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DEVELOPMENT OF PRE ORDER SYAR'I CLOTHES BASED ON ANDROID APPLICATIONS

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Abstract - *The recording of pre orders on the Be-Glow Store can be said to be semi-primitive and very far from the word effective and efficient in recording pre-orders and shipping shar'i clothes. Because management does not take advantage of the current technology as a whole, it often causes mistakes in recording pre orders and sending shar'i clothes, as well as waste time and paper. An android-based application is an answer and solution to assist the recording of pre-order entry and shar'i clothes delivery at the Be-Glow Store, building the application through a process of designing UML (Unified Modeling Language) to identify needs and solve problems in making applications who can support the pre order management process. SDLC Waterfall method is a method that the author chooses to develop from an application that the author has built with this method the author was helped to do a system development. The result is that this application is very helpful in the recording of pre-order entry and delivery of syar'i clothes at the Be-Glow Store effectively and efficiently. Admin has been able to make pre-order drafts with unnecessary applications with paper again and check Pre-orders can also be done on the application, Admin has no longer experienced duplication in the activity of recording pre orders which usually often occur duplication. Resellers are easier and don't take much time to pre-order syar'i clothes, pre-orders that are entered are already stored in the database.*

***Key Words*: android, wholesale, pre order, retailer, waterfall**

1. INTRODUCTION

This information system revolution has become mandatory for all countries in the world so that every country must leave the conventional information system to be internet-based. The internet now has also become one of the basic human needs in modern times as it is now because it is the main requirement in carrying out development [1]. As technology advances, it forms a new era in the world of information globalization. In the era of globalization of information, there emerged an intelligent communication device, Smartphone. Smartphone users are very much in Indonesia, and this is a new lifestyle. The lifestyle of electronic life or abbreviated as e-life has become a habit for people in Indonesia. So that many things affect the activities and activities with the e-life style, one of them is to look for shar'i clothing at a store. Smartphone users have many applications that help with their activities. For example, if they want to find syar'i clothing, there is already an application that helps smartphones to find the location of the nearest store[2].

A shop still uses manual methods to order syar'i clothing. This manual method has weaknesses such as at least a shopkeeper, if the shopkeeper is busy then the customer must wait for a relatively long time and more. Very troubling for customers who really prioritize the meaning of time commitment. According to the Big Indonesian Dictionary referred to as ordering is "Order in the general sense is an agreement between two or more parties, the agreement can be a product or service. (Septian, 2017) "[3]. Whereas according to (Rifani, 2015) "Ordering is the result of work performance of business activities related to the flow of goods and services from producers to consumers" [4].

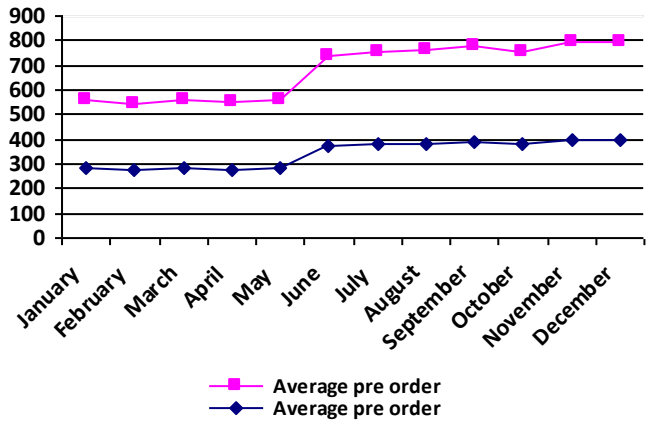


Chart - 1: Pre Order Data 2017

Based on interviews with shop owners, data is obtained as above with the calculation of the average pre order per year divided in months. To develop a business that runs in need of modern applications while the current system, Be-Glow Store resellers still pre-order traditionally by coming directly to the store or by sending messages via WhatsApp or BBM group stores or to guard numbers store. This was deemed ineffective, which caused shopkeepers to pay less attention to the queue of reseller orders, given the large number of Be-Glow Store resellers, few shopkeepers and a manual pre order recording system. From these problems, an application is needed that can make it easier for resellers to pre-order shar'i clothes as long as the stock is still there, besides that the reseller can also determine the order delivery time according to the time they want.

