

## **E-Market Place Application "Computer Devices" in the City of Medan**

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### **Abstract**

*A computer device is all the physical parts of a computer, and is distinguished by the data that is in it or that operates on it, and is distinguished from software that provides instructions for the hardware in completing its tasks. So far, marketing is still constrained in terms of promotion and marketing of computer peripheral products. so that buyers still do not know what products are sold by a particular company or shop. Several shops and companies in the city of Medan also face problems in terms of the details of orders by buyers and ordering computer hardware products using only the telephone or face to face. Goods data collection is still conventional, namely by entering the data into a price list book, sales transaction book and so on. So that conducting transactions and entering data must open the sales transaction data book. In this study, the authors raised several companies engaged in the computer equipment business. And another obstacle is that sellers often experience problems in carrying out the process of promoting and selling computer equipment that has been ordered by customers. The process of submitting cooperation between sellers and suppliers is still done manually. The process of selling computer equipment to companies is done by Via Call.*

**Keywords :** Marketplace, Android, Java, Mysql

### **1. Introduction**

Electronic Market (e-marketplace) is all efforts made to market a product or service through or using the Internet media. Meanwhile, place itself in the English dictionary means a place. Here it can be concluded that the meaning of E-Marketplace is a place for marketing products and services through or using Internet media.

In the business world, both producers and consumers rely heavily on information. Producers need information about market share and consumer needs for types and models of goods, especially in knowing computer equipment, while consumers need information about the characteristics and specifications of computer equipment goods. Many companies or government agencies create websites that can be accessed on the internet which are used for learning, promotion, information, sales, services for the wider community, and so on.

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telephone or face to face. Goods data collection is still conventional, namely by entering the data into a price list book, sales transaction book and so on. So that conducting transactions and entering data must open the sales transaction data book. In this study, the authors raised several companies engaged in the computer equipment business. And another obstacle is that sellers often experience problems in carrying out the process of promoting and selling computer equipment that has been ordered by customers. The process of submitting cooperation between sellers and suppliers is still done manually. The process of selling computer equipment to companies is done by Via Call.

From the problems above, it is hoped that stores and companies will be more easily recognized because the products offered can be seen and accessed by the public if they maximize the use of the internet as a media for sales and promotion. The computer equipment e-marketplace information system will be a place for conducting business activities and transactions between buyers and sellers. Buyers can find as many suppliers as possible with the desired criteria, so that they get according to market prices. Whereas suppliers/sellers can identify companies that need their products/services, e-marketplaces for computer equipment will also make it easier for computer equipment entrepreneurs to collect data on goods and transactions, as well as media for sales and promotion of goods, so that people find it easier to search for products and services. can also do price comparisons on the E-marketplace of computer equipment. The E-marketplace system is implemented using an Android-based application system.

## **2. Methodology**

At this stage it is carried out by studying the basic theory that supports research, searching and collecting the required data. To collect the required data, the authors use the following techniques:

### **2.1. Field Research**

#### **1. Direct Observation**

Researchers made direct observations about sales, product marketing to obtain data related to research.

#### **2. Interview (Interview)**

The researcher directly met face to face with several stores engaged in selling computer equipment to obtain more complete and less clear data through interviews. The questions asked are as follows:

- 1) How does the company promote computer equipment among the public?
- 2) What is the system that has been running so far in the process of selling computer equipment?
- 3) How to facilitate the company in receiving orders and purchases from consumers?

#### **3. Sampling**

The researcher chose the available data and was in accordance with the research, namely previous research applications and previous research thesis to be sampled in this study.

### **2.2 Library Research**

In this method the author quotes from several readings related to the implementation of the thesis cited can be in the form of theory, namely journals.

