

Android-Based Design of a Fresh Red Jabs (Jabs) Selling Application During the Covid-19 Virus Pandemic

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ABSTRACT

Red guava is one of the crops from the Pamijahan sub-district, Bogor Regency. The current system is considered ineffective in terms of marketing, especially during a pandemic like this, buyers/customers want the convenience or speed of relevant information to facilitate all their activities without having to leave the house. The Covid-19 virus makes people anxious and afraid to leave the house. In dealing with this problem, researchers designed an Android-based mobile application with the prototype method to facilitate ordering or selling red guava transactions and conducting technology-based marketing. Meanwhile, the system uses the Unified Modeling Language in the analysis and design phase. From the test results, the system performance is running well.

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INTRODUCTION

Corona virus disease 19 (Covid-19) which began to be detected in Wuhan, China at the end of 2019 (Salman and Baru 2021). The SARS-CoV2 virus has spread throughout the world, including Indonesia. Covid-19 is a viral infection that is transmitted to humans. This virus can attack anyone including adults, infants, the elderly, nursing mothers, and pregnant women. This virus attacks the respiratory system, which causes respiratory problems, lung infections, and death. Covid-19 brings changes to the pattern of life that occurs in society by complying with health protocols, namely washing hands, wearing masks, maintaining distance, staying away from crowds, and reducing mobility.

The existence of the Covid-19 virus has caused anxiety or fear for people leaving their homes to make ends meet, with that the researchers designed a red guava sales application, namely a direct sales system from guava farmers in Pamijahan sub-district, Bogor Regency. The benefits of this research are to make it easy for people who like or want red guava, so that people don't need to leave the house, they can be anywhere and anytime via mobile and can reduce the risk of transmission of Covid-19.

During a pandemic, it is necessary to pay attention to the immune system in order to avoid all kinds of diseases, one way to increase the immune system is to take vitamins regularly. Red guava (*Psidium guajava*) is a fruit that contains a lot of vitamin C with levels of 183.5 mg/100 g. On the other hand, red guava fruit also contains flavonoids and pectin which are believed to be able to control cholesterol metabolism in the body. (Lilyawati, Fitriani, and Prasetya 2019)

With Android, there is an idea to design and create an Android-based JABS application to solve problems. For this reason, the author wants to design and create a system with the aim of facilitating ordering or selling red guava transactions and conducting technology-based marketing.

METHOD

In this study, system development used the prototype method, at the prototype testing stage using the blackbox testing method to test the applications that were made (Juniawan et al. 2021).

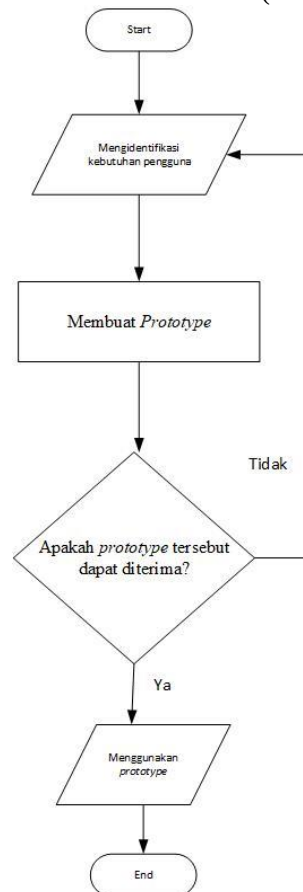


Figure 1. Prototype method

RESULTS AND DISCUSSION

Problem Identification Stage

The problem that occurs in people who like or want guava is wanting convenience in ordering goods that can be done anywhere, what farmers usually do is not using the system, so people who like or want guava do not know the information and come directly to the garden or market. .

The results of the prototype design are modeled and carried out so that the system is made according to the problems and needs. So the Use case diagram of the system is depicted in Figure 2.