1.1 Research Problems

Based on the description of the background described above, the problem can be formulated as follows:

1. How do you design a Pre-Order application that can bridge between store resellers and admins?
2. How do you build a Pre-Order application so that the store admin can record the order of reseller syar'i clothes and record and monitor them properly?
3. What is the flow of the pre-order and shipping process of the Shari'i clothes according to the time and expedition desired?

1.2 Project Objectives

Sugiyono (2016) argues in general the purpose of research is to find, develop and prove knowledge. Following are the objectives of this study [5]. The expected goal of this research are:

1. Make a pre order application as a means to order syar'i clothes
2. The application is able to provide notifications to the shopkeeper, so that the order can be monitored properly, and no orders are left behind or forget to be handled.
3. The application is able to monitor reseller orders so that orders can be monitored properly according to the order.
4. Application helps shopkeepers in recording or shipping activities so they can pack according to the expedition that the reseller chooses.

1.3 Project Benefits

1. Can understand more about a system and can build applications or systems based on Android with the web API and get experience and insights related to pre-order Syar'i clothes.
2. Can use this application to facilitate the pre order process of shar'i clothes.
3. With this application, it is expected that the pre-order process for syar'i clothes can be easier, effective and efficient.

2. LITERATURE REVIEW

2.1 Definition System Pre Order

Pre Order is a system of selling where a seller receives an order for a product and after the minimum quota for production is fulfilled the seller will ask the buyer to transfer the product, after the cost is sufficient then the product will be produced and after about 2-4 weeks of production and goods finished the seller will send the item to the buyer whose data has been given when ordering. To minimize the risk of shopping with a pre-order system, pay attention to the evidence and products that have been made by the seller. Meaning there are no items ordered [6].

2.2 Related research

In [7] an automated food ordering system is proposed which will keep track of user orders smartly. Basically, they implemented a food ordering system for different type of restaurants in which user will make order or make custom food by one click only. By means of android application for Tablet PCs this system was implemented. The front end was developed using JAVA, Android and at the backend MySQL database was used

In Paper [8], this research works on efforts taken by owners of restaurants to adopt information and communication technologies such as PDA, wireless LAN, costly multi-touch screens, etc. to enhance dining experience. This paper highlights some of the limitations of the conventional paper based and PDA-based food ordering system and proposed the low-cost touch screen-based Restaurant Management System using an android Smartphone or tablet as a solution.

In [9] Implementation of the Multilevel Feedback Queue Algorithm in the Restaurant Order of Food Application Development for Android and iOS Platform Make foods that have high priority and low priority to minimize food serving time. Single Phase queuing method

In [10] along with customer feedback for a restaurant a design and execution of wireless food ordering system was carried out. It enables restaurant owners to setup the system in wireless environment and update menu presentations easily. Smart phone has been integrated in the customizable wireless food ordering system with real-time customer feedback implementation to facilitate real-time communication between restaurant owners and customers.

In [11] Designing Ordering and Payment Information Systems in Printing With the design of this information system will provide an overview to the printing party in the processing of data ordering and payment transactions at printing to be faster and more precise. With the SWOT analysis method

3. RESEARCH METHODOLOGY

3.1 SWOT Analysis

According to Nandiroh (2016), analysis "SWOT is an analysis consisting of micro-environmental analysis that aims to determine the strengths and weaknesses of the company, and analysis of the macro environment that aims to determine opportunities and threats for the company" [12]. Another definition according to Prastiawan and Ranggadara (2018), "SWOT analysis is a strategic planning method used to evaluate strengths, weaknesses, opportunities, and threats in

projects or business speculation" [13]. SWOT is a method that can be used to evaluate strengths, weaknesses, opportunities, and threats that are both from within and outside the company.

Table -1: SWOT Analysis

SWOT	Existing	Proposal
STRENGTHS	➢ Records are made in the ledger ➢ Backup pre orders in files.	➢ Practical application is used. ➢ Storage is safer and easier to control
WEAKNESSES	➢ Sometimes the reseller still has difficulty pre-order. ➢ Manual recording is time consuming.	➢ Resellers are facilitated by the application in pre-order. ➢ Minimize the long recording time if by manual method.
OPPORTUNITIES	➢ From the average data that pre-orders, it can be concluded that the PreOrder application is needed. ➢ Speed up the confirmation process for pre order.	➢ Making reports of reseller needs easier ➢ Add new jobs as application admin.
TREATS	➢ Admin often forgets to record pre-orders that enter	➢ Resellers do not need to repeat to pre-order because of the application.

