Analysis Phase (Analysis)

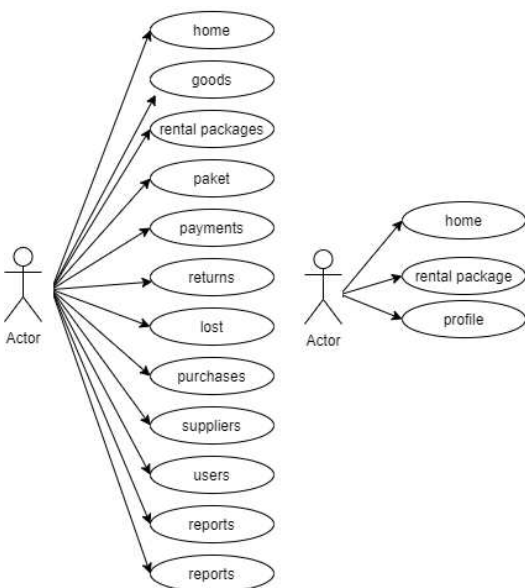
This analysis is used to analyze the company's old system and describe the needs of the Wedding Organizer. At this stage the author will make direct observations or observations of the company's operational activities related to cash orders at Alya's Bridal House, so that researchers can find out what data or documents are needed in the Information System that will be made later.

3. System Design (Design)

In the process of designing this system there are several stages, namely:

a) Use Case Diagram

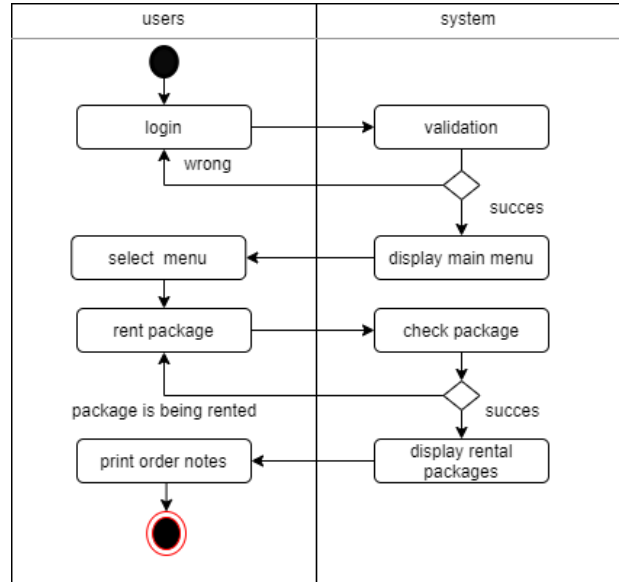
This stage is designing the system in outline. System design is used to describe some of the interactions between users of a system and the system itself about how the system is used. Ease of understanding between developers and users in the form of use case diagrams. The following is a use case diagram from this research which can be seen in picture 2.



Picture 2. Use Case Diagram

b) Activity Diagram

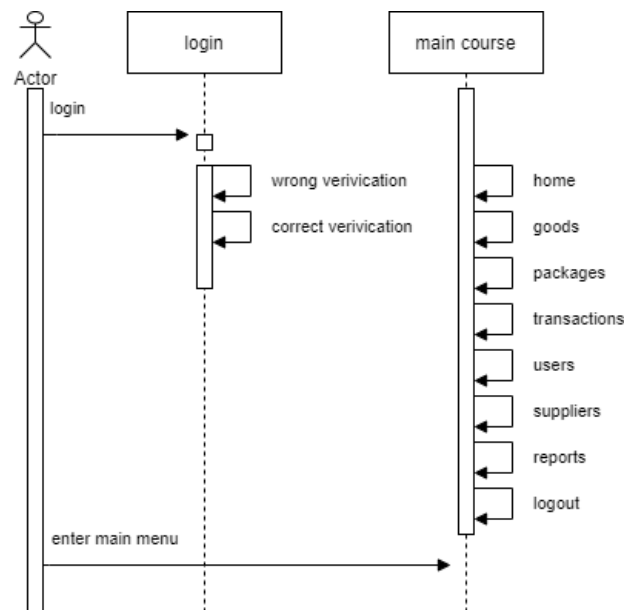
This stage is to explain the workflow of the activities of a system or business process or menu that is in the software. What should be noted here is that activity diagrams depict system activities, not what actors do, but activities that can be performed by the system. The following is an activity diagram from this research which can be seen in the picture 3.



Picture 3. Activity Diagram

c) Sequence Diagram

Sequence diagrams typically describe the behavior of a single scenario. A sequence diagram shows an example of an object and the messages that pass through the objects in the use case. The following is a sequence diagram from this research which can be seen in the picture 4.