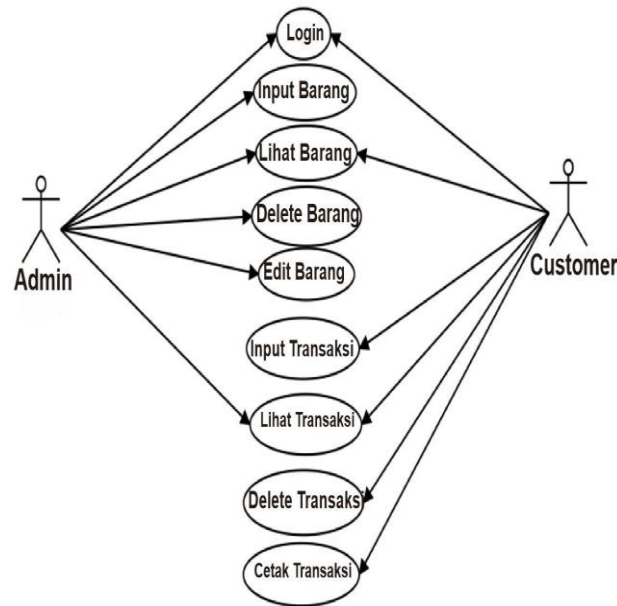


Figure 2. Use cases

Implementation

1. Splash View

On this page displays the splash page



Figure 3. Splash Display

2. Login Display

From the results of this design there are 2 outputs including a display for admin and a display for customers.

- Login view for admin



Figure 4. Login display for admin

The login display for the admin is a page that is specific to the admin/owner, when you want to log in, just enter the password that was created by the owner.

- Display Login for buyers / customers



Figure 5. Login display for buyers/customers

The display of the customer login page is specifically for customers who already have an account to enter/login to the application.

3. Display to input red guava



Figure 6. Display for inputting guava

The display for input works when the owner wants to enter the guava he wants to sell.

4. Account list view



Figure 7. Account list view

This account list display is specifically for customers who don't have an account to enter the JABS application, so customers must first create an account to enter the JABS application.

5. Main View



Figure 8. Main view

In this main view, after the customer has logged in/entered the JABS application.

6. Half-ripe guava details display



Figure 9. Display of half-ripe guava details

The display of half-ripe guava details when selecting a half-ripe menu will appear as shown in Figure9.

7. Display the weight of the guava

**Figure 10. Display of guava weight**

The weight of the guava display is a display for selecting the weight of the guava as desired, and when selecting the buy now menu which is shown in Figure 9, the display shown in Figure 10 appears.

8. Display details and total payment for guava orders

**Figure 11. Display of details and total payments for guava orders**

This display is the display after placing an order as shown in Figure 10. Then it appears as Figure 11 and this display also details the total costs to be incurred by the buyer/customer.

9. Display of successful buyer orders

**Figure 12. Display of a successful buyer's order**

The display of a successful buyer/customer order is the display when the buyer has selected the message menu as shown in Figure 11.

Test result

In this process, the system will be tested using the blackbox method, to ensure this application is suitable and can operate properly. The results of system testing via blackbox are:

Table 1. Testing the system via blackbox

Testing	Scenario	Results applied	Test result	Conclusion
Registration/Register Account	Users fill in data for the registration process	Enter the registration page	The registration/account list page appears	Succeed
Login	Admin login with password while user login with username and password	Enter the main menu	Enter the main menu	Succeed
Main page	Display when successful registration or login	The main page appears when successful login or registration	Main page appears	Succeed
Half-ripe guava details view	Click the half-baked menu	Enter the half-baked ambu details menu	Guava details page and postage appear	Succeed
Appearance of the weight of the guava weight	Click the buy now menu	Enter the guava weight selection display	The guava weight option appears	Succeed
Display details and total payment for guava orders	Click on the menu to order	Enter in the detail view and order total payment	The total payment page appears along with the details	Succeed

according to the
order

CONCLUSION

From this study it can be concluded that with the JABS application, people who like or want red guava can easily order on this application without having to go to the market or to the garden, and can reduce the transmission of Covid-19. This application is one of the solutions in making it easy for the public and buyers to find information about red guava. In testing this system runs well as expected and needs.

REFERENCES

- [1]. Juniawan, Fransiskus Panca, Dwi Yuny Sylfania, Rendy Rian Chrisna Putra, and Rahmat Sulaiman. 2021. "Implementasi Aplikasi Monitoring Nilai Dan Kegiatan Siswa Berbasis Android Dengan Metode Prototype." Jurnal Komtika (Komputasi Dan Informatika) 5(1):26–34. doi: 10.31603/komtika.v5i1.5119.
- [2]. Lilyawati, Sega Ade, Nurul Fitriani, and Fajar Prasetya. 2019. "Proceeding of Mulawarman Pharmaceuticals Conferences." Proceeding of Mulawarman Pharmaceuticals Conferences (April 2021):135–38.
- [3]. Salman, Yuliana, and Banjar Baru. 2021. "Edukasi Gizi Untuk Meningkatkan Imunitas Tubuh (Asupan Tepat Di Masa Pandemi Covid-19)." Edukasi Gizi Untuk Meningkatkan Imunitas Tubuh (Asupan Tepat Di Masa Pandemi Covid-19) 3(1):20–29.