



Android Based Online Computer Technician Application

Mawa Faqu Rochman*, Z I Rahmat

Departemen Teknik Informatika, Universitas Komputer Indonesia, Indonesia

Email: *mawafaqurahman@mahasiswa.unikom.ac.id

Abstract. This study aims to analyze the role of the Android-based Online Computer Technician. This study uses a quantitative description. An online Computer Technician application is to make it easier for customer actors to seek online computer technician services to repair damaged computers and provide convenience for users. The results of the study previously showed that computer users repairing computers by approaching technicians directly to offline stores and transforming into technicians approaching computer users' homes became a good solution. Using an Online Computer Technician Application can make it easier for computer users and not waste time, so they can optimize time properly and correctly.

Keyword: Android, Application, Computer Technician.

ARTICLE INFO:

Submitted/Received 11 Nov 2022

First revised 05 Des 2022

Accepted 22 Jan 2023

First available online 22 Feb 2023

Publication date 01 June 2023

1. Introduction

In the era of globalization as it is today, the world of technology and information is developing very rapidly, especially the world of smartphones. Today's smart phone or smartphone is a human need in carrying out various activities, coupled with the existence of information technology which is increasingly playing a role in the world of work. By using the right information technology tools, appropriate and accurate information will be produced according to needs so that decisions can be made quickly. [1].

With today's technological developments, Android phones are mobile devices that are very easy to use for human needs and more than mere communication devices, but Android phones are a pile of software that includes many operating systems and middleware. According to Claudio Maia, Android is a device that can be used for mobile devices equipped with operating systems, middleware and the main applications that we make. Since it's an official

public release, Android has launched interest from companies, developers and the general public [2]. Location-based services (LBS) appear as supporting applications thanks to cellular services for users with wireless devices who already know the location and can ask about their environment, such as finding the closest place they want or all expenditure centers within 10 miles anywhere, anytime. This paradigm brings great convenience to access information, cellular transportation, property of the data needed at that location. Now the mobility of mobile users presents a big challenge for location-based service providers to use mobile phones [3]. Connecting with Android, we use smart phones based on cellular systems, with more sophisticated computing capabilities and connectivity from mobile features [4]. Various applications add unlimited fun to living people. At the moment Android phones are very popular especially in the smartphone market. Because this Android phone is open source and some free tools have been developed very rapidly so there are many applications that are produced and really inspire people to use the Android system. In addition, the Android system has provided a hardware platform that is very convenient for developers so they can use more of their ideas to create an Android application [5,6]. Making this application uses software called Android studio using the Java programming language [7,8].

2. Method

In making the framework of an Android- based Online Computer Technician application using descriptive methods, in this method determine the status of humans, an object, a set of conditions, or events in the present [9,10]. The purpose of this research using descriptive method is to make a systematic description with factual and accurate facts, characteristics and relationships between phenomena being investigated. The following are several methods, namely:

2.1. Data collection

In making the framework of an Android- based Online Computer Technician application using descriptive methods, in this method determine the status of humans, an object, a set of conditions, or events in the present. The purpose of this research using descriptive method is to make a systematic description with factual and accurate facts, characteristics and relationships between phenomena being investigated.

2.2. Analysis

This analysis will determine what features and images will be made in accordance with the data that has been collected. Besides adjusting features that will be made and easy to use by users.

2.3. System planning

This analysis will determine what features and images will be made in accordance with the data that has been collected. Besides adjusting features that will be made and easy to use by users.

2.4. Coding

Translating data that has been designed algorithm into a predetermined programming language.

2.5. Testing

Tests for the program have been made.

2.6. Maintenance

Changes or additions to the program according to the user's convenience when using the application

3. Results and Discussion

The results of the research that can be done, 80% of computer users have the same problem, compiling user users has damage problems, they find it difficult to find computer service providers quickly and reliably. In making this Android-based Online Computer Technician application, 90% of computer users and assistance service providers will be very helpful in making it easier for computer users to find reliable and fast technicians and help security service providers to find consumers easily. This Online Computer Technician application will be very challenging for job opportunities to get scholars or people who have expertise in repairing computers and can reduce acquisition rates in Indonesia.

From the results of previous research (CA Harrison), this service technician has been applied to cable television technicians. On technicians the cable television programming system is a well-known customer in their field. Usually this system consists of service centers and a number of customer locations so that all are serviced by technicians. Central services or service representatives responsible for receiving incoming calls and service requests. The role of the operator is responsible for ensuring that the cable television technician has been sent to the location of the customer who needs service and reviews the technician's progress to coordinate with the customer service representative at the service site center or may be located in a different location. Therefore customers need help, they must call a service representative. Service representatives typically filter requests and determine whether the technician's assistance needed this work order requires data such as the customer's name, customer address, customer telephone number and date of service agreement, the status used for the current service and the service requested for service information other desired Devices that are used are computers to be used to assist in data storage input and information transfer, the work order is then continued to the operator to give work orders to the technician [10].

3.1. Admin Web Login Page Display

The login page on the web admin is a page to enter the system by entering a username and password. The login page can be seen in Figure 1.

3.2. Admin Web Home Page View

The home page on the web admin is a page to display all menus and system notifications. The home page can be seen in Figure 2.