3.2 Waterfall

The Waterfall Model is one of the software development models in the SDLC model (Sequencial Development Life Cycle).Sahara (2016) suggests that the waterfall model is often also called a linear (sequential linear) model or classic life cycle [14].

Whereas according to Dennis (2015) SDLC (systems development life cycle) Waterfall is an original structured design methodology that is still used today. With Waterfall-based development methodology, analysts and users continue sequentially from one phase to the next. This methodology is called the development of Waterfall because it moves forward from phase to phase in the same way as a waterfall [15]

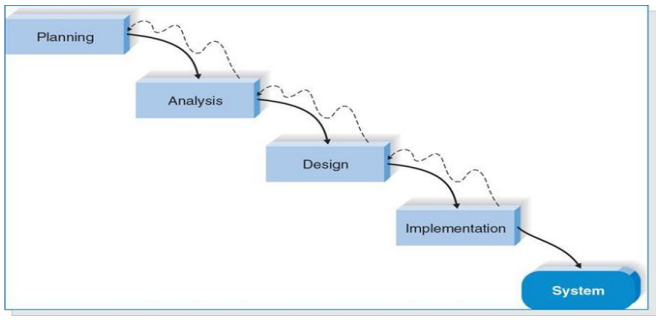


Fig - 1: SDLC Model Watterfall

1. Planning
   Phase Planning is a fundamental process for understanding why a system must be built and determining how the project team will build it.
2. Analysis
   During this phase, the project team analyzes the current system, identifies opportunities for improvement, and develops concepts for the new system.
3. Design
   This phase decides how the system will operate, in terms of hardware, software, network infrastructure, user interfaces, forms, reports, program specifics, databases, and files that will be needed.
4. Implementation
   The final phase in SDLC waterfall is the implementation phase, where the system is built. This is the phase that usually gets the most attention, because for most systems it is the single most expensive part of the development process.

3. EXISTING PROPOSED SYSTEM

3.1 Existing System

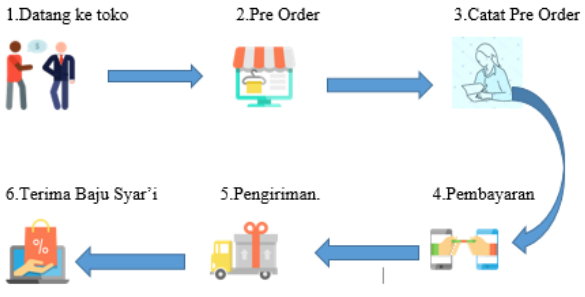


Fig - 2: Existing System

Explanation from the picture above:

1. Resellers come directly to the store and join social media groups to be able to see what products are updated.
2. The reseller pre-orders.
3. The process of recording a pre order is done by a reseller if you want to buy a new product available at the store or according to the wishes of the reseller, then the admin notes one by one.
4. Payment process is done directly to the sales or transfer department through the bank.
5. Delivery process is done after reseller confirms payment.
6. Reseller Accept the syar'i clothes ordered.

3.2 Proposed System

This application is a system for pre-order online syar'i clothes needed. This android application allows the end reseller to register in the application, select the product category as needed with the android application. By using this application, users are facilitated by not having to come to the store directly. Another benefit is that the admin or shopkeeper does not need to manually record pre orders.

This application is a cellular pre order system that runs under the Android platform used for promotion and sale of your products with one application. With a strong Admin Panel can manage orders, create product categories and menus, also can be configured like resellers, etc. from admin panels on the web. You can add, update, update or change it menu products, categories, taxes, currencies and change the admin password by generating passwords, etc. This application is made by Android for the client side and then PHP MySQL for the Admin side. Run below the Android platform which is the most popular operating system in the world.

