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# Android-based Mobile Wedding Organiser Application System for Yogyakarta Region

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Keywords

Wedding Organizer, Application System, Mobile Application, Firebase, Android

**Abstract.** A wedding organiser is a service that helps the bride-to-be and her family plan the wedding. Wedding organisers are often sought after by the public because they make it easier to plan a wedding party. During this time, booking a wedding party is done in the usual way: customers simply come to the house or call and ask if the Wedding Organizer package fits the budget and what facilities the Wedding Organizer has. The Wedding Organizer application system is built using Android-based technology. This Android based Wedding Organizer application system uses Android Studio and prototype. Email and password data will be connected to Firebase, data for registration and application login. The purpose of this research is to create an android based wedding organiser application system for the Yogyakarta area. The results of this research show that the wedding organizer application system can inform complete selection, wedding selection that includes (venue, tent, groom's wedding dress, bride's wedding dress), login and registration data is connected to Firebase database in real time, it is better to book in advance so that stock is available, payment via ATM transfer and confirmation via WhatsApp.

## 1. INTRODUCTION

Current technological developments continue to progress, technological developments have penetrated into various fields [1]. One example of technological development in the field of trade, namely the existence of e-commerce trade. E-commerce is a new concept that is generally described as the process of buying and selling goods and services over the Internet. E-commerce is a commercial activity carried out electronically via the internet or the purchase and sale of goods and services through digital media channels [2].

Wedding organiser is a service that functions to help brides and their families in planning wedding party events [3]. Wedding organiser (WO) is often sought after by the public because it makes it easier to plan a wedding party [4]. Wedding organisers are also very helpful for brides-to-be who don't want to bother with wedding planning. So far, booking a Wedding Planner has been done in the usual way: customers simply come to the house or call and ask what Wedding Planner package suits their budget and ask what facilities the Wedding Planner has [5].

Currently, smartphones have become ubiquitous across all levels of society, with the majority of users opting for Android-based devices [6]. In light of this trend, a new system has been developed to facilitate online or digital ordering for wedding planners, streamlining the order fulfilment process and overcoming the constraints of time and distance. Within this system, customers are able to select from a range of concepts, including venues, tents, groom's clothing and bride's clothing. The E-commerce Wedding Organizer Application System offers a variety of wedding options, such as venues, tents, men's and women's wedding dresses.

Its purpose is to assist prospective brides in finding inspiration for their wedding party. After selecting their desired wedding concept, prospective brides can make a reservation within a specified timeframe to ensure vendor availability. Wedding organizers offer a variety of options, including venues, tents, and bridal attire. There are many wedding concepts to choose from. Once the bride-to-be selects a concept through the application system, the reservation for the wedding event will be processed. Payment is made through a bank transfer.

The difference from previous research journals is that this android wedding system is only for the Yogyakarta area, using wedding choice data. Wedding options include venue/venue, tent, groom's dress, and bride's dress. There are 6 of these wedding choices.

## 2. METHOD

### Research Method

Systems Development Life Cycle SDLC is the stages of work carried out by system analysts and programmers in building information systems [7]. Software or often also called 'application' itself is a concrete manifestation of the results of system design that aims to process data or perform tasks given by its users based on certain rules of the programming language used [8].

The concept of System Development Life Cycle (SDLC) is the basis of various information system developments in forming a framework for planning and controlling information systems. Models of SDLC that are often used include Waterfall and Prototype. SDLC (System Development Life Cycle) is a classic methodology used to develop, maintain, and use information systems. In this research, the SDLC method uses a waterfall model, also known as waterfall, which is used due to the limited time of software development.

System analysis can be defined as the decomposition of an intact information system into its component parts with the intention of identifying and evaluating the problems that occur and the needs that are expected so that improvements can be proposed. System analysis aims to understand and document the business needs and process requirements of the new system. Analysis is very necessary in the construction or development of information systems, the success of an information system depends on good analysis and design, so that the system to be built will be able to overcome the problems found in the old system [9].

### Research Stages

#### a. Data Collection

Data used in research by collecting data obtained from online or internet data. Selected wedding data (Venue, Tent, Groom's Bajul, Bride's dress). The following is an explanation of data collection:

a) The data collection procedure is the process carried out to collect data obtained from google.com or pinterest.com. Downloading data from google or pinterest,
b) Data used in research by collecting data obtained from online or internet data.
c) The location of the data collection is taking data on wedding choices via google or pinterest.

Wedding option data includes options for venues, tents, groom's attire, and bride's attire. However, the wedding option data is not entered into the Database Management System (DBMS). There are 6 wedding options, including Venue, Tent, Groom's Dress, and Bride's Dress.