This research will go through several stages. The stages in this study can be modeled on the Fish Bone diagram. The several stages used in this study are as follows:

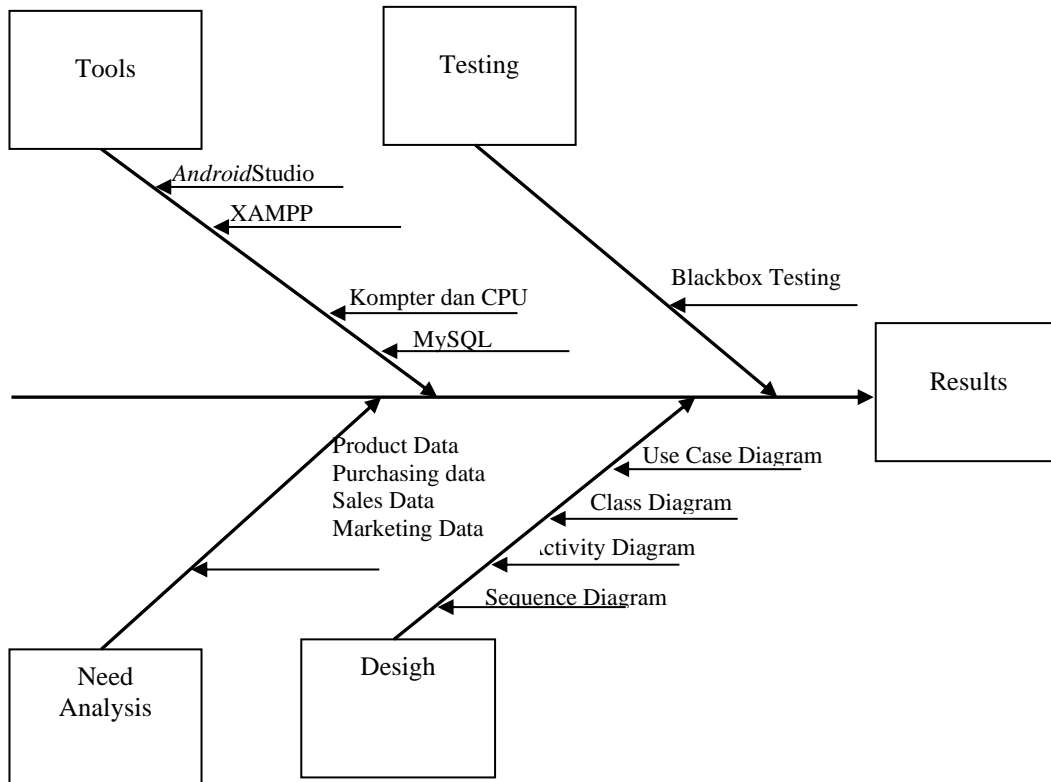


Figure 1. Fish Bone Diagram Research Methodology

Information :

1. Needs Analysis

At this stage an analysis of the needs needed to achieve the research objectives to be carried out, namely product data, catalog data, purchasing power, sales data and product marketing.

2. System Design

The system design used in theory is UML modeling, namely Use Case Diagrams, Class Diagrams, Activity Diagrams and Sequence Diagrams.

3.Tools

At this stage the researcher uses Android Studio Software, PHP, Xampp and the researcher uses computer/laptop hardware. The database used is MySQL.

4. Testing

At this stage the researchers tested the system that had been created using theory and practice testing. Testing the theory of researchers using blackbox testing and testing the practice of researchers using localhost.

5. Results

At this stage the research has been completed, the results of this research are the E-Marketpalce application for Android-based computer devices.

**3. Results and Discussion**

Flow Of Document is the part that describes the flow of documents and the processing of data contained in the document. In Flow Of Document the emphasis is on the document object and its flow. In Flow Of Document, symbols are used to describe documents, document flows and processes. The Flow Of Document (FOD) that is currently running on the Information System for purchasing office supplies can be seen in Figure 2:

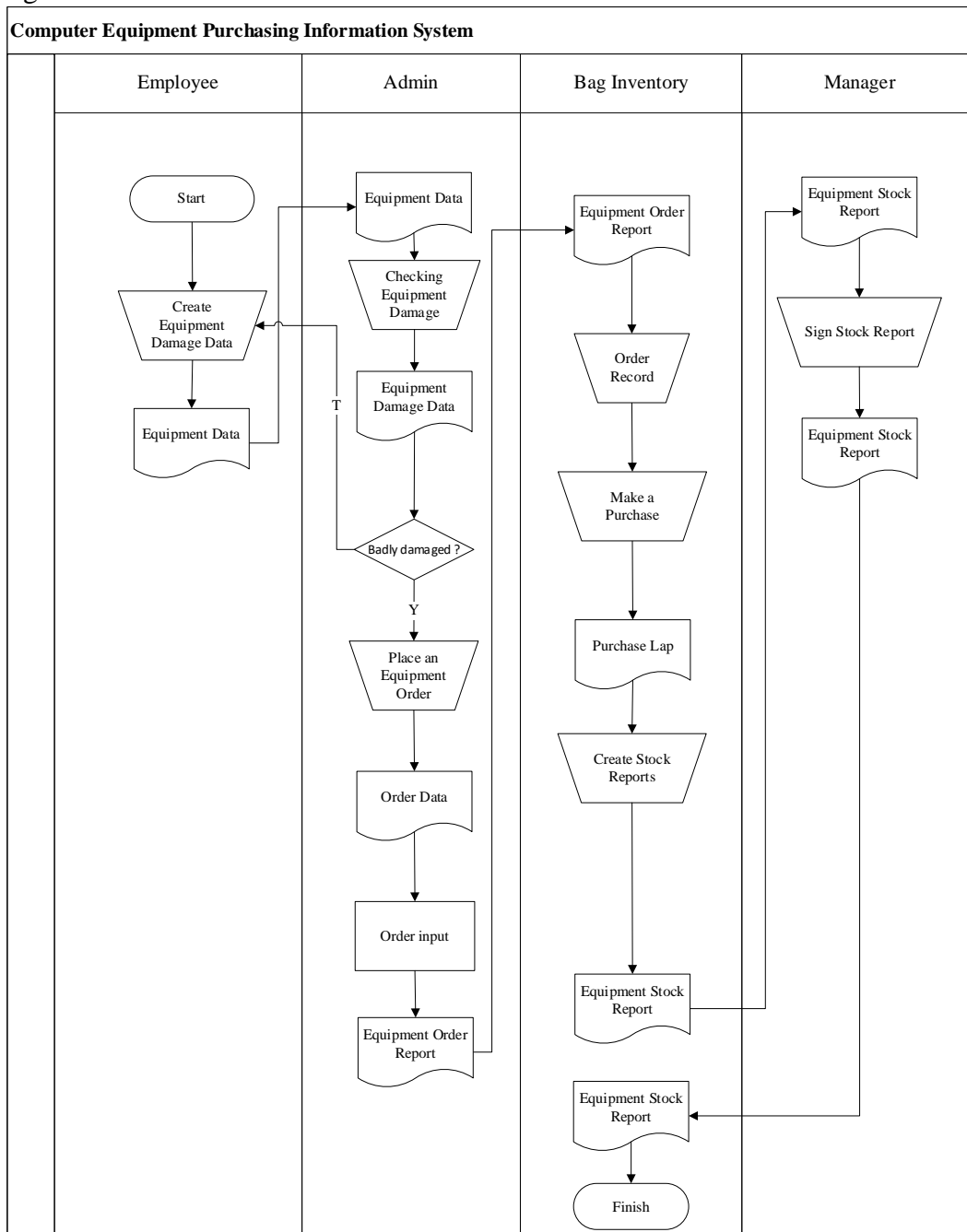


Figure 2 FOD Computer Equipment Purchase Information System

In compiling a program, a data model is needed in the form of a diagram that can explain a process flow of the system to be built. In writing this thesis the writer uses the

UML method in which the writer applies a Use Case diagram. Then a use case diagram is drawn which can be seen in Figure 3:

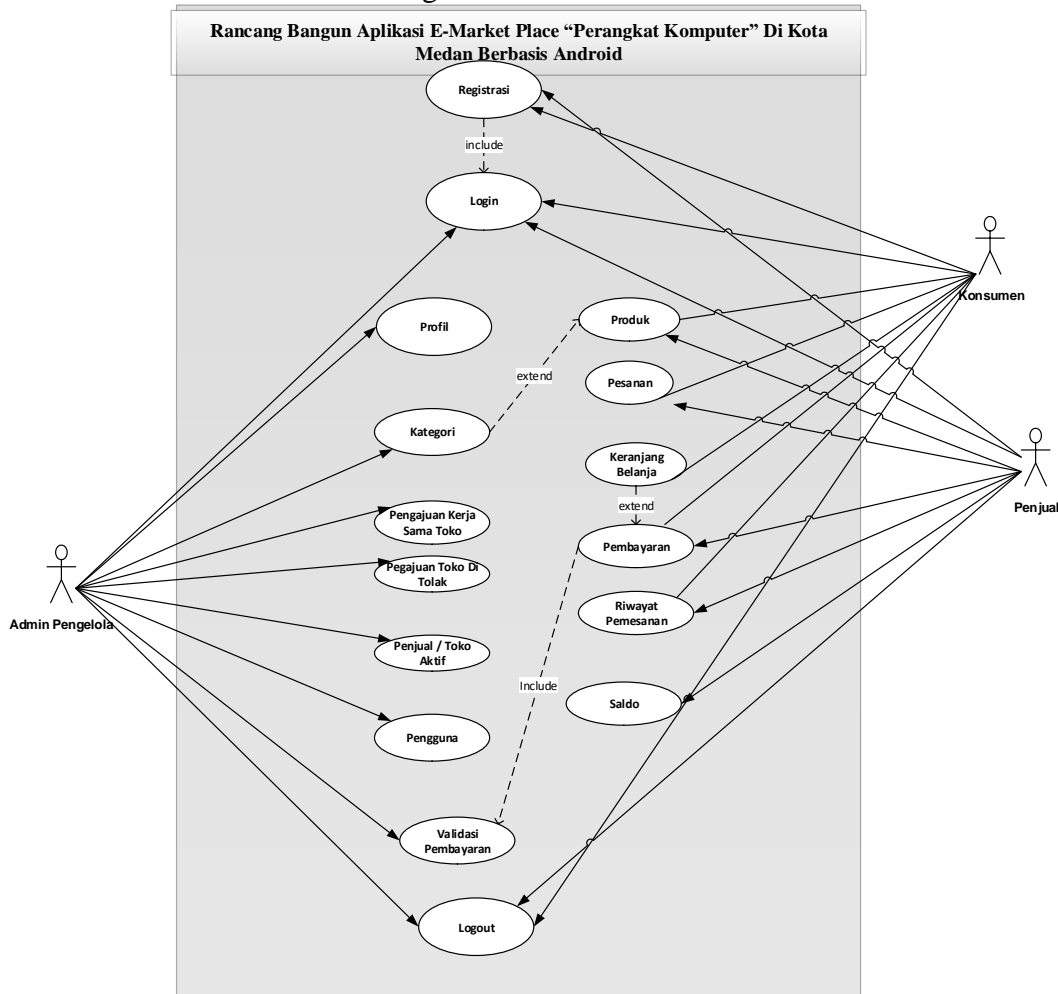


Figure 3. Use Case Design Diagram for E-Market Place Application "Computer Devices" in Medan City Based on Android

The explanation of the Use Case Design Diagram of the Android-Based E-Market Place Application "Computer Device" in Medan City is as follows:

1. Admin manager

The managing admin can log in and then can access the profile menu, category menu, cooperation proposal menu, rejected submissions, seller data, user data, payment validation and logout.

2. Consumers

Consumers register, then log in and can access the product menu, order menu, shopping cart menu, payment menu, order history and logout.

3. Seller

The seller logs in and can access the product menu, order menu, shopping cart menu, payment menu, order history, balance and logout.