3.2.1 Use Case Diagram

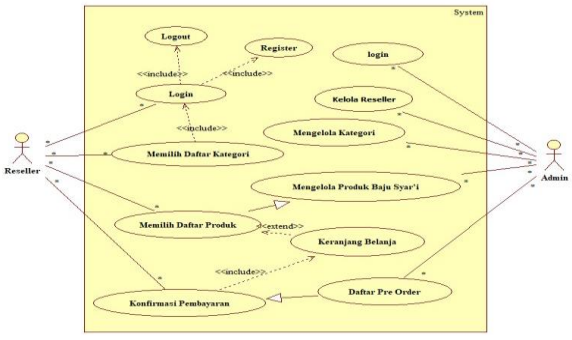


Fig - 3: Proposed Use Case

The image or explain the Proposed use case diagram of the pre order application is accessed by using the android application application

3.2.2 Class Diagram

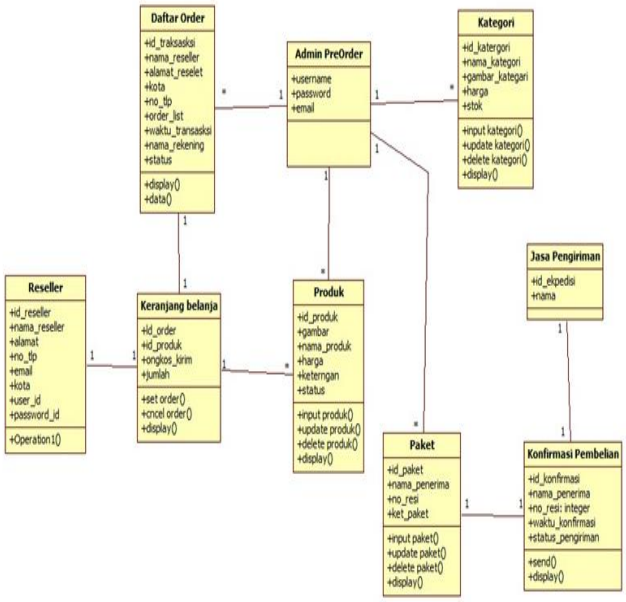


Fig - 4: Class Diagram

The image or explain the class diagram of the pre order application is accessed by using the android application

3.2.3 Activity Diagram

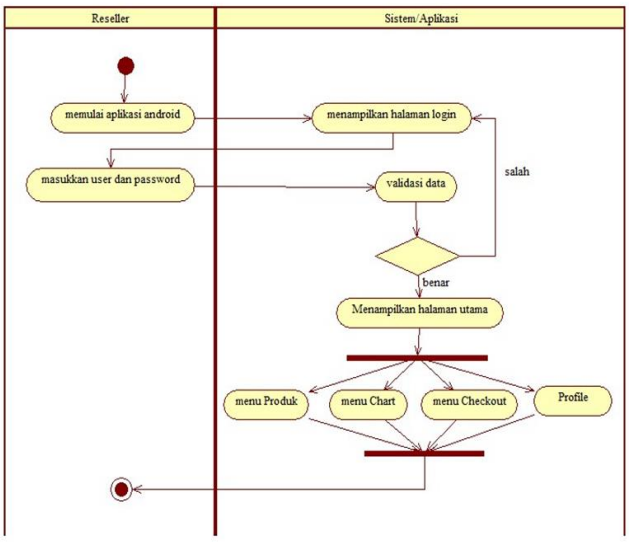


Fig -5: Activity Diagram

The image or explain the activity diagram of the pre order application is accessed by using the android application