3.3. Technician Application Login Display

Login to the technician application is to enter the system page by entering a username and password. The technician application login can be seen in Figure 3.



Figure 1. Admin Web Login Page Display



Figure 2. Admin Web Home Page View



Figure 3. Technician Application Login Display

3.4. Display Order List Login Technician Application

The list of orders entered in the technician application is a page to see where computer and laptop repair orders come from. And can immediately take orders by clicking on one of the incoming orders. The list of incoming orders can be seen in Figure 4.

3.5. Display Order List Received Technician Application

The list of orders received in the technician application is a page for viewing computer and laptop repair orders received. And you can immediately see the order details by clicking on one of the orders received. The list of orders received can be seen in Figure 5.

3.6. Technician Application Transaction Display

Transactions is a page to view balances and can make Top Up and With Draw transactions. transactions can be seen in the following Figure 6.



Figure 4. Display Order List Login Technician Application



Figure 5. Display Order List Received Technician Application



Figure 6. Technician Application Transaction Display

3.7. Technician Application Profile View

Profile in this technician application is to display technician data. The profile can be seen in the following Figure 7.



Figure 7. Technician Application Profile View

3.8. Customer Application Login Display

Login to the customer application is to enter the system page by entering a username and password. customer application login can be seen in the following Figure 8.



Figure 8. Customer Application Login Display

3.9. Customer Application Register Display

Register on the customer application is a page to register as a customer. registers can be seen in the following Figure 9.



Figure 9. Register View

3.10. Customer Application Home Display

Home in the customer application is the home page or the main page in the customer application. home can be seen in the following Figure 10.



Figure 10. Customer Application Home Display

3.11. Order Data Display

The order data in the customer application is a page for creating repair orders. order data can be seen in the following Figure 11.



Figure 11. Customer Application Order Data Display

3.12. Customer Application Transaction Display

Transactions on the customer application are pages to view balances and can make Top Up and With Draw transactions. transactions can be seen in the following Figure 12.

3.13. Customer Application Profile Display

Profile on this customer application is to display customer data. profile can be seen in the following Figure 13.



Figure 12. Customer Application Transaction Display



Figure 13. Customer Application Profile Display

4. Conclusion

In making the application of an Android- based Online Computer Technician aims to find a solution that brings together computer technician service providers with consumers in need. The idea of a computer technician application comes from seeing it difficult for computer users to find good and reliable computer service services and service providers who find it difficult to find customers and service those services where this application can also help reduce unemployment rates for graduates or people who have expertise in repairing computers. In terms of consumer trust, it is guaranteed that service service providers have met the requirements that have been determined or have been selected both in terms of completeness and identity of the service providers, as well as technicians have price transparency, consumers do not need to bargain because of financing the service has been printed on the application with any damage repaired by the technician to the customer. In this Computer Technician application where there are several features that are very easy to use by service

providers and consumers. In making the application " Computer technician " based on Android along with the increasing number of computer users that are very rapid in today's era, this Android-based computer service provider can expand the marketing area in various major cities in Indonesian.

Acknowledgement

The author would like to thank the support of Mr. Agis Abhi Rafdhi as the paper kwu unikom team who has provided suggestions for this research, the group and all parties involved in this research either directly or indirectly.

References

- [1] Abdilah, A., Mardiyani, E., & Nawawi, I. (2018). Aplikasi Komputer dan Smartphone Berbasis Android untuk Menangani Reservasi Hotel pada Citi Smart Hotel-BSD. *Jurnal Teknik Komputer AMIK BSI*, 4(2), 64-70.
- [2] Maia, C., Nogueira, L. M., & Pinho, L. M. (2010, July). Evaluating android os for embedded real-time systems. In *6th international workshop on operating systems platforms for embedded real-time applications* (pp. 63-70).
- [3] Wang, L., Gopal, R., Shankar, R., & Pancras, J. (2022). Forecasting venue popularity on location-based services using interpretable machine learning. *Production and Operations Management*, 31(7), 2773-2788.
- [4] Chua, S. L., Foo, L. K., & Juboor, S. S. D. S. (2020). Towards real-time recognition of activities in smart homes. *International Journal of Advanced Intelligence Paradigms*, 15(2), 146-164.
- [5] Butler, M. (2010). Android: Changing the mobile landscape. *IEEE pervasive Computing*, 10(1), 4-7.
- [6] Shabtai, A., Fledel, Y., Kanonov, U., Elovici, Y., Dolev, S., & Glezer, C. (2010). Google android: A comprehensive security assessment. *IEEE Security & Privacy*, 8(2), 35-44.
- [7] Deitel, P., Deitel, H., & Deitel, A. (2014). *Android how to Program*. Prentice Hall Press.
- [8] Simon, J. (2011). *Head First Android Development*. O'reilly.
- [9] Shabtai, A., Fledel, Y., & Elovici, Y. (2009). Securing Android-powered mobile devices using SELinux. *IEEE Security & Privacy*, 8(3), 36-44.
- [10] Muhammad, F., Fauziah, F., & Rini, R. (2020). Computer Technician Application Design in Household Based Part (BRT) Using the SDLC Method: Computer Technician Application Design in Household Based Part (BRT) Using the SDLC Method. *Jurnal Mantik*, 4(1), 366-373.