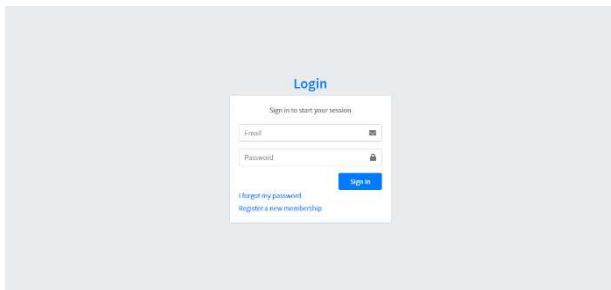
Picture 4. Sequence Diagram

IV.RESULT AND DISCUSSION

The results of the development of a rental system and asset data collection on this web-based wedding organizer have 11 menus for admin, namely home, goods, transactions (rental packages, packages, lost, purchases), package details, packages, users, suppliers, reports and payments. As for the user has three menus, namely home, rental, and profile. This information system is made with the PHP programming language and the Laravel 6 framework. The following is a display of the results of the information system that has been created:

1. Login Page

The login page has several input forms, where the admin and user must first fill in the username and password before making a transaction, which can be seen in picture 5.



Picture 5. Login Page

2. Admin Homepage

The Admin home page is the main display for admins when they have successfully logged in and there are 11 menus, namely home, goods, transactions (package rental, payments, package returns, lost, purchases), packages, users, suppliers, reports (rent reports and purchase reports)) which can be seen in picture 6.



Picture 6. Admin Homepage

3. User Homepage

The user's home page is the main display for the user when he has successfully logged in and there are 3 menus for the user, namely home, package rental, and profile which can be seen in picture 7.



Picture 7. User Homepage

4. Items & Accessories page

Itv is the main display to show the types of goods and accessories available which can be seen in picture 8.



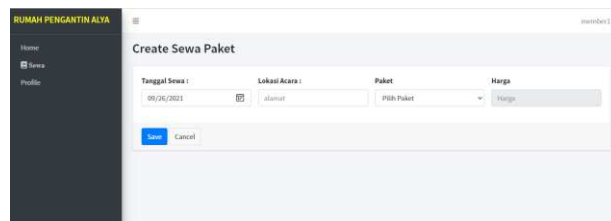
Picture 8. Item and Accessories

5. Package rental input page

The package rental input page displays several input forms that can be filled out by admins or users to add package rental data, these forms can be seen in picture 9 and picture 10.



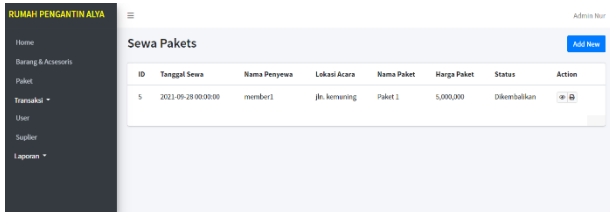
Picture 9. Admin package rental input page



Picture 10. User package rental input page

6. Package rental page

The package rental page displays the data that the admin has previously input on the package rental input menu. This page has several actions such as view data, and print data which can be seen in picture 11.



Picture 11. Package rental page

7. Order Details Page

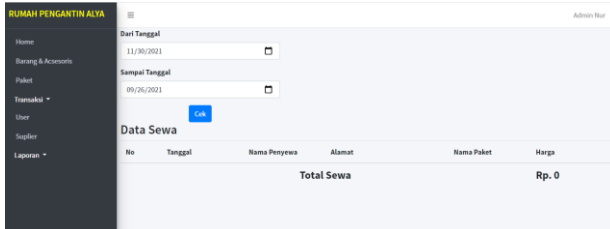
The order detail page is a page to view order details from order data and has an action to print data which can be seen in picture 12.



Picture 12. Order details page

8. Package rental report page

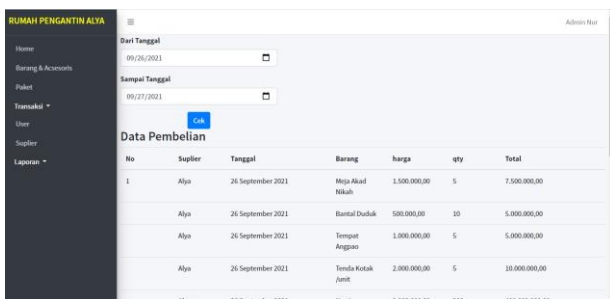
The package rental report page displays package rental data per date, month, and year which can be seen in picture 13.



Picture 13. Package rental report page

9. Purchase Report Page

The purchase report page displays data on the purchase of goods by date, month, and year which can be seen in picture 14.