3.2.4 Sequence Diagram

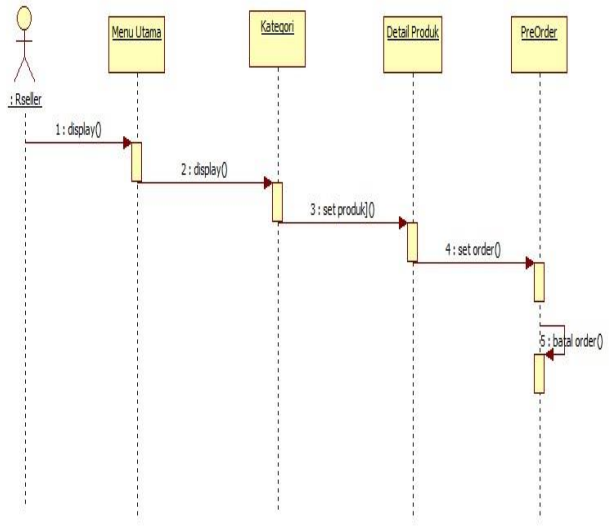
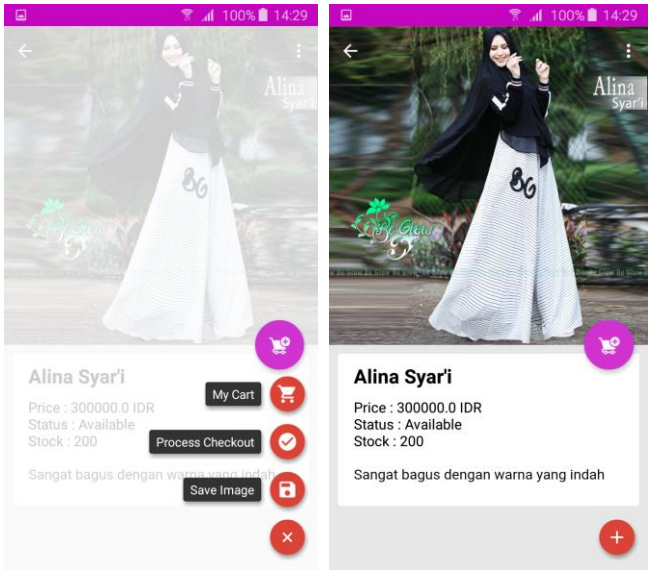


Fig -6: Sequence Diagram

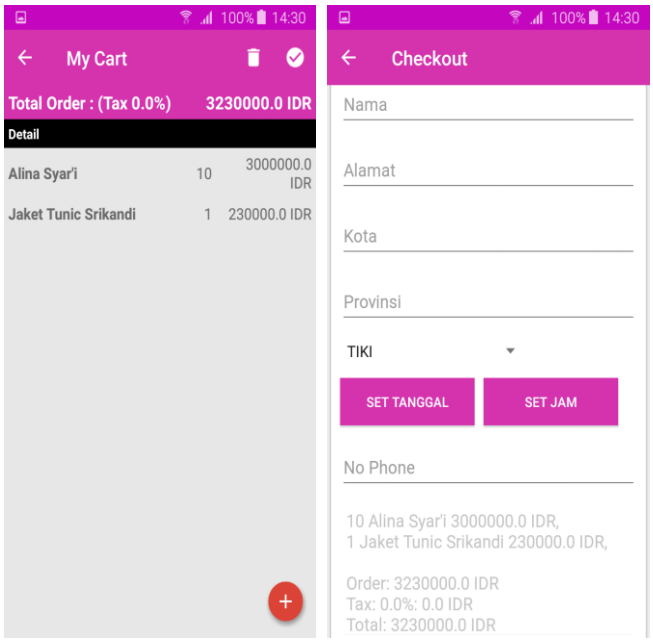
The image or explain the sequence diagram of the pre order application is accessed by using the android application

4. IMPLEMENTATION

4.1 Android Application For Reseller



(a) (b)



(c) (d)

Fig -7: Mobile Application Reseller Screenshots

(a) Order Menu Page

The picture above is an interface implementation of the order menu page accessed by resellers on android devices.

(b) Product Details

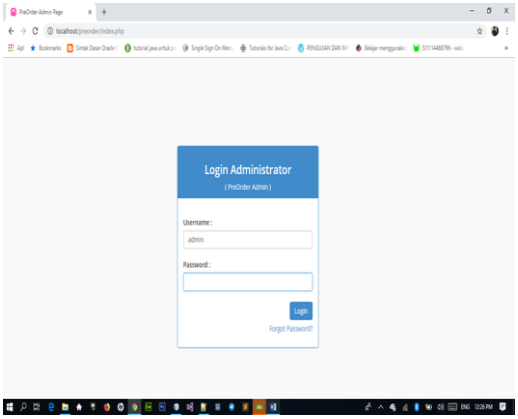
The image above is an implementation of the product details page interface accessed by resellers on android devices.