The design of the classes to be used in the system to be designed can be seen in Figure 4:

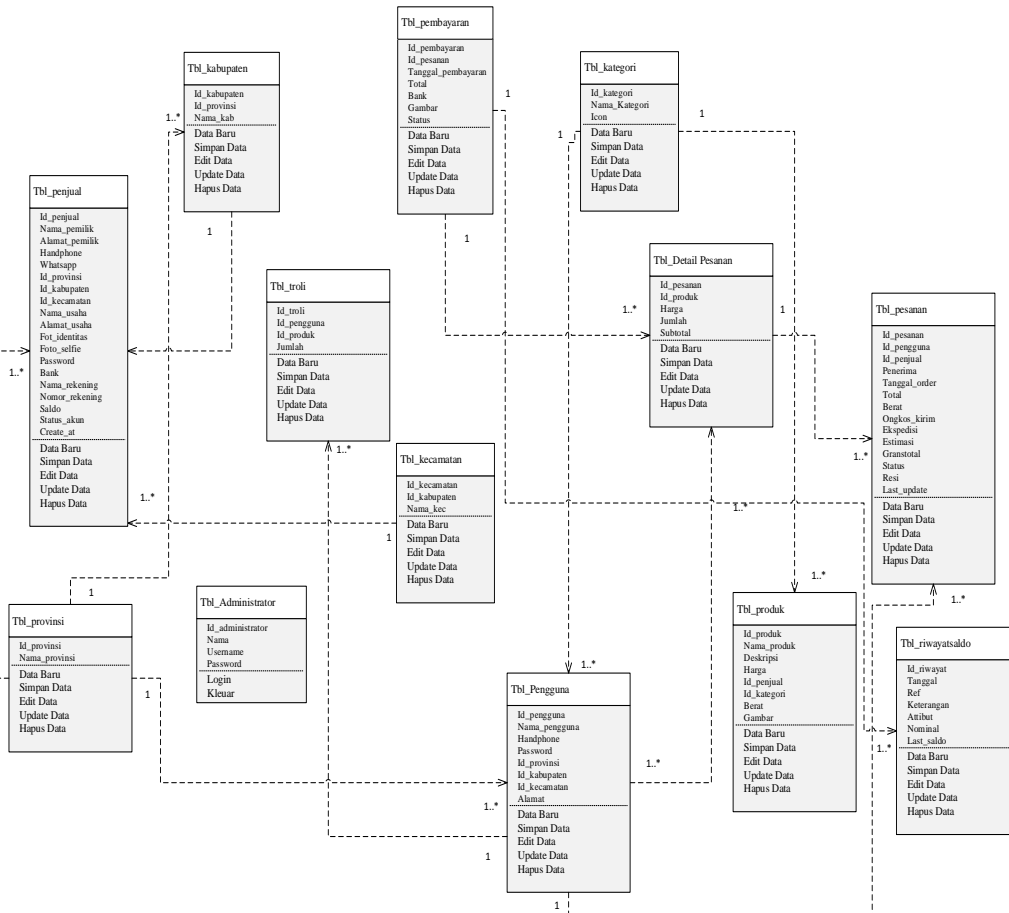


Figure 4. Class Diagram Design of E-Market Place Applications "Computer Devices" in Medan City Based on Android

This chapter will explain the display of the results of the application that has been made, which is used to clarify the views that exist in the Design and Build of the "Computer Device" E-Market Place Application in Medan City Based on Android. So that the results of its implementation can be seen in accordance with the results of the program that has been made. Below will be explained each view that is in the program. Suppliers/sellers can find companies that need their products/services, e-marketplaces for computer equipment will also make it easier for computer equipment entrepreneurs to collect data on goods and transactions, as well as media for sales and promotion of goods, so that people find it easier to search for products and can also perform price comparisons on the E-marketplace of computer equipment. The E-marketplace system is implemented using an Android-based application system.