Picture 14. Purchase report page

10. Welcome page

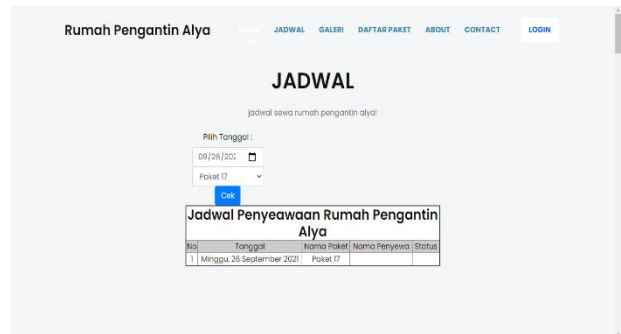
The welcome page is the main display of this application and has 7 main menus, namely home, schedule, gallery, package list, about, and contact and login can be seen in picture 15.



Picture 15. Welcome page

11. Package rental schedule page

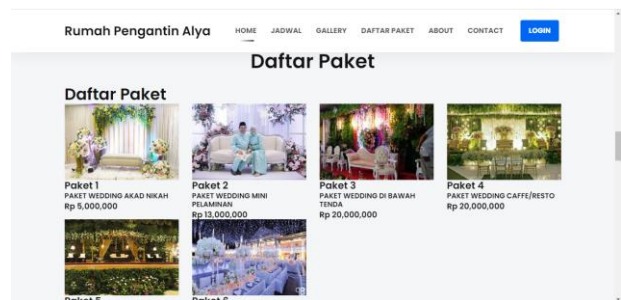
The rental schedule page is a display to see the schedule of packages that are being rented at Alya's Bridal House, for more details, see picture 16.



Picture 16. Package rental schedule page

12. Package List Page

The package list page is a display to find out the list of wedding packages at Alya's Bridal House, more details can be seen in picture 17.



Picture 17. Package list page

V. CONCLUSIONS

Based on the results and discussions that have been described previously as well as the results and analysis of the design and construction of a rental information system and asset collection on a web-based wedding organizer, it can be concluded that this information system can provide information to customers regarding package rental schedules without having to come in person. This information system can make it easier for admins in the scheduling and data collection process to check the available stock of goods. This information system can help

users to order wedding packages online.

REFERENCES

- Aminuzal, R., Studi, P., Informasi, S., Komputer, F. I., & Buana, U. M. (2018). *Pernikahan Berbasis Website Studi Kasus Destam Wedding*.
- Apriliani, Z., Hasanah, U., & Anas, A. S. (2019). Pembuatan Video Profil Dengan Efek Vintage Kampung Wisata Adat Sengkoah Sebagai Media Informasi. *Jtim : Jurnal Teknologi Informasi Dan Multimedia*, 1(1), 57–65. <https://doi.org/10.35746/Jtim.V1i1.15>
- Maiyana, E. (2019). Penyewaan Online Wedding Organizer Berbasis Web. *Jurnal Sains Dan Informatika*, 5(1), 26. <https://doi.org/10.22216/Jsi.V5i1.4158>
- Mulyati, S., & Hisyam, M. (2018). Rancang Bangun Sistem Informasi Penyewaan Wedding Organizer Berbasis Web Dengan Php Dan Mysql Pada Kiki Rias. *Jurnal Teknik: Universitas Muhammadiyah Tangerang*, 7(2), 29–35. <http://jurnal.umt.ac.id/index.php/jt/article/view/1355>
- Nurdiansyah. (2020). *Sistem Informasi Penyewaan Lapangan Futsal Berbasis Web Dengan Menggunakan Laravel Framework*.
- Pangesti, W., & Hasti, N. (2019). *Wedding Organizer Pada Wahyu Dinar Di Rembang Design Of Wedding Organizer Rent Information System In Wahyu Dinar At Rembang*.
- Pradipta, A. I., Informatika, J. T., & Komputer, F. I. (2016). *Rancang Bangun Sistem Informasi Wedding Organizer Di Bandar Lampung Berbasis Android*.
- Ridlo, I. A. (2017). Panduan Pembuatan Flowchart. *Fakultas Kesehatan Masyarakat*, 11(1), 1–27.
- Rosidah;. (2018). Bab Ii Landasan Teori. *Journal Of Chemical Information And Modeling*, 53(9), 8–24.
- Wiwit, A., & Harjunawati, S. (2017). Perancangan Sistem Informasi Transaksi Penyewaan. *Ilmu Pengetahuan Dan Teknologi Komputer*, 3(2527–4864), 59–64.
- Y. Yudhanto Dan H.A. Prastyo. (2019). *Mudah Menguasai Framework Laravel*. Pt Elex Media Komputindo.