(c) MyChart page

The image at the top is the implementation of the pre order page interface accessed by the reseller via an android device.

(d) Checkout page

Image on ata is the implementation of the checkout page interface accessed by resellers via an android device.



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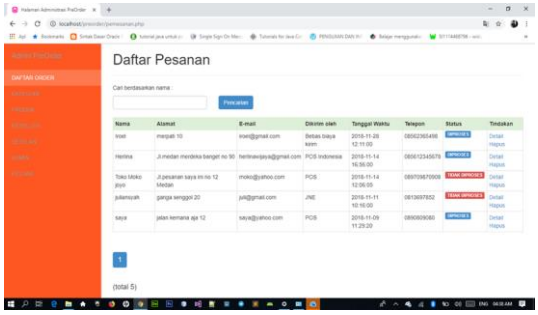
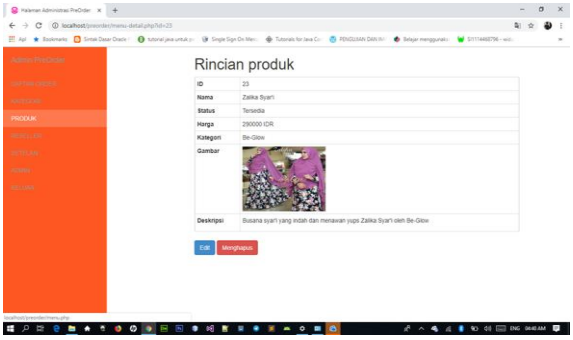
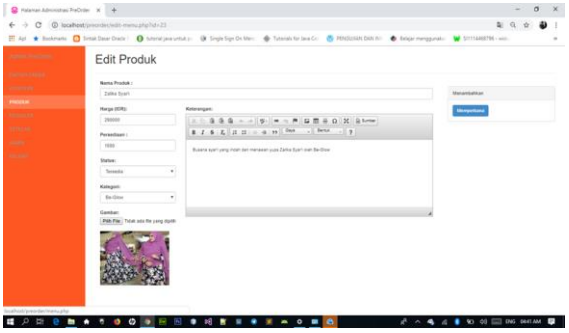


(b)



(c)



(d)

Fig - 8: Web API Application Admin Screenshots

(a) Admin Login an existing account

The picture above is an implementation of the admin login interface that is accessed via the web.

(b) Order list menu

The picture above is the implementation of the pre-order list menu interface that is accessed by the admin via the web.

(c) Product Details Menu

Gmbar above is an implementation of the menu of product details accessed by the admin via the web.

(d) Admin Edit Products

The picture above explains the page for managing products on a web server that is done by the admin.

4.2 Test Result

From the results of the test scenarios that have been carried out, it is expected that all processes will proceed properly according to the design that has been made and application forms produce the appropriate output. In the tests that have been carried out all users can carry out activities according to their respective roles. From the results of the tests carried out on the pre order application, it can be concluded that all functions can be executed properly. Based on the testing that has been done on this information system, it can be concluded that:

1. The testing process that has been carried out gives the output as expected.
2. The application business process runs in accordance with the design.
3. The application was successfully executed properly.

5. CONCLUSIONS

Based on the research that has been done, it can be defined as follows:

1. At this time, the pre order transaction process for syar'i clothes is done by means of resellers selecting ordered products and then put into the shopping basket. After that the reseller fills out the form to pre-order the shar'i clothes that will be ordered and make payments via transfer by giving confirmation of payment sent through the application.
2. At this time, recording pre orders is made based on the order number of the order or work order and the ordered product can be carried out according to the date of the reseller, there is no double order in recording and is permitted at the right time.
3. In this system, checking the order status is done by the admin after the reseller makes a payment, then the admin orders the incoming and recorded orders that will do the service according to the order. The admin will also monitor the order status, there are no pre-orders that are pending and long in the delivery process.

6. FUTURE SCOPE

The Pre Order application has been able to help overcome the problems that exist in Be-Glow Store in the matter of recording pre orders, but this application is planned not only to manage pre order records but to manage all transactions and procurement of syar'i clothes on Be-Glow Store to create record management to be effective, efficient, effective and safe.

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