Venue Options:

1) Perwacy Park
2) LPP Auditorium
3) Pamungkas Hall
4) Madu Chandya
5) Herritage Wooden Booth
6) Joglo Pondok Arum

Tent Options:

1) Flat
2) Curved
3) Regular Ceiling
4) VIP Ceiling
5) Drawstring Decoration
6) VIP Drawstring Decoration

Groom's Bajul Option:

1) Sequin Beskap
2) White Suit
3) Black Suit
4) Dark blue suit
5) Javanese Custom
6) Sunda custom

Bride's Bajul Options:

1) White Muslimah
2) White Dress
3) Light Green Dress
4) Light Blue Dress
5) Javanese Custom
6) Sundanese Custom

**b. Literature Study**

Literature study is carried out by studying literature and obtaining information related to the research being studied, such as books, magazines, or articles on the Internet. Therefore, it can be used as a basis for designing an Android-based wedding organiser system.

Ginanjar H, Setiawan R [10] conducted research with the title Designing Android-Based Wedding Organizer Applications. The study discusses the design of a wedding organizer application based on mobile android. In this study has a relationship with previous research specifically this study adopted several menus from previous studies, namely the dashboard category and wedding packages. This research creates an Android-based wedding planning application that can manage data about wedding planners to make it easier for prospective brides to determine their wedding plans. In principle, this research builds an application by applying some features from previous research and developing or adding features that have not been considered in previous research, especially the authentication function, user identification, and registration function as a WO party. This application helps wedding planners or prospective brides in determining which wedding plan suits their wishes or needs. This research aims to provide convenience between each wedding organiser and prospective brides in meeting the needs of organising wedding events with the support of Android applications, so that the service process becomes efficient and efficient .

Purwantoro S, Adhari D [11] conducted research with the title Designing an Android-based Wedding Organiser Booking Information System (Case Study: Pekanbaru City). The study discusses recognising the design of an android-based wedding organizer booking information system. In this study, the wedding organizer booking information system was built using the prototyping method. Based on the test results using blalckbox testing, the android-based wedding organizer booking application has run according to the expected function. Based on the results of Usability testing conducted on 10 Wedding Orgalnizer owners, it was found that 72.0% of respondents agreed that the application was useful, 78.0% of respondents agreed that the system was easy to use, 81.3% of respondents agreed that the system was easy to learn, and 74.0% of respondents agreed that the resulting application was satisfying and in accordance with expectations.

Indra Junri Setiawan [12] conducted research with the title Maria Wedding Organizer Palangka Raya Wedding Package Booking Application. The research discusses recognising the creation of a wedding package booking application at Maria Wedding Organizer Palangka Raya Web Based. In this study, the web-based Information System created can speed up the process of data processing and wedding package information services and carry out the process of ordering wedding packages offered by Maria Wedding Organizer. Creating a website-based marketing application via an internet connection so that it can help Malria Wedding Organizer in the process of marketing wedding products and services.

**c. System Design**

The topics that will be discussed in the physics science learning application of straight motion kinematics include Motion, Distance and Displacement, Speed and Velocity, Acceleration and Progress, Regular Straight Motion, Regular Changing Straight Motion, and Free Fall Motion. The system development used is object-oriented analysis using UML (Unified Modeling Language) diagrams. At present most object-oriented systems analysis and design approaches use UML to describe a developing system. UML uses a set of different diagrams to describe various views of the developing system [13].

Use cases on the wedding organizer application system. Where in the use case the system displays the registration and login form, then the bride registers and logs in. The system displays the

wedding menu, then the bride chooses her wedding menu. The system displays the options, then the bride chooses the option. Use cases can be seen in Figure 1

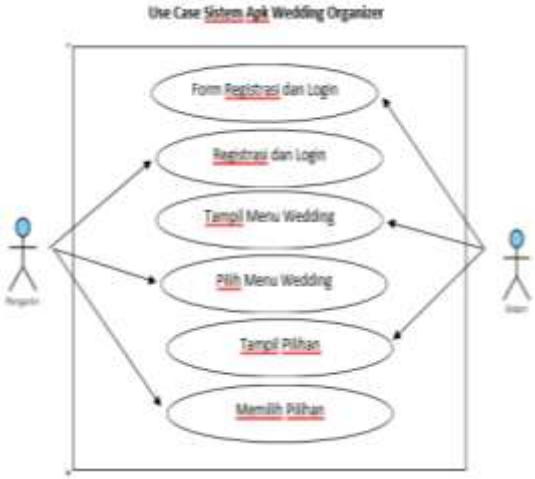


**Figure 1.** Use case

Flowchart on the wedding organiser application system. First start the application system, first register if you don't have an account, if you already have an account then log in, then the system displays the menu (Venue, Tent options, Groom & Bride), then the user chooses the menu, then the system displays the options, then the user chooses the options, then the system displays the WO account number, and the user transfers to the WO account number, then the system goes to the WO WhatssApp and also the user confirms the payment and order to the WO, then finished. In Figure 2 is a flowchart of the wedding orgalnizer application.