#### 1. Display Login Menu

Login display is the first display that appears when the program is run. Serves as an input form for the program admin username and password. The login display image can be shown in Figure 5:

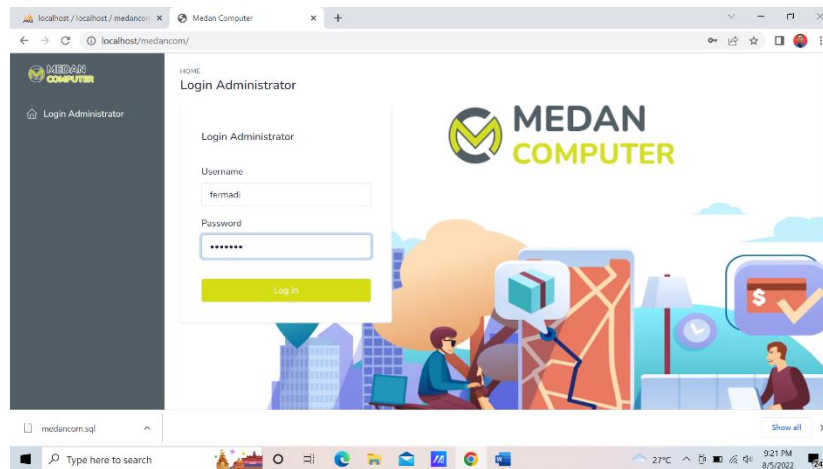


Figure 5. Display of the Login Form

## 2. Display Category Data Form

This form displays category data choices, when selecting category data, the program will display category data. Picture of the display of the category data form can be seen in Figure 6:

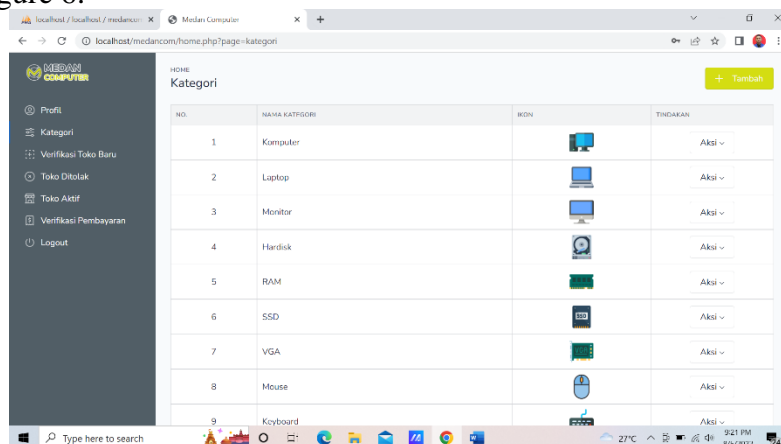


Figure 6. Category Form Display

## 3. Main Menu Form Display

This view is the main menu display that functions for the start page of the application. The main menu display image is shown in Figure 7:

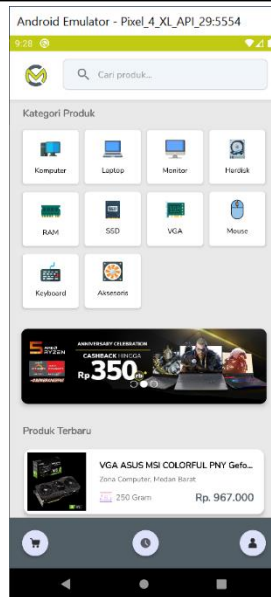


Figure 7. Display Main Menu Form

#### 4. Display the Guide Menu Form

This view is a guide menu display that functions for the start page of the guide. An image of the guide menu display is shown in Figure 8.

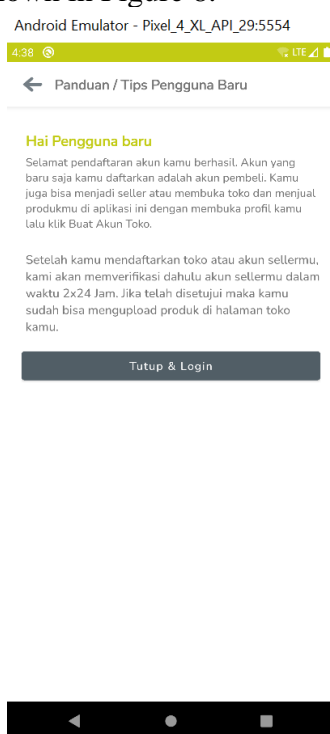


Figure 8. Display Guide Form Menu

### 5. Product Description Data Form Display

This view is a product description data display that functions to find out and display product description data. The product description display image is shown in Figure 9:

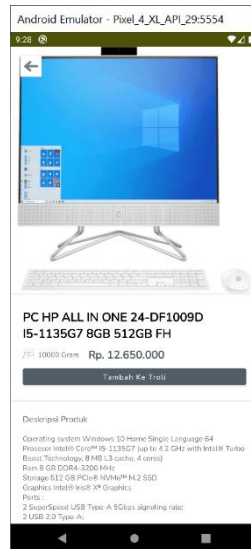


Figure 9. Display Product Description Form

### 6. View Order Data Form

This view is an order data display that functions to identify and display orders. The order display image is shown in Figure 10:



Figure 10. Display Order Form

### 7. View of Cart Data Form

This view is a shopping cart data display that functions to identify and display shopping carts. The shopping cart display image is shown in Figure 11:

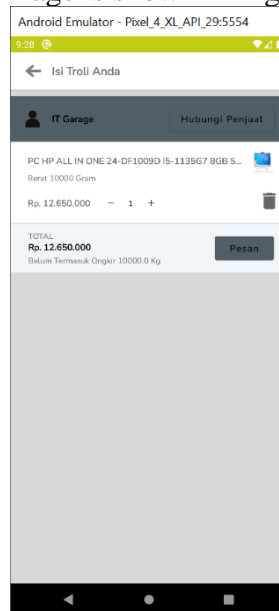
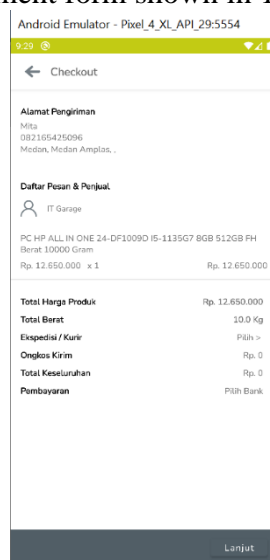


Figure 11. Display Shopping Cart Form

#### 8. View the Payment Form

This view is a payment form display that functions to fill in payment data. The following is an image of the Payment form shown in 12:



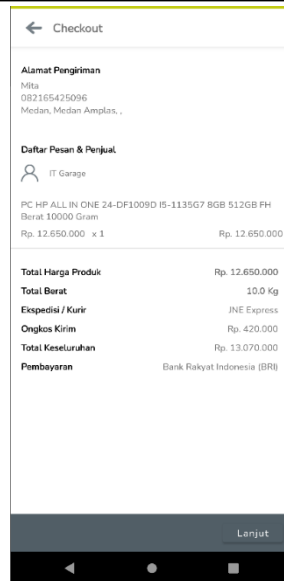


Figure 12. Display of Payment Confirmation Form

#### 9. View the Transaction History Form

This view is a transaction history form display that functions to fill in transaction history data. The following is a picture of the transaction history form shown in figure 13

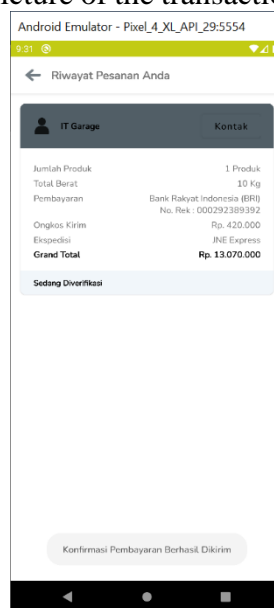


Figure 13. Display of the Transaction History Form

#### 4. Conclusion

Based on the research that has been done while making this application, several conclusions can be drawn as follows:

1. With the Android-based "Computer Devices" E-Marketplace application system, it will make it easier for customers to access orders for Computer Devices products.

2. By using Android-based APK Mobile to make it easier for companies to sell Computer Device products.
3. The application that is designed can be accessed by sellers, customers and admins managing Computer Device companies so that they can make transactions directly.

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