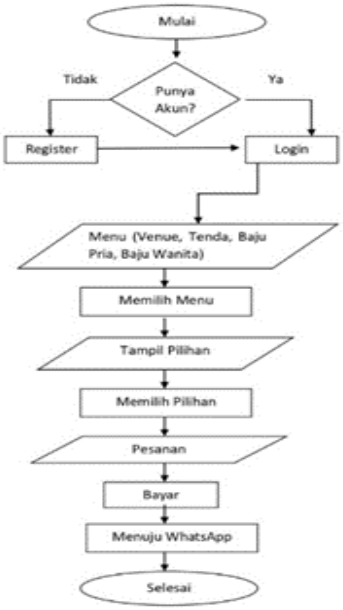


**Figure 2.** Flowchart

Email password data on the register and login form. Register first, email and password data will be connected to firebase. If you have registered, you can log in to the application. The display of email and password data on firebase can be seen in Figure 3 below.

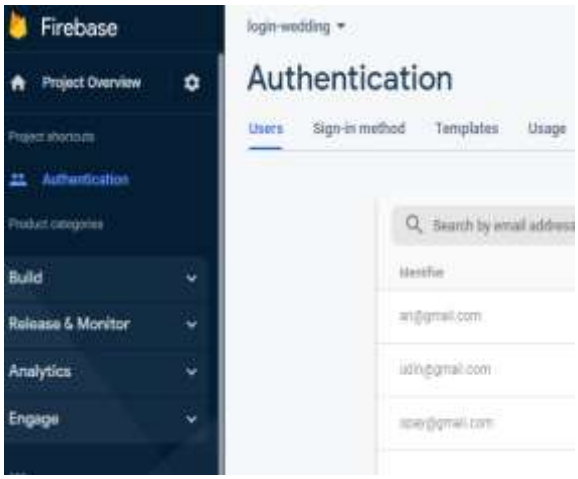


**Figure 3.** Email and Password Data in Firebase

The architecture design of the system, where in the architecture the bride to the WO application system, then the bride registers and logs in, the email data and password at login will be connected to the firebase database, after login will enter the WO Application system. The system architecture design can be seen in Figure 4.


**Figure 4.** System Architecture

Architectural design on the user, where the user can search for options, then choose an order, order an option, then pay via bank transfer. The architecture design can be seen in Figure 5

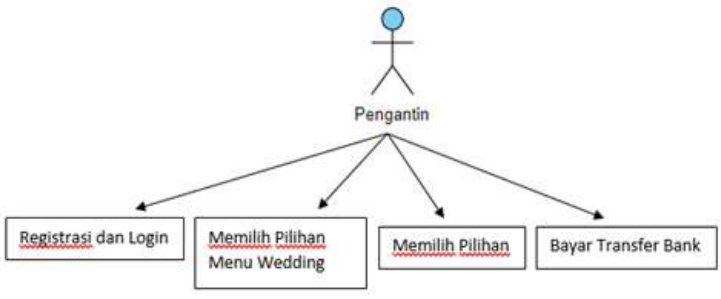


**Figure 5**

## 3. RESULTS AND DISCUSSION

### Results

Implement an android-based wedding organiser application system, using android studio software, with hardware in the form of a laptop and android. Using android studio using Kotlin programming language. Using firebase database for registration and login, email data and passwords.

The implementation steps are as follows:

a) Interface design: designing a responsive user interface so that users can interact with the application. The interface design is made good so that users are happy to see the User Interface.
b) Coding in Kotlin programming language: Android Studio uses Kotlin language, then coding in Kotlin language. So that the application can run.
c) Creating a register data base in login: on the registration and login page, connected to the firebase database. If the user registers and logs in, the email data and password data will be connected to the firebase database.
d) Running the application on the emulaltor: trying to run the wedding organizer application on the android emulator

The following is the result of the android-based wedding organiser application system:

1) The registration page

The registration page on the Android-based Wedding Organizer application system. The bride and groom must register first, then log in. Email and password data will be entered into the firebase database. The registration page can be seen in Figure 6


**Figure 6.** The registration page

2) Login page

Login page on the Android-based Wedding Organizer application system. The bride and groom must log in first, if they already have an account or have registered. If you do not have an account, then register first. Email and password data will be entered into the firebase database. The login page can be seen in Figure 7


**Figure 7.** Login page

3) Database on Firebase

Database on Firebase. Email and password data will be entered into the database. Email and password data are connected to Firebase, in real time. Firebase database display can be seen in Figure 8

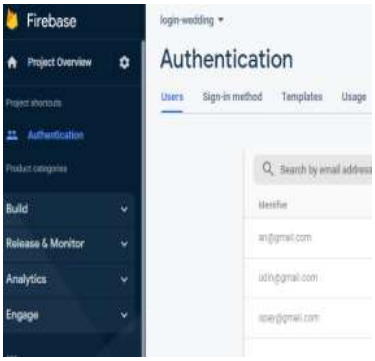


**Figure 8**. Database on Firebase

4) The main page

The main page of the Android-based Wedding Organizer application system. Where there are 4 wedding menu options. They are Venue, Tent, Men's Dress, and Women's Dress. There is a fragment below it. The main menu goes to the home fragment. The main menu display can be seen in Figure 9


**Figure 9.** The main page

5) Choice of venues

Choice of venues where there are 6 choices of venues. The venue options include Perwacy Building, LPP Auditorium, Pamungkas Hall, Madu Candhya, Heritage Wooden Room, Joglo Pondok Arum. The venue display can be seen in Figure 10


**Figure 10.** Choice of venues

6) Tent options

Tent options of which there are 6 tent options. Tent options include flat tent, arch, regular ceiling, VIP ceiling, drawstring decoration, VIP decoration. The display of tent options can be seen in Figure 11


**Figure 11**. Tent options

7) Groom's choice of dress

A selection of groom's suits of which there are 6 choices of groom's suits. Groom's clothes include sequin beskap, white suit, black suit, blue suit, Javanese custom, Sundanese custom. The display of the choice of groom's clothes can be seen in Figure 12


**Figure 12.** Groom's choice of dress

8) The order page

The order page where this page displays the selected order. There is a pay button, to go to the pay page. Wedding orders cannot be displayed on halalman yet. The order page view can be seen in Figure 13


**Figure 13.** The order page

9) The payment page

The payment page where this page displays the transfer or DP payment to WO. Which then the bride confirms and sends proof of transfer to WhatsApp WO. The bride and groom contact WhatsApp WO. The appearance of the payment page can be seen in Figure 14


**Figure 14.** The payment page

10) Account Fragment

Account Fragment which is where this page displays the user's profile photo and email. If the email is logged in, it will appear in the account fragment. Which is connected to the firebase database. The account fragment display can be seen in Figure 15

**Figure 15**. Account Fragment

**Discussion**

Android-based Wedding Organizer Application System, using Kotlin Language on Android Studio. Connected to the Firebase database, email and password are connected to the Firebase database. In the Registration and Login form, enter email and password, which is connected to the Firebase database. There are wedding options, namely location, tent options, groom's clothes, and bride's clothes.

The results of the android-based wedding organizer application system run normally and also not normally. The results of the application system are not perfect, there are still many things missing, there are still errors. The results of the wedding organizer application system that runs normally and abnormally (Error) are described in Table 1.

**Table 1**. Discussion Results

| Running Normal | Running Abnormal (Error) |
|---|---|
| Login and Registration are running normally. The email and password are entered into the database. | Not using the database for orders. |
| On the wedding menu, wedding menu options (Venue, tent, men's clothes, women's clothes) | Payment is manual transfer to the WO account. Not using midtrans or payment on the application system |
| In the data choices (choice of venue, tent, men's clothes, women's clothes) | Have not or do not use the Database Management System (DBMS) on the wedding data. |
| On the order page, the pay button will go to the pay page. | |
| On the payment page, displays the WO account number | |

**Test results on several types of android devices**

Testing the application on several types of android mobile devices is done by using several android devices from a number of friends or close people. Of all the devices used during testing, we found that the application can run well on all android devices. A summary of the results of testing the application on various types of android devices can be seen in Table 2.

**Table 2**. Test results of wedding organizer applications on android devices

| No. | Android device name | Test Result |
|---|---|---|
| 1 | Realme Narzo 30 | Successful |
| 2 | Samsung M10 | Successful |
| 3 | Samsung A10s | Successful |
| 4 | Realme C15 | Successful |
| 5 | Oppo A5s | Successful |
| 6 | Samsung A8 | Successful |
| 7 | Samsung A20s | Successful |
| 8 | Samsung A50s | Successful |
| 9 | Samsung Galaxy A33 | Successful |
| 10 | Xiaomi Note 8 | Successful |

## 4. CONCLUSION

In With the completion of all research activities, system analysis, program design to implementation and discussion, the authors can conclude that with this system [14]. Android-based Wedding Organizer Application System, using Kotlin Language on Android Studio. Connected to the Firebase database, email and password are connected to the Firebase database. In the Registration and Login form, enter email and password, which is connected to the Firebase database. The results of the android-based wedding organizer application system run normally and also abnormally (Error). The results of the application system are not perfect, there are still many things missing, there are still errors. For further development, in the future I will develop the system again. Make a website system and mobile system, so that they are connected to each other. Develop a database that includes user data, order data, payment data, wedding data. Developing the payment or payment.

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